

Number of  
Company

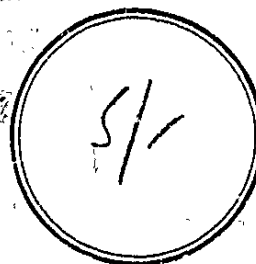
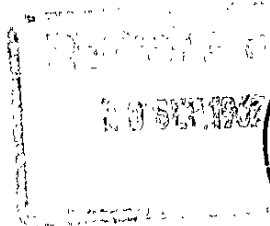
734915



Form No. 41

COMPANIES  
REGISTRATION

# THE COMPANIES ACT, 1948.



A 5/-  
Companies  
Registration  
Fee Stamp must  
be impressed  
here.

DECLARATION of Compliance with the requirements of The Companies Act,  
1948, on application for registration of a Company.

Pursuant to Section 15 (2).

Name of Company.....QUARTZ FUSED PRODUCTS.....

LIMITED

Presented by

N. HOWES & CO. LTD.  
Company Printers & Stationers

56, Old Broad St., E.C.2.

LONDON WALL 2237

H. HOWES & CO., LTD.,

Company Printers, Publishers & Stationers,

BELL YARD, (& 6, ANDREWS GROSSE), TEMPLE BAR, W.C.2.

Tel. : HOLBORN 3073.

56, OLD BROAD STREET, LONDON, E.C.2.

Tel. : LONDON WALL 2237

Head Office and Works:—53-55, MANSELL STREET, LONDON, E.1.

Tel. : ROYAL 8701.

NOTE.—This Margin is reserved for binding and must not be written across.

I... Frank Charles Steele,

of 78, Old Broad Street, London, E.C.2,

Do solemnly and sincerely declare that I am (a) A person  
named in the Articles of Association as Secretary

of .... QUARTZ FUSED PRODUCTS

(27)

LIMITED,

and That all the requirements of the Companies Act,  
1948, in respect of matters precedent to the registration of the  
said Company and incidental thereto have been complied with.

And I make this solemn Declaration conscientiously believing  
the same to be true and by virtue of the provisions of the

"Statutory Declarations Act, 1835."

Declared at *by Robert Allen*  
*E.C.2 in the City of London*  
the *sixteenth* day of *August*  
One thousand nine hundred and *as by law*

*Frank C. Steele*

Before me,

*A. D. Clements*

A. D. CLEMENTS  
(b) A Commissioner for Oaths.

(a) "A Solicitor of the Supreme Court" (or in Scotland "a Solicitor")  
"engaged in the formation," or "A person named in the Articles of Association  
"as a Director or Secretary."

(b) or Notary Public or Justice of the Peace.

*Redeclared at by Robert Allen*  
*E.C.2 in the City of London*  
*the sixteenth day of September 1962*  
*Before A. D. Clements Commissioner for Oaths*

No of Certificate.....

734915/2

Form No. 25,

QUARTZ FUSED PRODUCTS

10 SEP 1932



LIMITED.

STATEMENT of the Nominal Capital made pursuant to s. 112 of the Stamp Act, 1891, as amended by s. 7 of the Finance Act, 1899, and s. 39 of the Finance Act, 1920. (Note.—The Stamp duty on the Nominal Capital is Ten Shillings for every £100 or fraction of £100.)

This Statement is to be filed with the Memorandum of Association, or other Document, when the Company is registered.

Presented by

H. HOWES & Co. LTD,  
Company Printers & Stationers  
55, OLD BROAD ST., E.C.2  
LONDON WALL 3187.

**H. HOWES & CO. LTD.**

Law & Company Printers, Publishers & Stationers,

7, BELL YARD (and 6, ANDREWS CROSSE) TEMPLE BAR, W.C.2.  
Telephone—HOLBORN 3073.

56, OLD BROAD STREET, LONDON, E.C.2  
Telephone—LONDON WALL 2237.

Head Office & Works: 53 & 55, MANSELL STREET, LONDON, E.1.  
Telephone—ROYAL 8701.



The NOMINAL CAPITAL of QUARTZ FUSED PRODUCTS

..... Limited

is £ 1,500 ....., divided into 1,500 Shares of £1 each.

Signature.....

*H. Keene*

Description..... Secretary .....

Dated..... 23rd August 19 62.



734915/3

THE COMPANIES ACT, 1948.

COMPANY LIMITED BY SHARES.



REGISTERED

10 SEP 1962

## Memorandum of Association

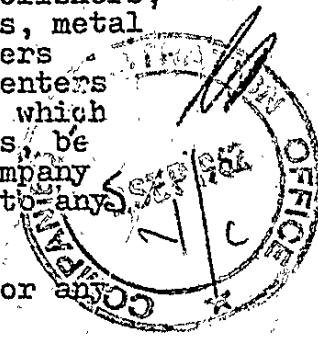
— OF —

QUARTZ FUSED PRODUCTS LIMITED

1. The name of the Company is "QUARTZ FUSED PRODUCTS LIMITED". ✓
2. The registered office of the Company will be situate in England. ✓
3. The objects for which the Company is established are :-

(A) To carry on business as workers in quartz, silica, ceramic and similar materials, manufacturers of and dealers in chemical, medical, mechanical, electrical and electronic instruments and equipment of all kinds and descriptions; mechanical electrical and electronic engineers, electro-platers, nickel-platers, chromium-platers, bronziers, oxidisers, enamellers, lacquerers, varnishers, painters, polishers, gilders, goldsmiths and silversmiths, metal and alloy makers, refiners and workers cabinet workers, wood workers, carpenters and joiners, and any other business which can, in the opinion of the Directors, be advantageously carried on by the Company in connection with or as ancillary to any of the above businesses.

(B) To acquire and undertake the whole or any part of the business, property and liabilities of any person or company carrying on any business which this Company is authorised to carry on or possessed of property suitable for the purposes of this Company.



25 AUG 1962

- (C) To erect, construct, lay down enlarge, alter and maintain any roads, railways, tramways, sidings, bridges, reservoirs, shops, stores, factories, buildings, works, plant and machinery necessary or convenient for the Company's business, and to contribute to or subsidise the erection, construction and maintenance of any of the above.
- (D) To pay for any property or rights acquired by the Company, either in cash or shares, with or without preferred or deferred rights in respect of dividend or repayment of capital or otherwise, or by any securities which the Company has power to issue, or partly in one mode and partly in another, and generally on such terms as the Company may determine.
- (E) To apply for, purchase or otherwise acquire, protect, prolong and renew any patents, patent rights, brevets d'invention, licences, concessions and the like, conferring any exclusive or non-exclusive or limited right to use or any secret or other information as to any invention which may seem capable of being used for any of the purposes of the Company, or the acquisition of which may seem calculated directly or indirectly to benefit the Company, and to use, exercise, manufacture, develop or grant licences in respect of, or otherwise turn to account the property, rights or information so acquired, and to expend money in experimenting upon and testing and in improving or seeking to improve any patents, inventions or rights which the Company may acquire or propose to acquire.
- (F) To enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint adventure, reciprocal concession or otherwise with any person or company carrying on or engaged in, or about to carry on or engage in, any business or transaction which this Company is authorised to carry on or engage in, or any business or transaction capable of being conducted so as directly or indirectly to benefit this Company, and to subsidise or otherwise assist any such company, and to give any guarantees.
- (G) To take or otherwise acquire and hold shares in or securities of any company, and to sell, hold, re-issue, with or without guarantee, or otherwise deal with the same.

- (H) To establish and support or aid in the establishment and support of associations, institutions, funds, trusts and conveniences calculated to benefit employees or ex-employees of the Company or the dependants or connections of such persons, and to grant pensions and allowances, and to make payment towards insurances, and to subscribe or guarantee money for charitable or benevolent objects, or for any exhibition or for any public, general or useful object.
- (I) To promote any company or companies for the purpose of acquiring all or any of the property, rights and liabilities of this Company, or for any other purpose which may seem directly or indirectly calculated to benefit this Company.
- (J) Generally to purchase, take on lease or in exchange, hire or otherwise acquire, rebuild or improve any real or inheritable and personal property, and any rights or privileges which the Company may think necessary or convenient for the purposes of its business, and in particular any land, buildings, concessions, claims, wayleaves, easements, machinery, plant and stock-in-trade.
- (K) To construct, improve, maintain, develop, work, manage, carry out or control any roads, ways, tramways, railways, branches or sidings, bridges, reservoirs, water-courses, wharves, manufactories, warehouses, buildings, residences, workmen's houses, electric works, telegraphs, shops, stores and other works, machinery and conveniences which may seem calculated, directly or indirectly to advance the Company's interests, and to contribute to, subsidise or otherwise assist or take part in the construction, improvement, maintenance, working, management, carrying out or control thereof.
- (L) To invest and deal with the moneys of the Company not immediately required upon such securities, including the purchase of real estate, in such manner as may from time to time be determined, and to sell, vary or otherwise deal with the same.
- (M) To lend money to such persons and bodies and on such terms as may seem expedient, and in particular to customers and others having dealings with the Company, and to companies or firms in which the Company may be directly or indirectly interested,

and to guarantee the performance of contracts or the due payment of any moneys, including principal interest and dividends of any shares, stocks or securities, by any company or person.

- (N) To borrow or raise or secure the payment of money in such manner as the Company shall think fit, and in particular by the issue of debentures or debenture stock, perpetual or otherwise, charged upon all or any of the Company's property, both present and future, including its uncalled capital, and to purchase, redeem or pay off any such securities.
- (O) To draw, make, accept, indorse, discount, execute, deal in and issue promissory notes, bills of exchange, drafts, bills of lading, warrants, debentures and other negotiable or transferable instruments.
- (P) To procure the Company to be registered or recognised in any country or place, and to obtain any Provisional Order or Act of Parliament, or any enactment, decree or other legislative or executive act of any empire, kingdom, state, republic, colony, municipality, or other authority for enabling the Company to carry any of its objects into effect, or for effecting any alteration or modification of the Company's constitution.
- (Q) To sell, improve, manage, develop, exchange, lease, mortgage, dispose of, turn to account or otherwise deal with all or any part of the property and rights, privileges, concessions and easements of the Company for such consideration as the Company may think fit, and in particular for shares, fully or partly paid, debentures or securities of any other company.
- (R) To amalgamate with any other company having objects altogether or in part similar to those of this Company.
- (S) To adopt such means of making known the business and products of the Company as may seem expedient, and in particular by advertising in the press, by circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
- (T) To pay all or any part of the expenses of and incident to the formation and establishment of the Company, and to remunerate



any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of any of the shares in the Company's capital, or any debentures, debenture stock or other securities of the Company, or in or about the conduct of the Company's business.

- (U) To distribute any of the property of the Company in specie among the members.
- (V) To do all or any of the above things in the United Kingdom or in any part of the world, and as principals, agents, contractors, trustees or otherwise, and by or through trustees, sub-contractors, agents or otherwise, and either alone or in conjunction with others.
- (W) To do all such other things as the Company shall think may be incidental or conducive to the attainment of the above objects or any of them.

And it is hereby declared that the word "Company" in this clause shall be deemed to include any partnership or other body of persons whether incorporated or not incorporated and whether domiciled in the United Kingdom or elsewhere.

And it is hereby further declared that the objects of the Company in any wise limited by reference to any other paragraph or the order as specified in each of the foregoing paragraphs of this clause (except only if and so far as otherwise expressly provided in any paragraph) shall be separate and distinct objects of the Company and shall not be in which the same occur or the name of the Company.

- 4. The liability of the members is limited. ✓
- 5. The share capital of the Company is £1,500. divided in 1,500 shares of £1. each with power to increase and to divide the shares in the capital for the time being whether original or increased and before or after the issue thereof into several classes and to attach thereto respectively, any preferential, deferred, qualified or special rights, privileges or conditions, and with a special or without any right of voting. ✓

WE, the several persons whose names and addresses and descriptions are subscribed, are desirous of being formed into a Company, in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Names, Addresses and Descriptions of Subscribers	Number of Shares taken by each Subscriber
Florence Beatrice Watkins 14 Coniston Road, Bramley Kent Clerk	One
Frank Charles Steers 3, Frank Woolley Road, Tonbridge, Kent Certified Accountant	One

Dated this 26<sup>th</sup> day of August 1962.

A. J. Meale,  
18, Harrow Drive,  
Hamchurch,  
Essex.  
Typist





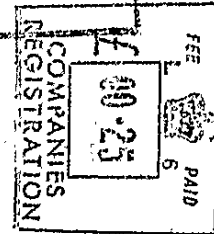
734915

REGISTERED

10 SEP 1962

THE COMPANIES ACT, 1948.

COMPANY LIMITED BY SHARES.



## Articles of Association

— OF —

QUARTZ FUSED PRODUCTS LIMITED ✓

1. Subject as hereinafter provided, the regulations contained or incorporated in Part II of Table "A" in the First Schedule to the Companies Act, 1948 (hereinafter called Table "A") shall apply to this Company.
2. Regulations 2, 5, 24, 44, 53, 58, 59, 61, 75, 76, 77, 79, 88, 89, 90, 91, 92, 93, 95 and 99, and paragraphs (2) and (4) of Regulation 84 of Part I of Table "A", and Regulation 3 of Part II of Table "A" shall not apply to the Company.
3. Except in the case of a transfer of shares expressly authorised by the last preceding article or a transfer approved in writing by all the members for the time being (including as members for this purpose the personal representatives of any deceased members in whose names shares are still standing) the right to transfer shares in the Company shall be subject to the following restrictions, namely :—
  - (A) Before transferring or requiring the Company to register a transfer of any shares, the person, whether a member of the Company or not, proposing to transfer the same (hereinafter called "the retiring member") shall give a notice in writing (hereinafter called "the transfer notice") to the Company, that he desires to transfer the same, and the transfer notice shall constitute the Company his agent for the sale of the shares therein mentioned at the prescribed price to any member (including as aforesaid). A transfer notice once given shall not be revocable except with the consent of the Directors.

A.S.

- (B) If the Company within a space of two months after receiving any transfer notice or after the prescribed price for the shares included therein shall have been determined (whichever is the later) shall find members (including as aforesaid) (hereinafter called "the purchasers") willing to purchase all the shares therein mentioned, and shall give notice in writing thereof to the retiring member, he shall be bound, upon payment of the prescribed price, to transfer the shares mentioned in the transfer notice to the purchaser or purchasers thereof.
- (C) Every notice given by the Company under paragraph (B) stating that it has found purchasers for the shares included in a transfer notice shall state the names and addresses of the purchasers and the number of shares agreed to be purchased by them respectively and the purchases shall be completed at a place and time to be appointed by the Company, not being more than 28 days after the date of the notice.
- (D) If in any case a retiring member, after having become bound to transfer any shares to a purchaser, shall make default in transferring the shares, the Directors may authorise some person to transfer the shares to the purchasers, and the Company may receive the purchase money, and shall thereupon cause the name of the purchasers to be entered in the register as the holders of the shares, and shall hold the purchase money in trust for the retiring member. The receipt of the Company for the purchase money shall be a good discharge to any purchaser, and he shall not be bound to see to the application thereof, and after the name of the purchaser has been entered in the register in purported exercise of the aforesaid powers the validity of the proceedings shall not be questioned by any person.
- (E) If the Company shall not within the space of two months mentioned in paragraph (B) find members desiring to purchase all the shares mentioned in the transfer notice, and give notice in writing thereof to the retiring member, or, if the Company shall within the space aforesaid give to the retiring member notice in writing that it has no prospect of finding purchasers for all those shares, the retiring member shall, at any time within three months thereafter be at liberty (subject only to the restrictions contained in Article 7 so far

as applicable) to transfer the shares or any of them to any person at any price.

- (F) By the expression "the prescribed price" used in this article is meant the sum per share agreed upon between the retiring member and the Company, acting by the Directors, as the fair value of a share, or failing such agreement before or within seven days after the giving of the transfer notice the sum per share determined and certified in writing to be in his opinion such fair value as between a willing buyer and willing seller by the Auditor for the time being of the Company. The said Auditor shall act as an expert and not as an arbitrator in so determining and certifying the fair value of the shares included in the transfer notice and his decision shall be final.
- (G) All shares included in any transfer notice shall be offered by the Company for sale at the prescribed price to all the members (including for this purpose the personal representatives of deceased members in whose names shares are still standing but excluding the member giving the transfer notice) on the terms and so that in case of competition the shares so offered shall be allocated and sold to the members accepting the offer in proportion (as nearly as may be and without increasing the number sold to any member beyond the number applied for by him) to their existing holding of shares. All offers of shares under this paragraph shall be made by writing sent through the post in prepaid letters addressed to the members at their respective registered addresses as appearing in the register, and every such offer shall limit a time (not being less than 14 days nor more than 28 days) within which the offer must be accepted or in default may be treated as declined.

4. If any member shall die or shall be adjudged bankrupt, his personal representatives or his trustees in bankruptcy (as the case may be) shall be bound if and when called in writing by the Directors so to do within three months of the date when representation shall be granted to his estate or he shall be adjudged bankrupt, to give to the Company a transfer notice in respect of all the shares registered in the name of the deceased or bankrupt member and, in default of such transfer notice being given within one month of its being so called for, the personal representatives or the trustee in bankruptcy (as the case may be) shall be deemed to have given such notice at the expiration of the said period of one month and the provisions of these presents shall apply accordingly.

5. The Directors may, in their absolute discretion, and without assigning any reason therefor, refuse to register any transfer of shares (not being a transfer expressly authorised by Articles 3 or 4).
6. The Directors may refuse to register any transfer of shares on which the Company has a lien, or the registration of which would cause the limit hereinbefore imposed upon the number of the members of the Company to be exceeded.
7. A person becoming entitled to a share in consequence of the death or bankruptcy of a member shall be entitled to receive and may give a discharge for all dividends and other moneys payable in respect of the share, and shall also be entitled to exercise all such other rights as are conferred upon members of the Company by Statute or by these Articles of Association, but he shall not (except as otherwise provided by these Articles) be entitled to receive notices of or to attend or vote at meetings of the Company, or, save as aforesaid, to any of the rights or privileges of a member until he shall have become a member in respect of the share. Provided that during a period of six months from the date of the death of a member his executors, if probate of his Will shall have been granted, and his Administrators, if Letters of Administration to his estate shall have been granted, and unless and until probate of his Will shall have been granted the persons named in the Will as his executors (subject to their producing such Will to the Company) shall be entitled to be given notice of and to attend and vote in respect of the shares standing in the name of the deceased member at any meeting held within the said period of six months.
8. The lien conferred by Regulation 11 of Part I of Table "A" shall extend to all shares, whether fully paid or not, and shall attach to all shares registered in the name of any person indebted or under liability to the Company, whether he shall be the sole registered holder thereof or shall be one of several joint holders.
9. There shall be not less than one Director nor more than seven. A Director shall not be required to hold any share or shares to qualify him for the office of Director. The first Directors shall be nominated by the subscribers to the Memorandum of Association.
10. At any General Meeting a resolution put to the vote of the meeting shall be decided on a show of hands, unless a poll is (before or on the declaration of the result of the show of hands) demanded by any member present in person or by proxy and unless a poll is so demanded a declaration by the Chairman that a resolution has on a show of hands been carried or carried unanimously, or by a particular majority,

or lost, or not carried by a particular majority, and an entry to that effect in the minute book of the Company shall be conclusive evidence thereof without proof of the number or proportion of the votes recorded in favour of or against such resolution. A proxy shall be entitled to vote both upon a show of hands and on a poll. The demand for a poll may be withdrawn. Any business other than that upon which a poll has been demanded may be proceeded with pending the taking of the poll. Save as otherwise provided by or pursuant to the regulations of the Company, two members present in person or by proxy shall be a quorum for the purposes of all meetings of the Company.

*Yds. JW*

*11. JW*

11. If a poll is demanded by a person entitled so to do under Article 10 hereof, it shall be taken at such time, and in such a manner as the Chairman directs, and the result of such poll shall be deemed to be the resolution of the meeting at which such poll was demanded.

12. The words "not less than 48 hours" and "not less than 24 hours" appearing in Regulation 69 of Part I of Table "A" shall not apply to such Regulation and shall be modified accordingly.

13. The Directors may regulate the meetings of Directors as they think fit, and may determine the quorum necessary for the transaction of business and until otherwise determined one Director shall be a quorum. A resolution in writing signed by all the Directors for the time being entitled to receive notice of a meeting of the Directors shall be as valid and effectual as if it had been passed at a meeting of the Directors duly convened and constituted. In the event of an equality of votes at any General Meeting of the Company or any meeting of Directors, the Chairman shall have a second or casting vote. Any Directors may in writing appoint some other person to be his alternate or substitute Director during such periods as he may think fit and each alternate or substitute Director shall exercise and discharge all the duties of the Director he represents.

14. Any person may be appointed or elected as a Director, whatever his age, and no Director shall be required to vacate his office of Director by reason of his attaining or having attained the age of seventy years or any other age.

15. The Directors may from time to time entrust to and confer upon the Managing Director or Managing Directors all or any of the powers of the Directors (not including the power to make calls, forfeit shares, borrow money or issue debentures) that they may think fit. But the exercise of all powers by the Managing Director or Managing Directors shall be subject to all such regulations and restrictions

as the Directors may from time to time make and impose, and the said powers may at any time be withdrawn, revoked or varied.

16. The office of a Director ipso facto shall be vacated -
- (A) If he be found a lunatic, or become of unsound mind, or be permanently incapacitated through illness or other infirmity.
  - (B) If by notice in writing he resigns the office of Director.
  - (C) If he become bankrupt.
  - (D) If he be prohibited from being a Director by an order made under any of the provisions of the Companies Act, 1948.
17. In addition and without prejudice to the provisions of Regulations 96 and 97 of Part I of Table "A", the Company may by Extraordinary Resolution remove any Director before the expiration of his period of office, and may by Ordinary Resolution appoint another Director in his stead.
18. No Director shall be disqualified by his office from contracting with the Company, either as vendor, purchaser or otherwise, or from being interested in any contract or arrangement entered into by or on behalf of the Company, nor shall any such contract made by a Director with the Company, nor any such contract or arrangement entered into by or on behalf of the Company in which any Director shall be in any way interested be avoided, nor shall any Director so contracting or being so interested be liable to account to the Company for any profits realised by him from any such contract made by him with the Company or from any such contract or arrangement in which he shall be so interested by reason of such Director holding that office or the fiduciary relation thereby established, but it is declared that as regards such contract or arrangement in which he shall be so interested the nature of his interest must be disclosed by him in manner required by Section 199 of the Companies Act, 1948. A Director may as a Director vote in respect of any contract entered into by him with the Company, and in respect of any contract or arrangement entered into by or on behalf of the Company in which he is interested, and if he do so vote his vote shall be counted and he may be reckoned for the purpose of constituting a quorum of Directors. A general notice to the Directors of the Company that a Director is a member of any specified firm or company and is to be regarded as interested in any subsequent transactions with such firm or company shall be sufficient disclosure under this clause, and after such general



804. JW  
notice it shall not be necessary to give any special notice relating to any particular transaction with such firm or company. Without prejudice to the generality of the foregoing provisions of this Article, a Director may hold any other office or place of profit in the Company in conjunction with this directorship (other than that of Auditor), and may be appointed thereto upon such terms as to remuneration, tenure of office, and otherwise as may be arranged by the Directors, and a Director of the Company may be or become a Director of any company promoted by this Company or in which this Company may be interested as vendor, shareholder or otherwise, and no such Director shall be accountable for any remuneration or other benefits received as director or officer or member of, or from his interest in such other company.

19. The Directors may exercise all the powers of the Company to borrow money, and to mortgage or charge its undertaking, property and uncalled capital, or any part thereof, and to issue debentures, debenture stock, and other securities, whether outright or as security for any debt, liability or obligation of the Company or of any third party. Debentures, debenture stock, bonds or other securities may be made assignable free from any equities between the Company and the person to whom the same may be issued. Any debentures, debenture stock, bonds or other securities may be issued at a discount, premium or otherwise, and with any special privileges as to redemption, surrender, drawings, allotment of shares, attending and voting at General Meetings of the Company, appointment of Directors and otherwise.

20. The Company may from time to time by Ordinary Resolution increase the capital by the creation of new shares of such amount as may be deemed expedient. Such new shares shall be of such amount and shall be issued for such consideration on such terms and conditions and with such preference or priority as regards dividends or in the distribution of assets or as to voting or otherwise over other shares of any class whether then already issued or not, or with such stipulations deferring them to any other shares with regard to dividends, or in the distribution of assets, as the Company by Ordinary Resolution may direct, and subject to or in default of any such direction the provisions of these Articles shall apply to the new capital in the same manner in all respects as to the initial capital of the Company. The powers conferred by this Article shall be subject to the provisions of Regulation 4 of Part I of Table "A".

21. The Directors of the Company shall be paid out of the funds of the Company as remuneration for their services such sums as the Board shall from time to time fix. The Directors shall also be entitled to be paid their reasonable travelling, hotel and other

expenses incurred in the execution of their duties as Directors and servants of the Company.

22. The Directors shall have power from time to time, and at any time, to appoint any other persons to be Directors, but so that the total number of Directors shall not at any time exceed the maximum number fixed as above, and so that no such appointment shall be effective unless two-thirds of the Directors in the United Kingdom concur therein.
23. The business of the Company shall be managed by the Directors, who, in addition to the powers and authorities by these presents or otherwise expressly conferred upon them, may exercise all such powers and do all such acts and things as may be exercised or done by the Company, and are not by Statute or by these presents expressly directed or required to be exercised or done by the Company in General Meeting, subject nevertheless to the provisions of the Statutes and of these presents and to any regulations from time to time made by the Company in General Meeting: Provided that no regulation made shall invalidate any prior act of the Directors which would have been valid if such regulation had not been made.
24. Any instrument to which it shall be necessary to affix the seal of the Company shall be properly executed if the said seal is affixed in the presence of and signed by any one Director.
25. In a winding up the Liquidators may, with the sanction of an Extraordinary Resolution, distribute all or any of the assets in specie among the members in such proportions and manner as may be determined by such resolution, provided always that if any such distribution is proposed to be made otherwise than in accordance with the existing rights of the members, every member shall have the same right of dissent and other ancillary rights as if such resolution were a Special Resolution passed pursuant to Section 287 of the Companies Act, 1948.
26. Where any of the regulations of Table "A" and the Articles of Association are inconsistent, the said Articles shall prevail.
27. The first Secretary of the Company shall be Frank Charles Steele of 78 Old Broad Street in the City of London.

Names, Addresses and Descriptions of Subscribers

Flanence Beatrice Watkins  
14 Coniston Road  
Bramley, Kent  
Clerk

Frank Charles Steele,  
3, Frank Woolley Road,  
Tounbridge, Kent.  
Certified Accountant.

DATED this 24<sup>th</sup> day of August 1962

WITNESS to the above Signatures:-

A. J. Meale,  
18, Hannas Drive,  
Honnchurch,  
Essex.

Ypist

OUR REF: 82192/c  
YOUR REF: R2D/TH/R2D

COMPANIES REGISTRATION OFFICE

Companies House,

55-71 City Road,

LONDON, E.C.1

Name of Proposed Company

QUARTZ FUSED PRODUCTS LIMITED

The annexed documents are returned in order that

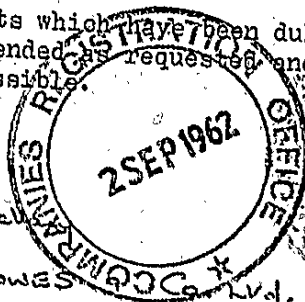
The Declaration of Compliance may be re-declared. (The Declaration must be dated contemporary with or subsequent to the completion of the Memorandum and Articles).

~~The duty and fees payable amount to £ and this sum should be forwarded with the documents amended as requested above.~~

The documents which have been duly stamped, could be amended as requested and returned as early as possible.

The Secretary

H. HOWES



DUPLICATE FOR THE FILE.

No. 734915



## Certificate of Incorporation

I Hereby Certify, that

QUARTZ FUSED PRODUCTS LIMITED

is this day incorporated under the Companies Act, 1948, and that the Company is Limited.

Given under my hand at London this Tenth day of September One thousand nine hundred and sixty two.

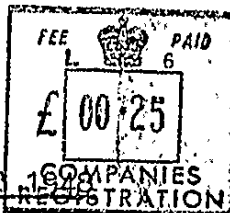
*Herbert*  
Assistant Registrar of Companies.

Certificate  
received by

Date 10 SEP 1962

148/10/17

No. of Company:



51-

ORDINARY RESOLUTIONS

- of -

QUARTZ FUSED PRODUCTS LIMITED

REGISTERED

22 JUL 1966

Passed the 29th day of June 1966

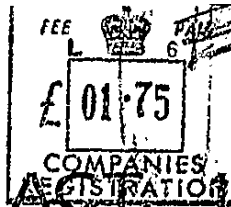
At an EXTRAORDINARY GENERAL MEETING of Quartz Fused Products Limited duly convened and held at Roneo Works, Govett Avenue, Shepperton, on Wednesday the 29th day of June, 1966 the following RESOLUTIONS were duly passed as ORDINARY RESOLUTIONS :

1. "That the Capital of the Company be increased from £1,500 to £5,000 by the creation of 3,500 shares of £1 each to rank pari passu with the existing Ordinary Shares.
2. That in accordance with the recommendation of the Directors the sum of £3,500 being part of the sum at present standing to the credit of Profit & Loss Account be capitalised and appropriated as capital to and amongst the shareholders of the company in proportion to the number of shares held by them respectively and be applied on their behalf in paying up in full 3,500 unissued shares of the company, such shares to be allotted and distributed credited as fully paid up to and amongst such shareholders in the proportion of seven of such shares for every three shares held by them respectively, in satisfaction of their respective shares and interests in the said capitalised sum, and that the said 3,500 shares shall on issue rank pari passu in all respects with the existing shares".

Chairman



No. of Company...734915.....



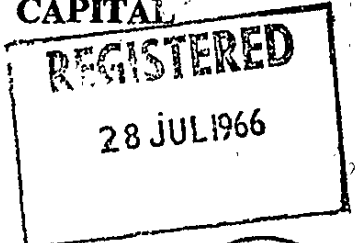
FORM No. 10.

# THE COMPANIES ACT, 1948

CH 1-10-0

## NOTICE OF INCREASE IN NOMINAL CAPITAL

PURSUANT TO SECTION 63.

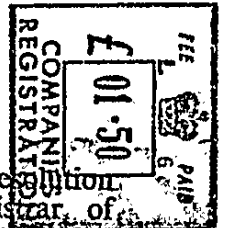


NAME OF COMPANY.

QUARTZ FUSED PRODUCTS



LIMITED.



NOTE.—This Notice, accompanied by a printed copy of the Resolution authorising the Increase, must be forwarded to the Registrar of Companies within 15 days after the passing of the said Resolution.

Presented by

Everett & Son, Chartered Accountants,

City-Gate House, Finsbury Square,  
London, E.C.2.

## H. HOWES & CO., LTD

Latv & Company Printers, Publishers & Stationers,  
7, BELL YARD (and 6, ANDREWS CROSSE) TEMPLE BAR, W.C.2.  
Telephone—HOLBORN 3073.

56, OLD BROAD STREET - - LONDON, E.C.2.  
Telephone—LONDON WALL 2237.

Head Office & Works—53 & 55, MANSELL STREET, LONDON, E.1.  
Telephone—ROYAL 8701

TO THE REGISTRAR OF COMPANIES.

QUARTZ FUSED PRODUCTS LIMITED

hereby gives you notice pursuant to Sect. 63 of the Companies Act, 1948,  
that by (a) Ordinary Resolution of the Company dated the 29th  
day of June 1966, the nominal Capital of the Company has  
been increased by the addition thereto of the sum of £ 3,500 beyond  
the registered Capital of £ 1,500. The additional Capital  
is divided as follows:—

<u>Number of Shares</u>	<u>Class of Share.</u>	<u>Nominal Amount of each Share.</u>
3,500	Ordinary	£1

The conditions (e.g., voting rights, dividends, etc.) subject to which the  
new Shares have been or are to be issued are as follows:—

To rank pari passu with the existing  
Ordinary Shares.

As per Resolution attached dated  
29th June, 1966.

(If any of the new Shares are Preference Shares state whether they are  
redeemable or not.)

(Signature) R. C. Langdon

(State whether Director,  
or Secretary) Secretary

Dated the 14th day of July 1966.

(a) "Ordinary," "Extraordinary" or "Special."

Margin reserved for binding.



No. of Certificate....734915.....

Form No. 26A.

QUARTZ FUSED PRODUCTS

LIMITED

Statement of Increase of Nominal Capital pursuant to Section 11 of the  
Stamp Act, 1891, as amended by Section 7 of the Finance Act, 1899, and  
Section 39 of the Finance Act, 1920. (NOTE.—The Stamp Duty on an increase of  
Nominal Capital is Ten Shillings for every £100 or fraction of £100.)

This statement is to be filed within 15 days after the passing of the  
Resolution by which the Registered Capital is increased, and if not so filed  
Interest on the Duty at the rate of 5 per centum per annum from the passing of the  
Resolution is also payable (Section 5, Revenue Act, 1903).

NOTE.—Attention is drawn to Section 63 of the Companies Act, 1948,  
relative to the filing of a Notice of Increase and a printed copy of the Resolution  
authorising the Increase.

Presented for registration by

Everett & Son, Chartered Accountants.

City-Gate House,

Finsbury Square, London, E.C.2.

**H. HOWES & CO., LTD.**

Law & Company Printers, Publishers & Stationers.

7, BELL YARD (and 6, ANDREWS CROSSE), TEMPLE BAR, W.C.2

Telephone—HOLBORN 3073.

56, OLD BROAD STREET

LONDON, E.C.2.

Telephone—LONDON WALL 2237.

Head Office & Works: 53 & 55, MANSELL STREET, LONDON, E.1.

Telephone—ROYAL 8701.

NOTE.—This margin is reserved for binding and must not be written across.

The NOMINAL CAPITAL of.....QUARTZ FUSED PRODUCTS.....

..... Limited,

has by a Resolution of the Company dated...29th June, 1966.....

been increased by the addition thereto of the sum of £...3,500..... divided

into ...3,500..... shares of £1..... each, beyond the Registered

Capital of £1,500.....

Signature.....*R. C. Langdon*.....

State whether Director or Secretary.....Secretary.....

Dated the .....14th..... day of .....July,..... 1966.....

This Statement should be signed by an Officer of the Company.

[paid up

No. of Company: 734915

THE COMPANIES ACT 1948

ORDINARY RESOLUTIONS

- of -

QUARTZ FUSED PRODUCTS LIMITED

Passed the 29th day of June 1966

At an EXTRAORDINARY GENERAL MEETING of Quartz Fused Products Limited duly convened and held at Roneo Works, Govett Avenue, Shepperton, on Wednesday the 29th day of June, 1966 the following RESOLUTIONS were duly passed as ORDINARY RESOLUTIONS :

1. "That the Capital of the Company be increased from £1,500 to £5,000 by the creation of 3,500 shares of £1 each to rank pari passu with the existing Ordinary Shares.
2. That in accordance with the recommendation of the Directors the sum of £3,500 being part of the sum at present standing to the credit of Profit & Loss Account be capitalised and appropriated as capital to and amongst the shareholders of the company in proportion to the number of shares held by them respectively and be applied on their behalf in paying up in full 3,500 unissued shares of the company, such shares to be allotted and distributed credited as fully paid up to and amongst such shareholders in the proportion of seven of such shares for every three shares held by them respectively, in satisfaction of their respective shares and interests in the said capitalised sum, and that the said 3,500 shares shall on issue rank pari passu in all respects with the existing shares".

R. J. RODD

Chairman

Number of } 734915 } 25  
Company

CR 1-25

# THE COMPANIES ACTS 1948 to 1967

## NOTICE OF INCREASE IN NOMINAL CAPITAL

Pursuant to section 63 of the Companies Act 1948

(A separate STATEMENT OF INCREASE may not be required with this form; please see overleaf)

To the REGISTRAR OF COMPANIES

QUARTZ FUSED PRODUCTS

Insert name  
of Company

"Ordinary" or  
"Extraordinary"  
or "Special"

Limited, hereby gives you notice, pursuant to Section 63 of the Companies Act 1948, that by a \* Ordinary Resolution of the Company dated the 28<sup>th</sup> day of March 1972 the nominal capital of the Company has been increased by the addition thereto of the sum of £5,000. beyond the registered capital of £5,000.

The additional capital is divided as follows:—

Number of Shares	Class of Share	Nominal amount of each share
5,000	Ordinary	£1.

mb

The conditions (e.g., voting rights, dividend rights, winding-up rights, etc.) subject to which the new shares have been, or are to be, issued are as follows:—

\* If any of the new shares are Preference Shares state whether they are redeemable or not. If the space below is insufficient the conditions should be set out separately by way of annexure.

The new shares rank pari passu in all respects with the existing ordinary shares of £1. each.

Signature

R. K. E. [Signature]

State whether Director  
or Secretary

Secretary.

Dated the 28<sup>th</sup> day of March 1972

Presented by

3 57

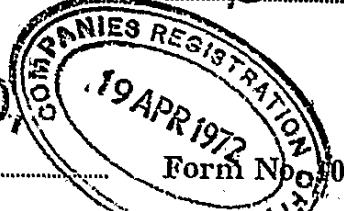
Presenter's Reference

45

WILLIAM GILBERT & CO.,

16 ST. MARTIN'S LE GRAND

1972

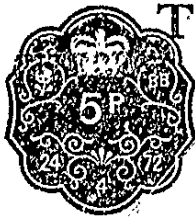


Number of  
Company

734915

26

22 days 147. 05/1



# THE STAMP ACT 1891

Company Limited by Shares



## STATEMENT OF INCREASE OF THE NOMINAL CAPITAL

OF

QUARTZ FUSED PRODUCTS

LIMITED

Pursuant to Section 112 of the Stamp Act 1891, as amended by Section 7 of  
the Finance Act 1899, by Section 39 of the Finance Act 1920, and  
Section 41 of the Finance Act 1933.

*NOTE.—The Stamp duty on an increase of Nominal Capital is Ten Shillings for  
every £100 or fraction of £100.*

This Statement is to be filed with the Notice of Increase which must be filed  
pursuant to Section 63 (1) of the Companies Act 1948. If not so filed within  
15 days after the passing of the Resolution by which the Capital is increased  
interest on the duty at the rate of 5 per cent per annum from the date of the  
passing of the Resolution is also payable. (Section 5 of the Revenue Act 1903.)

Presented by

Presenter's Reference

45

WITNESSED BY :-

THE SOLICITORS & CO.,

13 ST. MARTIN'S LE GRAND,

LONDON.

Form No. 26a

The Solicitors' Law Stationery Society, Limited.  
191-192 Fleet Street, E.C.4; 3 Bucklersbury, E.C.4; 49 Bedford Row, W.1;  
15 Hanover Street, W.1; 55-59 Newhall Street, Birmingham, 3; 31 Charles Street, Cardiff  
19 & 21 North John Street, Liverpool, 2; 28-30 John Dalton Street, Manchester, 2;  
14-22 Renfrew Court, Glasgow, G.2.

PRINTERS AND PUBLISHERS OF COMPANIES' BOOKS AND FORMS

Companies 6b

F17378.17-3-00



[P.T.O.]

# THE NOMINAL CAPITAL

OF

QUARTZ FUSED PRODUCTS Limited

has by a Resolution of the Company dated 28 March

1971 been increased by the addition thereto of the sum of

£ 5,000., divided into:—

5,000 Shares of £1. each

Shares of each

beyond the registered Capital of £5,000.

Signature

R.C.V.  
R.C. [Signature]

(State whether Director or Secretary) Secretary

Dated the 28<sup>th</sup> day of March 1972

Note—This margin is reserved for binding and must not be written across

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28  
THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES.

19/4  
ORDINARY RESOLUTIONS

— of —

QUARTZ FUSED PRODUCTS LIMITED

(Passed 28th March, 1972)

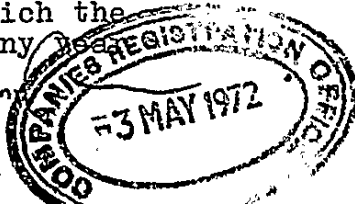
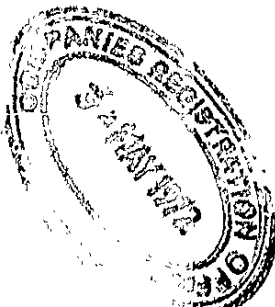
AT AN EXTRAORDINARY GENERAL MEETING of the above-named Company, duly convened and held at 18 Church Street, Epsom, Surrey, on Tuesday, the 28th day of March, 1972, the following Resolutions were duly passed as ORDINARY RESOLUTIONS:

RESOLUTIONS

1. That the capital of the Company be increased to £10,000 by the creation of 5,000 Ordinary Shares of £1 each ranking *pari passu* in all respects with the existing Ordinary Shares of £1 each in the capital of the Company.
2. That the sum of £5,000 being part of the amount standing to the credit of the General Reserves of the Company be capitalised on the basis that the same shall not be paid in cash but shall be appropriated as capital to and amongst the persons who are registered as the holders of the 5,000 existing Ordinary Shares of £1 each in the capital of the Company and that the Directors shall apply the said sum of £5,000 on behalf of such persons in paying up in full 5,000 new Ordinary Shares of £1 each in the capital of the Company and shall issue, allot and distribute such 5,000 new Ordinary Shares of £1 each credited as fully paid up to and amongst such persons or their nominees in proportion to their respective shareholdings or in such proportions as such persons may agree.
3. That each of the Ordinary Shares of £1 each (other than the 5,000 Ordinary Shares capitalised pursuant to Resolution 2 above) be and the same is thereupon converted into Deferred Shares of £1 each carrying no right to attend and vote at General Meetings of the Company nor to participate in the profits of the Company which the Directors may resolve to distribute in any year of the Company.

*JRS*  
*4*  
A. Bacon

Chairman



Number of Company 734915



THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES

SPECIAL RESOLUTIONS

of

QUARTZ FUSED PRODUCTS LIMITED

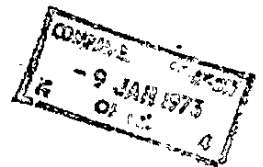
PASSED the 19th day of October, 1972.

AT an EXTRAORDINARY GENERAL MEETING of the above-named Company, duly convened and held at 18 Church Street, Epsom, Surrey, the subjoined SPECIAL RESOLUTIONS were duly passed, viz:-

1) That with the consent of the Board of Trade the name of the Company be changed to HERAEUS QUARTZ FUSED PRODUCTS LIMITED

2) That the regulations contained in the printed document submitted to this Meeting and for the purpose of identification subscribed by the Chairman be and the same are hereby adopted as the Articles of Association of the Company in substitution for and to the exclusion of the existing Articles of Association of the Company.

  
CHAIRMAN.



*P. Vischer*  
*P. Vischer*  
*P. Vischer*





**CERTIFICATE OF INCORPORATION  
ON CHANGE OF NAME**

No. 734915 / 37

I hereby certify that

**QUARTZ FUSED PRODUCTS LIMITED** ✓

having by special resolution and with the approval of the Secretary of State changed its name, is now incorporated under the name of

**HERAEUS QUARTZ FUSED PRODUCTS LIMITED**

Given under my hand at London the 31st January 1973

*N Taylor*  
(N. TAYLOR)

Assistant Registrar of Companies

14

C.172

No. 734915

THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES

R E S O L U T I O N S

- of -

HERAEUS QUARTZ FUSED PRODUCTS LIMITED ✓

(formerly QUARTZ FUSED PRODUCTS LIMITED)

Passed the 19th day of October, 1972

At an EXTRAORDINARY GENERAL MEETING of the Members of the above named company duly convened and held at 18 Church Street, Epsom, Surrey on Thursday the 19th day of October, 1972 the following resolutions were duly passed:-

ORDINARY RESOLUTION

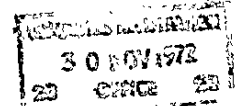
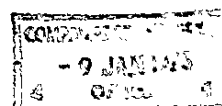
"That the authorised Share Capital be and it is hereby increased from £10,000 to £70,000 by the creation of 60,000 Shares of One Pound each to rank pari passu in all respects with the existing ordinary Share Capital of the Company".

SPECIAL RESOLUTION

"That in accordance with the recommendation of the Directors the sum of £10,000 standing to the credit of Revenue Reserve be appropriated as capital to and amongst the Shareholders of the Company in proportion to the number of Shares held by them respectively and be applied on their behalf in paying up in full 10,000 of the unissued Ordinary Shares of the Company, such Shares to be allotted and distributed credited as fully paid up to and amongst such shareholders in the proportion of one of such shares for every share held by them respectively in satisfaction of their respective shares and interest in the said capitalised sum".

*P. P. de*  
Chairman.

INCREASE



# THE COMPANIES ACTS 1948 to 1967

## Notice and Statement\* of Increase in Nominal Capital

DELETE statement in form where a SEPARATE statement is necessary; see overhead for notes

Insert name of Company.

† State whether Ordinary or Extraordinary or Special Resolution.

To the REGISTRAR OF COMPANIES

**HERAEUS QUARTZ FUSED PRODUCTS**  
(FORMERLY QUARTZ FUSED PRODUCTS)

Limited, hereby gives you notice, pursuant to Section 63 of the Companies Act 1948, that by an **ORDINARY** Resolution of the Company dated the **19TH** day of **OCTOBER** 1972 the nominal capital of the Company has been increased by the addition thereto of the sum of **£60,000** beyond the registered capital of **£10,000**

The additional capital is divided as follows:—

Number of Shares

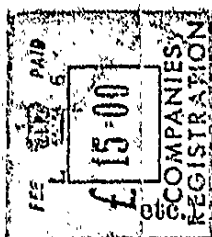
Class of Share

Nominal amount

**60,000**

**ORDINARY**

of each share  
**ONE POUND**



The conditions (e.g., voting rights, dividend rights, winding-up rights, etc.) subject to which the new shares have been, or are to be, issued are as follows:—

\*If any of the new shares are Preference Shares state whether they are redeemable or not. If the space below is insufficient the conditions should be set out separately by way of annexure.



*To rank pari-passu in all respects with the existing Ordinary Shares of the company.*

Signature R. C. [Signature]

State whether Director or Secretary Secretary

Dated the 1st day of November 1972

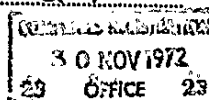
Presented by

Presentor's Reference Q 11

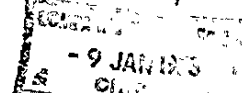
Everett Hou

City: York House

Trinity Square, R.C.2.



Form No. 10/10A



LCA Section 9. 1972.

No. of Company: 734915

✓ / 40

THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES

**Memorandum**  
— and —  
**NEW**  
**Articles of Association**

(Adopted by Special Resolution passed 19th October 1972)

-OF-

HERAEUS QUARTZ FUSED PRODUCTS LIMITED ✓  
(formerly Quartz Fused Products Limited)

Incorporated the 10th day of September, 1962

H.B. WEDLAKE, SAINT & CO.,  
Solicitors,  
33 Bedford Row,  
London WC1R 4JN

COMPANIES REGISTRATION  
- 9 JAN 1973  
OFFICE 4

✓  
*P. H. S. C.*

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THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES

**Memorandum of Association**

-OF-

**\*HERAEUS QUARTZ FUSED PRODUCTS  
LIMITED**

1. The name of the Company is "HERAEUS QUARTZ FUSED PRODUCTS LIMITED."

2. The registered office of the Company will be situate in England.

3. The objects for which the Company is established are :-

- (A) To carry on business as workers in quartz, silica, ceramic and similar materials, manufacturers of and dealers in chemical, medical, mechanical, electrical and electronic instruments and equipment of all kinds and descriptions; mechanical electrical and electronic engineers, electro-platers, nickel-platers, chromium-platers, bronziers, oxidisers, enamellers, lacquerers, varnishers, painters, polishers, gilders, goldsmiths and silversmiths, metal and alloy makers, refiners and workers cabinet workers, wood workers, carpenters and joiners, and any other business which can, in the opinion of the Directors, be advantageously carried on by the Company in connection with or as ancillary to any of the above businesses.
- (B) To acquire and undertake the whole or any part of the business, property and liabilities of any person or company

\* Note: Pursuant to a Special Resolution of the Company passed 19th October 1972 the name of the Company was changed to the above name from "QUARTZ FUSED PRODUCTS LIMITED."

carrying on any business which this Company is authorised to carry on or possessed of property suitable for the purposes of this Company.

- (C) To erect, construct, lay down enlarge, alter and maintain any roads, railways, tramways, sidings, bridges, reservoirs, shops, stores, factories, buildings, works, plant and machinery necessary or convenient for the Company's business, and to contribute to or subsidise the erection, construction and maintenance of any of the above.
- (D) To pay for any property or rights acquired by the Company, either in cash or shares, with or without preferred or deferred rights in respect of dividend or repayment of capital or otherwise, or by any securities which the Company has power to issue, or partly in one mode and partly in another, and generally on such terms as the Company may determine.
- (E) To apply for, purchase or otherwise acquire, protect, prolong and renew any patents, patent rights, brevets d'invention, licences, concessions and the like, conferring any exclusive or non-exclusive or limited right to use or any secret or other information as to any invention which may seem capable of being used for any of the purposes of the Company, or the acquisition of which may seem calculated directly or indirectly to benefit the Company, and to use, exercise, manufacture, develop or grant licences in respect of, or otherwise turn to account the property, rights or information so acquired, and to expend money in experimenting upon and testing and in improving or seeking to improve any patents, inventions or rights which the Company may acquire or propose to acquire.
- (F) To enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint adventure, reciprocal concession or otherwise with any person or company carrying on or engaged in, or about to carry on or engage in, any business or transaction which this Company is authorised to carry on or engage in, or any business or transaction capable of

being conducted so as directly or indirectly to benefit this Company, and to subsidise or otherwise assist any such company, and to give any guarantees.

- (G) To take or otherwise acquire and hold shares in or securities of any company, and to sell, hold, re-issue, with or without guarantee, or otherwise deal with the same.
- (H) To establish and support or aid in the establishment and support of associations, institutions, funds, trusts and conveniences calculated to benefit employees or ex-employees of the Company or the dependants or connections of such persons, and to grant pensions and allowances, and to make payment towards insurances, and to subscribe or guarantee money for charitable or benevolent objects, or for any exhibition or for any public, general or useful object.
- (I) To promote any company or companies for the purpose of acquiring all or any of the property, rights and liabilities of this Company, or for any other purpose which may seem directly or indirectly calculated to benefit this Company.
- (J) Generally to purchase, take on lease or in exchange, hire or otherwise acquire, rebuild or improve any real or inheritable and personal property, and any rights or privileges which the Company may think necessary or convenient for the purposes of its business, and in particular any land, buildings, concessions, claims, wayleaves, easements, machinery, plant and stock-in-trade.
- (K) To construct, improve, maintain, develop, work, manage, carry out or control any roads, ways, tramways, railways, branches or sidings, bridges, reservoirs, watercourses, wharves, manufactories, warehouses, buildings, residences, workmen's houses, electric works, telegraphs, shops, stores and other works, machinery and conveniences which may seem calculated, directly or indirectly to advance the Company's interests, and to contribute to, subsidise or otherwise assist or take part in the construction, improvement, maintenance, working, management, carrying



out or control thereof.

- (L) To invest and deal with the moneys of the Company not immediately required upon such securities, including the purchase of real estate, in such manner as may from time to time be determined, and to sell, vary or otherwise deal with the same.
- (M) To lend money to such persons and bodies and on such terms as may seem expedient, and in particular to customers and others having dealings with the Company, and to companies or firms in which the Company may be directly or indirectly interested, and to guarantee the performance of contracts or the due payment of any moneys, including principal interest and dividends of any shares, stocks or securities, by any company or person.
- (N) To borrow or raise or secure the payment of money in such manner as the Company shall think fit, and in particular by the issue of debentures or debenture stock, perpetual or otherwise, charged upon all or any of the Company's property, both present and future, including its uncalled capital, and to purchase, redeem or pay off any such securities.
- (O) To draw, make, accept, indorse, discount, execute, deal in and issue promissory notes, bills of exchange, drafts, bills of lading, warrants, debentures and other negotiable or transferable instruments.
- (P) To procure the Company to be registered or recognised in any country or place, and to obtain any Provisional Order or Act of Parliament, or any enactment, decree or other legislative or executive act of any empire, kingdom, state, republic, colony, municipality, or other authority for enabling the Company to carry any of its objects into effect, or for effecting any alteration or modification of the Company's constitution.
- (Q) To sell, improve, manage, develop, exchange, lease, mortgage, dispose of, turn to account or otherwise deal with all or any part of

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the property and rights, privileges, concessions and easements of the Company for such consideration as the Company may think fit, and in particular for shares, fully or partly paid, debentures or securities of any other company.

- (R) To amalgamate with any other company having objects altogether or in part similar to those of this Company.
- (S) To adopt such means of making known the business and products of the Company as may seem expedient, and in particular by advertising in the press, by circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
- (T) To pay all or any part of the expenses of and incident to the formation and establishment of the Company, and to remunerate any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of any of the shares in the Company's capital, or any debentures, debenture stock or other securities of the Company, or in or about the conduct of the Company's business.
- (U) To distribute any of the property of the Company in specie among the Members.
- (V) To do all or any of the above things in the United Kingdom or in any part of the world, and as principals, agents, contractors, trustees or otherwise, and by or through trustees, sub-contractors, agents or otherwise, and either alone or in conjunction with others.
- (W) To do all such other things as the Company shall think may be incidental or conducive to the attainment of the above objects or any of them.

AND it is hereby declared that the word "Company" in this clause shall be deemed to include any partnership or other body of persons whether incorporated or not incorporated and whether domiciled in the United Kingdom or elsewhere.

And it is hereby further declared that the objects of the Company in any wise limited by reference to any other paragraph or the order as specified in each of the foregoing paragraphs of this clause (except only if and so far as otherwise expressly provided in any paragraph) shall be separate and distinct objects of the Company and shall not be in which the same occur or the name of the Company.

4. The liability of the members is limited.

5.\* The share capital of the Company is £1,500, divided in 1,500 shares of £1. each with power to increase and to divide the shares in the capital for the time being whether original or increased and before or after the issue thereof into several classes and to attach thereto respectively, any preferential, deferred, qualified or special rights, privileges or conditions, and with a special or without any right of voting.

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\*Note: By divers Resolutions of the Company the Share Capital as at the 19th October, 1972 was £70,000 divided into 70,000 Shares of £1 each.

WE, the several persons whose Names, Addresses, and descriptions are subscribed, are desirous of being formed into a Company, in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

NAMES, ADDRESSES AND DESCRIPTIONS OF SUBSCRIBERS.	Number of Shares taken by each Subscriber
FLORENCE BEATRICE WATKINS, 14, Coniston Road, Bromley, Kent.  Clerk.	One
FRANK CHARLES STEELE, 3, Frank Woolley Road, Tonbridge, Kent.  Certified Accountant.	One

D A T E D the 24th day of August, 1962.

WITNESS to the above Signatures:-

A.T. NEALE,  
48, Harrow Drive,  
Hornchurch, Essex.  
Typist.

THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES

NEW

Articles of Association

-OF-

HERAEUS QUARTZ FUSED PRODUCTS  
LIMITED

(Adopted by Special Resolution passed on the  
19th October, 1972)

PRELIMINARY.

1. The regulations in Table A in the first schedule to the Companies Act, 1948 shall not apply to the Company.

2. In these Articles, if not inconsistent with the subject or context, the following words shall bear the following meanings:-

<u>WORDS</u>	<u>MEANINGS.</u>
The Acts ... ..	The Companies Acts 1948 to 1967, and every statutory modification or re-enactment thereof for the time being in force.
These Articles ... ..	These Articles of Association as originally framed or as from time to time altered.
Office ... ..	The registered office for the time being of the Company.
Seal ... ..	The common seal of the Company.
The United Kingdom ...	Great Britain and Northern Ireland.
Paid up ... ..	Paid up or credited as paid up.

In writing ... .. Written, printed or lithographed, or visibly expressed in all or any of those or any other modes of representing or reproducing words.

Words importing the singular number shall include the plural number, and vice versa.

Words importing the masculine gender shall include the feminine gender.

The expression "Secretary" shall (subject to the provisions of the Acts) include an assistant or deputy Secretary, and any person appointed by the Directors to perform any of the duties of the Secretary.

Save as aforesaid, any words or expressions defined in the Act shall, if not inconsistent with the subject or context, bear the same meaning in these Articles.

#### CAPITAL.

3. The share capital of the Company at the date of the adoption of these Articles is £70,000 divided into 70,000 Shares of £1 each.

4. Without prejudice to any special rights for the time being conferred on the holders of any class of shares (which special rights shall not be varied or abrogated except with such consent or sanction as is required by the next following Article), any share in the Company may be issued with such preferred, deferred or other special rights, or such restrictions, whether in regard to dividend, return of capital, voting or otherwise, as the Company may from time to time by Ordinary Resolution determine; and any Preference Share may be issued on the terms that it is, or at the option of the Company is to be liable, to be redeemed, subject to the provisions of the Acts, on such terms and in such manner as may be provided by these Articles.

#### VARIATION OF RIGHTS.

5. Whenever the capital of the Company is divided into different classes of shares, the special rights attached to any class may be varied or abrogated, either whilst the Company is a going concern or during or in contemplation of a winding up, with the consent in writing of the holders of three-fourths of the issued shares of the class, or with the sanction of an

Extraordinary Resolution passed at a separate meeting of the holders of the shares of the class, but not otherwise. To every such separate meeting all the provisions of these Articles relating to General Meetings of the Company or to the proceedings thereat shall, mutatis mutandis, apply.

6. The special rights conferred upon the holders of any class of shares issued with preferred or other special rights shall be deemed to be varied by the reduction of the capital paid up on such shares and by the creation of further shares ranking in priority thereto, but shall not (unless otherwise expressly provided by these Articles or by the conditions of issue of such shares) be deemed to be varied by the creation or issue of further shares ranking *pari passu* therewith or subsequent thereto.

#### SHARES.

7. The Company is a Private Company, and accordingly (A) no invitation shall be issued to the public to subscribe for any shares or debentures or debenture stock of the Company; (B) the number of the members of the Company (exclusive of persons who are in the employment of the Company and of persons who having been in the employment of the Company were while in such employment and have continued after the determination of such employment to be members of the Company) shall be limited to fifty, provided that, for the purposes of this provision, where two or more persons hold one or more shares in the Company jointly, they shall be treated as a single member; and (C) the right to transfer the shares of the Company shall be restricted in manner hereinafter appearing.

8. All shares for the time being unissued and all new shares of any class shall, before issue, be offered to the existing holders of shares in proportion to the number of shares held by them respectively. Every such offer shall be made by notice in writing specifying the number of shares to which the member is entitled and limiting a time within which the offer, if not accepted, will be deemed to be declined. After the expiration of that time, or on receipt of an intimation from the member to whom such notice is given that he declines to accept the shares offered, the shares not taken up by members shall be at the disposal of the Directors who may allot or otherwise dispose of them subject to Article 7 hereof to such persons at such times and generally on such terms and conditions as they think proper, provided that no shares shall be issued at a

discount except as provided by Section 57 of the Companies Act, 1948.

9. The Company shall not give, whether directly or indirectly and whether by means of a loan, guarantee, the provision of security or otherwise, any financial assistance for the purpose of or in connection with a purchase or subscription made or to be made by any person of or for any shares of the Company or of its holding company (if any), nor shall the Company make a loan for any purpose whatsoever on the security of its shares or those of its holding company (if any), but nothing in this Article shall be taken to prohibit transactions not prohibited by the Acts.

10. In addition to all other powers of paying commissions, the Company may exercise the powers conferred by the Acts of paying commissions to persons subscribing or procuring subscriptions for shares of the Company, or agreeing so to do, whether absolutely or conditionally, and any such commissions may be satisfied by the payment of cash or by the allotment of fully or partly paid shares of the Company, or partly in the one way and partly in the other: Provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required by the Acts and shall not exceed 10 per cent of the price at which the shares in respect whereof the commission is paid are issued or an amount equivalent thereto. The Company may also, on any issue of shares, pay such brokerage as may be lawful.

11. No person shall be recognised by the Company as holding any share upon any trust, and the Company shall not be bound by or recognise any equitable, contingent, future or partial interest in any share, or (except only as by these Articles otherwise provided or as by law required) any interest in any fractional part of a share, or any other right in respect of any share, except an absolute right to the entirety thereof in the registered holder.

#### CERTIFICATES.

12. (A) Every person whose name is entered as a member in the Register of Members shall be entitled without payment to one certificate for all his shares of each class, or upon payment of such sum, not exceeding one shilling for every certificate after the first, as the Directors shall from time to



time determine, to several certificates, each for one or more of his shares. Every Certificate shall be issued within one month after allotment unless the conditions of issue of such shares otherwise provide, or within 21 days of the lodgment with the Company of any transfer of the shares, not being a transfer which the Company is for any reason entitled to refuse to register and does not register, and shall be under the Seal, and shall specify the number and class and distinguishing number (if any) of the shares to which it relates, and the amount paid up thereon. The Company shall not be bound to register more than three persons as the joint holders of any share or shares (except in the case of executors or trustees of a deceased Member) and in the case of a share held jointly by several persons, the Company shall not be bound to issue more than one certificate therefor, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all. Where a Member transfers part of his holding of shares he shall be entitled to a certificate for the balance of his holding without charge.

(B) If the Directors so resolve, share certificates and, subject to the provisions of any instrument constituting or securing the same, certificates issued under the Seal in respect of any debentures, need not be signed or countersigned, or the requisite signatures may be affixed thereto by such mechanical means as may be specified in such resolution. Until otherwise so resolved and subject as regards certificates for debentures to any conditions applicable thereto, every such certificate shall bear the autographic signature of one Director and the Secretary.

13. If a share certificate be lost, destroyed, defaced or worn out, it may be renewed on payment of such fee (if any) not exceeding one shilling, and (in case of loss or destruction) on such terms (if any) as to evidence and indemnity as the Directors think fit, and (in case of defacement or wearing out) on delivery up of the old certificate.

#### LIEN.

14. The Company shall have a first and paramount lien on every share for all moneys (whether presently

payable or not) called or payable at a fixed time in respect of such share; and the Company shall also have a first and paramount lien on all shares registered in the name of a Member as sole registered holder or as a joint holder in respect thereof for all the debts and liabilities of such Member or his estate to the Company, and that whether the same shall have been incurred before or after notice to the Company of any equitable or other interest in any person other than such Member and whether the period for the payment or discharge of the same shall have actually arrived or not, and notwithstanding that the same are joint debts or liabilities of such Member or his estate and any other person, whether a Member of the Company or not. The Company's lien (if any) on a share shall extend to all dividends or other moneys payable thereon or in respect thereof. The Directors may resolve that any share shall for some specified period be exempt from the provisions of this Article.

15. The Company may sell, in such manner as the Directors think fit, any share on which the Company has a lien, but no sale shall be made unless some moneys in respect of which the lien exists are presently payable, and fourteen days have expired after a notice in writing, stating and demanding payment of the moneys presently payable, and giving notice of intention to sell in default, shall have been served on the holder for the time being of the shares or the person entitled by reason of his death or bankruptcy to the shares.

16. The net proceeds of such sale, after payment of the costs of such sale, shall be applied in or towards payment or satisfaction of the debt or liability in respect whereof the lien exists, so far as the same is presently payable, and any residue shall (subject to a like lien for debts or liabilities not presently payable as existed upon the shares prior to the sale) be paid to the person entitled to the shares at the time of the sale. For giving effect to any such sale the Directors may authorise some person to transfer the shares sold to the purchaser thereof. The purchaser shall be registered as the holder of the shares so transferred and he shall not be bound to see to the application of the purchase money, nor shall his title to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.

#### CALLS ON SHARES.

17. The Directors may, subject to the provisions

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of these Articles and to any conditions of allotment, from time to time make calls upon the Members in respect of any moneys unpaid on their shares (whether on account of the amount of the shares or by way of premium), provided that (except as otherwise fixed by the conditions of application or allotment) no call on any share shall exceed one-fourth of the nominal amount of the share or be payable at less than fourteen days from the date appointed for payment of the last preceding call, and each Member shall (subject to being given at least fourteen days' notice specifying the time or times and place of payment) pay to the Company at the time or times and place so specified the amount called on his shares.

18. A call may be made payable by instalments. A call may be postponed and a call may be wholly or in part revoked as the Directors may determine. A call shall be deemed to have been made at the time when the resolution of the Directors authorising the call was passed. The joint holders of a share shall be jointly and severally liable to pay all calls in respect thereof.

19. If a sum called in respect of a share is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest on the sum from the day appointed for payment thereof to the time of actual payment at the rate of 10 per cent per annum or at such lesser rate as the Directors may agree to accept, but the Directors shall be at liberty to waive payment of such interest wholly or in part.

20. Any sum which by or pursuant to the terms of issue of a share becomes payable upon allotment or at any fixed date, whether on account of the amount of the share or by way of premium, shall for all the purposes of these Articles be deemed to be a call duly made and payable on the date on which, by or pursuant to the terms of issue, the same becomes payable, and in case of non-payment all the relevant provisions of these Articles as to payment of interest, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.

21. The Directors may make arrangements on the issue of shares for a difference between the holders in the amount of calls to be paid and in the times of payment.

22. The Directors may, if they think fit,

receive from any Member willing to advance the same all or any part of the money unpaid upon the shares held by him beyond the sums actually called up thereon as a payment in advance of calls, and such payment in advance of calls shall extinguish, so far as the same shall extend, the liability upon the shares in respect of which it is advanced, and the Company may pay interest upon the money so received, or so much thereof as from time to time exceeds the amount of the calls then made upon the shares in respect of which it has been received, at such rate as the Member paying such sum and the Directors agree

#### FORFEITURE OF SHARES.

23. If a Member fails to pay any call or instalment of a call on the day appointed for payment thereof, the Directors may at any time thereafter, during such time as any part of such call or instalment remains unpaid, serve a notice on him requiring payment of so much of the call or instalment as is unpaid, together with any interest which may have accrued.

24. The notice shall name a further day (not earlier than fourteen days from the date of service thereof) on or before which and the place where the payment required by the notice is to be made, and shall state that in the event of non-payment at or before the time and at the place appointed the shares on which the call was made will be liable to be forfeited.

25. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which such notice has been given may at any time thereafter, before payment of all calls and interest due in respect thereof has been made, be forfeited by a resolution of the Directors to that effect, and such forfeiture shall include all dividends which shall have been declared on the forfeited shares and not actually paid before the forfeiture.

26. A forfeited share may be sold, re-allotted or otherwise disposed of, either to the person who was before forfeiture the holder thereof or entitled thereto, or to any other person, upon such terms and in such manner as the Directors shall think fit, and at any time before a sale, re-allotment or disposal the forfeiture may be cancelled on such terms as the Directors think fit. The Directors may, if

necessary, authorise some person to transfer a forfeited share to any other person as aforesaid.

27. A Member whose shares have been forfeited shall cease to be a Member in respect of the forfeited shares, but shall notwithstanding the forfeiture remain liable to pay to the Company all moneys which at the date of forfeiture were presently payable by him to the Company in respect of the shares, with interest thereon at the rate of 10 per cent per annum from the date of forfeiture until payment, and the Directors may enforce payment without any allowance for the value of the shares at the time of forfeiture.

28. A statutory declaration that the declarant is a Director or the Secretary of the Company, and that a share has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share, and such declaration and the receipt of the Company for the consideration (if any) given for the share on the sale, re-allotment or disposal thereof, together with the certificate for the share delivered to a purchaser or allottee thereof, shall (subject to the execution of a transfer if the same be so required) constitute a good title to the share, and the person to whom the share is sold, re-allotted or disposed of shall be registered as the holder of the share and shall not be bound to see to the application of the consideration (if any), nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale, re-allotment or disposal of the share.

#### TRANSFERS.

29. Except in the case of a transfer of shares approved in writing by all the members for the time being (including as members for this purpose the personal representatives of any deceased members in whose names shares are still standing) the right to transfer shares in the Company shall be subject to the following restrictions, namely:-

- (A) Before transferring or requiring the Company to register a transfer of any shares, the person, whether a member of the Company or not, proposing to transfer the same, (hereinafter called "the retiring member") shall give a notice in writing (hereinafter

called "the transfer notice") to the Company, that he desires to transfer the same, and the transfer notice shall constitute the Company his agent for the sale of the shares therein mentioned at the prescribed price to any member (including as aforesaid). A transfer notice once given shall not be revocable except with the consent of the Directors.

- (B) If the Company within a space of four months after receiving any transfer notice or after the prescribed price for the shares included therein shall have been determined (whichever is the later) shall find members (including as aforesaid) (hereinafter called "the purchasers") willing to purchase all the shares therein mentioned, and shall give notice in writing thereof to the retiring member, he shall be bound, upon payment of the prescribed price, to transfer the shares mentioned in the transfer notice to the purchaser or purchasers thereof.
- (C) Every notice given by the Company under paragraph (B) stating that it has found purchasers for the shares included in a transfer notice shall state the names and addresses of the purchasers and the number of shares agreed to be purchased by them respectively and the purchases shall be completed at a place and time to be appointed by the Company, not being more than 28 days after the date of the notice.
- (D) If in any case a retiring member, after having become bound to transfer any shares to a purchaser, shall make default in transferring the shares, the Directors may authorise some person to transfer the shares to the purchasers, and the Company may receive the purchase money, and shall thereupon cause the name of the purchasers to be entered in the register as the holders of the shares, and shall hold the purchase money in trust for the retiring member. The receipt of the Company for the purchase money shall be a good discharge to any purchaser, and he shall not be bound to see to the application thereof, and after the name of the purchaser has been entered in the register in purported exercise of the aforesaid powers the validity of the proceedings shall not be questioned by any

person.

- (E) If the Company shall not within the space of four months mentioned in paragraph (B) find members desiring to purchase all the shares mentioned in the transfer notice, and give notice in writing thereof to the retiring member, or, if the Company shall within the space aforesaid give to the retiring member notice in writing that it has no prospect of finding purchasers for all those shares, the retiring member shall, at any time within three months thereafter be at liberty (subject only to the restrictions contained in Article 7 so far as applicable) to transfer the shares or any of them to any person at any price.
- (F) By the expression "the prescribed price" used in this Article is meant the sum per share agreed between the retiring member and the Company, acting by the Directors, as the fair value of a share. Failing such agreement before or within two months after the giving of the transfer notice the sum per share shall be determined and certified in writing by an independent Chartered Accountant to be appointed jointly by the retiring member and the Company. Failing such agreement within a further period of four weeks the prescribed price shall be determined and certified in writing by a Fellow or Member of the Institute of Chartered Accountants to be nominated at the request of either the retiring member or the Company by the President for the time being of the International Chamber of Commerce in Paris. The principles upon which such prescribed price shall be reached either by the said independent Chartered Accountant or the said Fellow or Member shall be according to generally accepted accountancy principles taking into account the value of the assets and the profitability of the Company but not taking into consideration any offers for the shares by third parties. In so certifying the said independent Chartered Accountant or Fellow or Member as the case may be shall act as an expert and not as an Arbitrator and in so determining and certifying the fair value of the shares included in the transfer notice his decision shall be final. The costs and expenses in relation to the valuation by such independent Chartered Accountant

or Fellow or Member as the case may be shall be borne by the retiring member.

- (G) All shares included in any transfer notice shall be offered by the Company for sale at the prescribed price to all the members (including for this purpose the personal representatives of deceased members in whose names shares are still standing but excluding the member giving the transfer notice) on the terms and so that in case of competition the shares so offered shall be allocated and sold to the members accepting the offer in proportion (as nearly as may be and without increasing the number sold to any member beyond the number applied for by him) to their existing holdings of shares. All offers of shares under this paragraph shall be made by writing sent through the post in prepaid letters addressed to the members at their respective registered addresses as appearing in the register, and every such offer shall limit a time (not being less than 14 days nor more than 28 days) within which the offer must be accepted or in default may be treated as declined.

30. If any member shall die or shall be adjudged bankrupt, his personal representatives or his trustees in bankruptcy (as the case may be) shall be bound if and when called upon in writing by the Directors so to do within three months of the date when representation shall be granted to his estate or he shall be adjudged bankrupt, to give to the Company a transfer notice in respect of all the shares registered in the name of the deceased or bankrupt member and, in default of such transfer notice being given within one month of its being so called for, the personal representatives or the trustee in bankruptcy (as the case may be) shall be deemed to have given such notice at the expiration of the said period of one month and the provisions of these presents shall apply accordingly.

31. The Directors may, in their absolute discretion, and without assigning any reason therefor, refuse to register any transfer of shares.

32. The Directors may refuse to register any transfer of shares on which the Company has a lien, or the registration of which would cause the limit hereinbefore imposed upon the number of the members of the Company to be exceeded.



33. A person becoming entitled to a share in consequence of the death or bankruptcy of a member shall be entitled to receive and may give a discharge for all dividends and other moneys payable in respect of the share, and shall also be entitled to exercise all such other rights as are conferred upon members of the Company by Statute or by these Articles of Association, but he shall not (except as otherwise provided by these Articles) be entitled to receive notices of or to attend or vote at meetings of the Company, or, save as aforesaid, to any of the rights or privileges of a member until he shall have become a member in respect of the share. Provided that during a period of six months from the date of the death of a member his executors, if probate of his Will shall have been granted, and his Administrators, if Letters of Administration to his estate shall have been granted, and unless and until probate of his Will shall have been granted the persons named in the Will as his executors (subject to their producing such Will to the Company) shall be entitled to be given notice of and to attend and vote in respect of the shares standing in the name of the deceased member at any meeting held within the said period of six months.

34. All transfers of shares shall be effected by transfer in writing in the usual common form or in any other form approved by the Directors, and need not be under seal.

35. The instrument of transfer shall be signed by or on behalf of the transferor and, in the case of a partly paid share, by the transferee. The transferor shall be deemed to remain the holder of the shares until the name of the transferee is entered on the Register of Members in respect thereof.

36. The Directors may decline to recognise any instrument of transfer, unless:-

(A) the instrument of transfer duly stamped is deposited at the Office or such other place as the Directors may appoint, accompanied by the certificate for the shares to which it relates, and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer; and

(B) the instrument of transfer is in respect of only one class of share.

37. If the Directors refuse to register a transfer of any shares, they shall, within two months after the date on which the transfer was lodged with the Company, send to the transferee notice of the refusal.

38. The registration of transfers of shares or of any class of shares may be suspended at such times and for such periods (not exceeding thirty days in any year) as the Directors may from time to time determine.

39. No fee shall be charged in respect of the registration of any probate, letters of administration, certificate of marriage or death, power of attorney or other document relating to or affecting the title to any shares.

40. All instruments of transfer which shall be registered shall be retained by the Company, but any instrument of transfer which the Directors may refuse to register shall (except in any case of fraud) be returned to the person depositing the same.

41. Nothing in these Articles shall preclude the Directors from recognising a renunciation of the allotment of any share by the allottee in favour of some other person.

#### STOCK.

42. The Company may by Ordinary Resolution convert any paid-up shares into stock, and re-convert any stock into paid-up shares of any denomination.

43. The holders of stock may transfer the same or any part thereof in the same manner, and subject to the same regulations, as would have applied to the shares from which the stock arose if they had not been converted, or as near thereto as circumstances admit, but the Directors may from time to time, if they think fit, fix the minimum amount of stock transferable, provided that such minimum shall not exceed the nominal amount of each of the shares from which the stock arose.

44. The holders of stock shall, according to the amount of the stock held by them, have the same rights, privileges and advantages in all respects as if they held the shares from which the stock arose, but no such privilege or advantage (except participation in dividends and profits of the Company and in its assets on a winding up) shall be conferred by an amount of stock which would not, if existing in shares, have

conferred such privilege or advantage.

45. All the provisions of these Articles applicable to paid-up shares shall apply to stock, and in all such provisions the words "share" and "Member" shall include "stock" and "Stockholder" respectively.

#### INCREASE OF CAPITAL.

46. The Company may from time to time by Ordinary Resolution increase its capital by such sum, to be divided into shares of such amounts, as the resolution shall prescribe.

47. All new shares shall be subject to the provisions of these Articles with reference to payment of calls, lien, forfeiture, transfer, transmission and otherwise, and, unless otherwise provided by these Articles, by the resolution creating the new shares or by the conditions of issue, the new shares shall be Ordinary Shares.

#### ALTERATION OF CAPITAL.

48. The Company may by Ordinary Resolution:-

(A) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;

(B) cancel any shares which, at the date of the passing of the resolution, have not been taken, or agreed to be taken, by any person, and diminish the amount of its share capital by the amount of the shares so cancelled;

(C) sub-divide its shares, or any of them, into shares of smaller amount than is fixed by the Memorandum of Association (subject nevertheless to the provisions of the Act), and so that the resolution whereby any share is sub-divided may determine that, as between the holders of the shares resulting from such sub-division, one or more of the shares may have any such preferred or other special rights over, or may have such deferred rights, or be subject to any such restrictions as compared with the others as

the Company has power to attach to unissued or new shares and may by Special Resolution reduce its share capital and any capital redemption reserve fund and any share premium account in any manner authorised by the Acts.

Whenever as a result of any consolidation of shares any Members would become entitled to fractions of a share, the Directors may for the purpose of eliminating such fractions sell the shares representing the fractions for the best price reasonably obtainable and distribute the proceeds of sale in due proportion among the Members who would have been entitled to the fractions of shares, and for the purpose of any such sale the Directors may authorise some person to transfer the shares representing the fractions to the purchaser thereof, whose name shall thereupon be entered in the Register of Members as the holder of the shares, and who shall not be bound to see to the application of the purchase money nor shall his title to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.

#### GENERAL MEETINGS.

49. The Company shall in each year hold a General Meeting as its Annual General Meeting in addition to any other meetings in that year; and not more than fifteen months shall elapse between the date of one Annual General Meeting of the Company and that of the next. Subject as aforesaid and to the provisions of the Acts, the Annual General Meeting shall be held at such time and place as the Directors may determine. All General Meetings other than Annual General Meetings shall be called Extraordinary General Meetings.

50. The Directors may call an Extraordinary General Meeting whenever they think fit, and Extraordinary General Meetings shall also be convened on such requisition, or in default may be convened by such requisitionists, as provided by the Acts.

#### NOTICE OF GENERAL MEETINGS.

51. An Annual General Meeting and an Extraordinary General Meeting for the passing of a Special Resolution shall be called by twenty one days' notice at the least, and all other Extraordinary General Meetings shall be called by fourteen days' notice at

the least. The notice shall be exclusive of the day on which it is served, or deemed to be served, and of the day for which it is given. Every notice shall be in writing and shall specify the place, the day and the time of meeting, and in the case of special business the general nature of such business, and in the case of an Annual General Meeting shall specify the meeting as such. Notices shall be given in manner hereinafter mentioned to all the Members, other than those who under the provisions of these Articles or the conditions of issue of the shares held by them are not entitled to receive the notice, and to the Auditors for the time being of the Company.

52. In every notice calling a meeting of the Company there shall appear with reasonable prominence a statement that a Member entitled to attend and vote is entitled to appoint one or more proxies to attend and vote instead of him and that a proxy need not also be a Member.

53. It shall be the duty of the Company, subject to the provisions of the Acts, on the requisition in writing of such number of Members as is specified in the Act and (unless the Company otherwise resolves) at the expense of the requisitionists:-

(A) to give to Members entitled to receive notice of the next Annual General Meeting notice of any resolution which may properly be moved and is intended to be moved at that meeting, and

(B) to circulate to Members entitled to have notice of any General Meeting sent to them any statement of not more than one thousand words with respect to the matter referred to in any proposed resolution or the business to be dealt with at that meeting.

54. The accidental omission to give notice of a meeting to, or the non-receipt of notice of a meeting by, any person entitled to receive notice shall not invalidate the proceedings at that meeting.

#### PROCEEDINGS AT GENERAL MEETINGS.

55. All business shall be deemed special that is transacted at an Extraordinary General Meeting. All business that is transacted at an Annual General

Meeting shall also be deemed special, with the exception of declaring dividends, the consideration of the accounts and balance sheet and the reports of the Directors and Auditors and other documents required to be annexed to the balance sheet, the appointment of Directors in the place of those retiring by rotation or otherwise and the fixing of the remuneration of the Auditors.

56. Where, by any provision contained in the Acts, special notice is required of a resolution, the resolution shall not be effective unless notice of the intention to move it has been given to the Company not less than twenty-eight days (or such shorter period as the Acts permit) before the meeting at which it is moved, and the Company shall give to the Members notice of any such resolution as required by and in accordance with the provisions of the Acts.

57. No business shall be transacted at any General Meeting unless a quorum is present. Save as in these Articles otherwise provided, two Members present in person or by proxy and entitled to vote at the meeting shall be a quorum for all purposes.

58. If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if convened on the requisition of, or by, Members, shall be dissolved. In any other case it shall stand adjourned to the same day in the next week at the same time and place, or to such other day and at such other time and place as the Directors may determine, and if at such adjourned meeting a quorum is not present within fifteen minutes from the time appointed for holding the meeting, the meeting shall be dissolved.

59. The Chairman (if any) of the Board of Directors, or in his absence some other Director nominated by the Directors, shall preside as Chairman at every General Meeting of the Company, but if at any meeting neither the Chairman nor such other Director be present within fifteen minutes after the time appointed for holding the meeting, or if neither of them be willing to act as Chairman, the Directors present shall choose some Director present to be Chairman, or if no Director be present, or if all the Directors present decline to take the Chair, the Members present shall choose some Member present to be Chairman.

60. The Chairman may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting

except business which might lawfully have been transacted at the meeting from which the adjournment took place. When a meeting is adjourned for fourteen days or more, seven clear days' notice at the least, specifying the place, the day and the time of the adjourned meeting shall be given, but it shall not be necessary to specify in such notice the nature of the business to be transacted at the adjourned meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment.

61. At any General Meeting a resolution put to the vote of the meeting shall be decided on a show of hands, unless a poll is (before or on the declaration of the result of the show of hands) demanded by any member present in person or by proxy and unless a poll is so demanded a declaration by the Chairman that a resolution has on a show of hands been carried or carried unanimously, or by a particular majority, or lost, or not carried by a particular majority, and an entry to that effect in the minute book of the Company shall be conclusive evidence without proof of the number or proportion of the votes recorded in favour of or against such resolution. A proxy shall be entitled to vote both upon a show of hands and on a poll. The demand for a poll may be withdrawn. Any business other than that upon which a poll has been demanded may be proceeded with pending the taking of the poll.

62. If any votes shall be counted which ought not to have been counted, or might have been rejected, the error shall not vitiate the result of the voting unless it be pointed out at the same meeting, or at any adjournment thereof, and it shall in the opinion of the Chairman of the meeting be of sufficient magnitude to vitiate the result of the voting.

63. If a poll is duly demanded, it shall be taken in such manner as the Chairman may direct (including the use of ballot or voting papers or tickets), and the result of a poll shall be deemed to be the resolution of the meeting at which the poll was demanded. The Chairman may, in the event of a poll, appoint scrutineers (who need not be Members), and may fix some place and time for the purpose of declaring the result of the poll.

64. In the case of an equality of votes, whether on a show of hands or on a poll, the Chairman of the meeting at which the show of hands takes place or at which the poll is demanded shall be entitled to a

second or casting vote.

VOTES OF MEMBERS.

65. Subject to any special rights or restrictions as to voting attached to any shares by or in accordance with these Articles, on a show of hands every Member who (being an individual) is present in person or (being a corporation) is present by a representative or proxy shall have one vote, and on a poll every Member who is present in person or by proxy shall have one vote for every £1 in nominal amount of the Shares of which he is the holder.

66. In the case of joint holders of a share, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders, and for this purpose seniority shall be determined by the order in which the names stand in the Register of Members in respect of the share.

67. A Member of unsound mind in respect of whom an order has been made by any competent Court may vote, whether on a show of hands or on a poll, by his committee, receiver, curator bonis, or other person appointed by such Court (who may on a poll vote by proxy) provided that such evidence as the Directors may require of the authority of the person claiming to vote shall have been deposited at the Office not less than forty-eight hours before the time for holding the meeting or adjourned meeting at which such person claims to vote.

68. No Member shall, unless the Directors otherwise determine, be entitled to vote at any General Meeting either in person or by proxy, or to exercise any privilege as a Member, unless all calls or other sums presently payable by him in respect of shares of the Company have been paid.

69. No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes. Any such objection made in due time shall be referred to the Chairman of the meeting, whose decision shall be final and conclusive.

70. On a poll votes may be given either in person or by proxy. On a poll a Member entitled to more



than one vote need not, if he votes, use all his votes or cast all the votes he uses in the same way.

71. Any person (whether a Member or not) may be appointed to act as a proxy. A Member may appoint more than one proxy to attend on the same occasion.

72. The instrument appointing a proxy shall be in writing in the usual common form, or such other form as may be approved by the Directors, and shall be signed by the appointor or by his attorney duly authorised in writing, or if the appointor is a corporation shall be either under its common seal or under the hand of an officer or attorney duly authorised in writing.

73. The instrument appointing a proxy and the power of attorney or other authority (if any) under which it is signed, or a notarially certified or office copy of such power or authority, shall be deposited at the Office, or at such other place in the United Kingdom as is specified for that purpose in the notice calling the meeting, or in any instrument of proxy sent out by the Company in relation to the meeting before the time appointed for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, and in default the instrument of proxy shall not be treated as valid. No instrument appointing a proxy shall be valid after the expiration of twelve months from the date named in it as the date of its execution, except at an adjourned meeting or on a poll demanded at a meeting or an adjourned meeting in cases where the meeting was originally held within twelve months from such date.

74. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal, or the revocation of the instrument of proxy or of the authority under which the instrument of proxy was executed, provided that no intimation in writing of such death, insanity or revocation shall have been received by the Company at the Office three hours at least before the commencement of the meeting or adjourned meeting at which the instrument of proxy is used.

75. The Directors may at the expense of the Company send, by post or otherwise, to the Members instruments of proxy (with or without provision for their return prepaid) for use at any General Meeting

or at any separate meeting of the holders of any class of the shares of the Company, either in blank or nominating in the alternative any one or more of the Directors or any other persons. If for the purpose of any meeting invitations to appoint as proxy a person, or one of a number of persons, specified in the invitations are issued at the Company's expense, they shall be issued to all (and not to some only) of the Members entitled to be sent a notice of the meeting and to vote thereat by proxy.

#### CORPORATIONS ACTING BY REPRESENTATIVES.

76. Any corporation which is a Member of the Company may, by resolution of its Directors or other governing body, authorise such person as it thinks fit to act as its representative at any meeting of the Company, or at any separate meeting of the holders of any class of shares of the Company, and the person so authorised shall be entitled to exercise the same powers on behalf of the corporation which he represents as that corporation could exercise if it were an individual Member of the Company.

#### DIRECTORS.

77. There shall be not less than 3 Directors nor more than 7. A Director shall not be required to hold any share or shares to qualify him for the office of Director.

78. The Directors shall be entitled to remuneration at such rate as the Company by Ordinary Resolution may from time to time determine. The Directors' remuneration shall be deemed to accrue from day to day. The Directors shall also be entitled to be paid all travelling, hotel and other expenses properly incurred by them in connection with the business of the Company, or in attending and returning from meetings of the Directors or of committees of the Directors or General Meetings.

79. Any Director who serves on any committee or who devotes special attention to the business of the Company, or who otherwise performs services which in the opinion of the Directors are outside the scope of the ordinary duties of a Director, may be paid such extra remuneration by way of salary, participation in profits or otherwise as the Directors may determine.

80. The Company shall not make a loan to any person who is its Director or a director of its holding company (if any), nor enter into any guarantee or provide any security in connection with a loan made to such a person by any other person, but nothing in this Article shall prohibit anything not prohibited by the Acts.

81. Any Director may at any time appoint any person approved by the Directors to be an alternate Director of the Company, and may at any time remove any alternate Director so appointed by him from office and, subject to such approval as aforesaid, appoint another person in his place. An alternate Director so appointed shall not be required to hold any share qualification. An alternate Director shall (subject to his giving to the Company an address within the United Kingdom at which notices may be served upon him) be entitled to receive notices of all meetings of the Directors, and to attend and vote as a Director at any such meeting at which the Director appointing him is not personally present, and generally to perform all the functions of his appointor as a Director in the absence of such appointor. An alternate Director shall ipso facto cease to be an alternate Director if his appointor ceases for any reason to be a Director. All appointments and removals of alternate Directors shall be effected by notice in writing under the hand of the Director making or revoking such appointment sent to or left at the Office.

82. An alternate Director shall be an officer of the Company and shall alone be responsible to the Company for his own acts and defaults, and he shall not be deemed to be the agent of or for the Director appointing him. The remuneration of any such alternate Director shall be payable out of the remuneration payable to the Director appointing him, and shall consist of such part (if any) of the last-mentioned remuneration as shall be agreed between the alternate Director and the Director appointing him.

83. A Director, including an alternate Director, may hold any other office or place of profit under the Company (other than the office of Auditor) in conjunction with his office of Director, and may act in a professional capacity to the Company, on such terms as to tenure of office, remuneration and otherwise as the Directors may determine.

84. No Director or intending Director, including

an alternate Director, shall be disqualified by his office from contracting with the Company either with regard to his tenure of any other office or place of profit, or as vendor, purchaser or otherwise, nor shall any such contract, or any contract or arrangement entered into by or on behalf of the Company in which any Director is in any way, whether directly or indirectly, interested, be liable to be avoided, nor shall any Director so contracting or being so interested be liable to account to the Company for any profit realised by any such contract or arrangement by reason of such Director holding that office or of the fiduciary relation thereby established.

85. Any Director, including an alternate Director, may continue to be or become a director or other officer or member or otherwise interested in any other company promoted by the Company or in which the Company may be interested, as a member or otherwise, and no such Director shall be accountable for any remuneration or other benefits received by him as a director or other officer or member of, or from his interest in, any such other company. The Directors may exercise the voting power conferred by the shares of any other company held or owned by the Company or exercisable by them as directors of such other company, in such manner in all respects as they think fit (including the exercise thereof in favour of any resolution appointing themselves or any of them directors or other officers of such company, or voting or providing for the payment of remuneration to the directors or other officers of such company), and any Director may vote in favour of the exercise of such voting rights, notwithstanding that he may be, or be about to be, appointed a director or other officer of such other company, or is or may become interested in the exercise of such voting rights.

86. A Director who is in any way, whether directly or indirectly, interested in a contract or proposed contract with the Company shall declare the nature of his interest in manner required by Section 199 of the Companies Act, 1948. A Director may vote in respect of any such contract or proposed contract and if he do so vote his vote shall be counted and he shall be capable of being counted towards the quorum at any meeting of the Directors at which any such contract or proposed contract shall come before the Board for consideration.

87. For the purposes of the last preceding Article a general notice given to the Directors by

any Director to the effect that he is a member of any specified company or firm and is to be regarded as interested in any contract which may, after the date of the notice, be made with the company or firm shall (if such Director shall give the same at a meeting of the Directors or shall take reasonable steps to secure that it is brought up and read at the next meeting of the Directors after it is given) be deemed a sufficient declaration of interest in relation to any contract so made.

APPOINTMENT, REMOVAL AND DISQUALIFICATION  
OF DIRECTORS

88. The Directors of the Company shall not be subject to retirement by rotation and shall, without prejudice to the provisions of the Acts, continue in office until they shall be removed from or cease to hold such office pursuant to the provisions of the Acts or of these presents.

89. At the Annual General Meeting of the Company in every year any Director who shall have held office as such Director for a period of three years shall retire but shall be eligible for re-election either for a further period of three years or for such other period as the Company in general meeting may prescribe.

90. The Company may from time to time by Ordinary Resolution increase or reduce the number of Directors.

91. The Directors shall have power at any time, and from time to time, to appoint any person to be a Director, either to fill a casual vacancy or as an additional Director, but so that the total number of Directors shall not at any time exceed the maximum number fixed by or in accordance with these Articles. Subject to the provisions of the Acts and of these Articles, any Director so appointed shall hold office only until the conclusion of the next following Annual General Meeting, and shall be eligible for re-appointment at that meeting.

92. Without prejudice to the provisions of the Acts, the Company may, by Extraordinary Resolution, remove a Director before the expiration of his period of office (but such removal shall be without prejudice to any claim such Director may have for breach of any contract of service between him and the Company) and may, by Ordinary Resolution, appoint another person in his stead.

93. The office of a Director shall be vacated in any of the following events:-

- (A) if (not being a Director who has agreed to serve as a Director for a fixed term) he resigns his office by notice in writing under his hand sent to or left at the Office;
- (B) if he becomes bankrupt or makes any arrangement or composition with his creditors generally;
- (C) if he becomes of unsound mind;
- (D) if he is absent from meetings of the Directors for six successive months without leave, and his alternate Director (if any) shall not during such period have attended in his stead, and the Directors resolve that his office be vacated;
- (E) if he ceases to be a Director by virtue of, or becomes prohibited from being a Director by reason of, any order made under any provisions of the Acts.

#### RETIREMENT OF DIRECTORS.

94. Unless and until otherwise determined by the Company by Ordinary Resolution, either generally or in any particular case, no Director shall vacate or be required to vacate his office as a Director on or by reason of his attaining or having attained the age of seventy and any Director retiring or liable to retire under the provisions of these Articles and any person proposed to be appointed a Director shall be capable of being re-appointed or appointed, as the case may be, as a Director notwithstanding that at the time of such re-appointment or appointment he has attained the age of seventy, and no special notice need be given of any resolution for the re-appointment or appointment or approving the appointment as a Director of a person who shall have attained the age of seventy, and it shall not be necessary to give to the Members notice of the age of any Director or person proposed to be re-appointed or appointed as such. For the purposes of this Article the expression "Director" shall include an alternate Director.

#### EXECUTIVE DIRECTORS.

95. The Directors may from time to time appoint

any one or more of their body to be the holder of any executive office whether or not for a fixed period and on such terms as they think fit. A Director so appointed shall not be subject to retirement by rotation and shall not be taken into account in determining the rotation of retirement of Directors, but shall (without prejudice to any claim such Director may have for breach of any contract of service between him and the Company) be subject to the same provisions as to vacation of office as the other Directors of the Company, and if he shall vacate the office of Director or (without prejudice to any such claim as aforesaid) if the Directors resolve that his term of office as the holder of any such executive office be determined, his appointment as such shall ipso facto be determined.

96. The Directors may subject to Article 97 hereof entrust to and confer upon any Director appointed to any such executive office any of the powers exercisable by them as Directors, other than the power to make calls for forfeit shares, upon such terms and conditions and with such restrictions as they think fit, and either collaterally with or to the exclusion of their own powers, and may from time to time revoke, withdraw, alter or vary all or any of such powers.

#### POWERS OF DIRECTORS.

97. The business of the Company shall be managed by the Directors, who, in addition to the powers and authorities by these presents or otherwise expressly conferred upon them, may exercise all such powers and do all such acts and things as may be exercised or done by the Company, and are not by Statute or by these presents expressly directed or required to be exercised or done by the Company in General Meeting, subject nevertheless to the provisions of the Statutes and of these presents and to any regulations from time to time made by the Company in General Meeting: Provided that no regulation made shall invalidate any prior act of the Directors which would have been valid if such regulation had not been made: and Provided further that the Directors shall have no power save with the prior consent of a general meeting of the Company either:-

- (a) to buy, sell, dispose of, acquire, lease, charge or otherwise deal with any land or any interest therein in the name of or on

behalf of the Company; or

- (b) to commence or terminate the production or manufacture by the Company of any product not previously or previously (as the case may be) produced or manufactured by the Company; or
- (c) to conclude in the name of the Company any licence or royalty agreement for the manufacture or production by any person other than the Company of any product produced or manufactured by the Company; or
- (d) to employ a general manager of the business of the Company; or
- (e) to acquire or dispose of (on behalf of the Company) any shares in any other company.

98 The Directors may establish any councils, committees, local boards or agencies for managing any of the affairs of the Company, either in the United Kingdom or elsewhere, and may appoint any persons to be members of such local boards, or any managers or agents, and may fix their remuneration, and may delegate to any council, committee, local board, manager or agent any of the powers, authorities and discretions vested in the Directors, with power to sub-delegate, and may authorise the members of any local board, or any of them, to fill any vacancies therein, and to act notwithstanding vacancies, and any such appointment or delegation may be made upon such terms and subject to such conditions as the Directors may think fit, and the Directors may remove any person so appointed, and may annul or vary any such delegation, but no person dealing in good faith and without notice of any such annulment or variation shall be affected thereby.

99 The Directors may from time to time, and at any time, by power of attorney under the Seal, appoint any corporation, firm or person, or any fluctuating body of persons, whether nominated directly or indirectly by the Directors, to be the attorney or attorneys of the Company for such purposes and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the Directors under these Articles) and for such period and subject to such conditions as they may think fit, and any such power of attorney may contain such provisions for the protection and convenience of persons dealing with any such attorney as the Directors may think fit, and may also authorise any such attorney to

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A Directo



sub-delegate all or any of the powers, authorities and discretions vested in him.

100. The Directors may cause to be kept in any part of Her Majesty's Dominions outside the United Kingdom, the Channel Islands or the Isle of Man in which the Company transacts business a Branch Register or Registers of Members resident in such part of the said Dominions, and the Directors may (subject to the provisions of the Acts) make and vary such regulations as they may think fit respecting the keeping of any such Register.

101. The Directors may establish and maintain, or procure the establishment and maintenance of, any pension or superannuation funds (whether contributory or otherwise) for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances and emoluments to, any persons who are or were at any time in the employment or service of the Company, or for any company which is a subsidiary of the Company or is allied to or associated with the Company or any such subsidiary or of any of the predecessors in business of the Company or any such other company as aforesaid, or who may be or have been Directors or officers of the Company, or of any such other company as aforesaid and who hold or have held executive positions or agreements for service with the Company or any such other company as aforesaid, and the wives, widows, families and dependents of any such persons, and also establish, subsidise and subscribe to any institutions, associations, societies, clubs or funds calculated to be for the benefit of, or to advance the interests and well-being of the Company or of any such other company as aforesaid, or of any such person as aforesaid, and make payments for or towards the insurance of any such persons as aforesaid and subscribe or guarantee money for charitable or benevolent objects, or for any exhibition or for any public, general or useful object, and do any of the matters aforesaid either alone or in conjunction with any such other company as aforesaid. Subject to particulars with respect to the proposed payment being disclosed to the Members of the Company and to the proposal being approved by the Company by Ordinary Resolution, if the Acts shall so require, any Director who holds or has held any such executive position or agreement for services shall be entitled to participate in and retain for his own benefit any such donation, gratuity, pension, allowance or emolument. A Director may vote at a meeting of Directors in

respect of any matter referred to in this Article, notwithstanding that he is personally interested in such matter, and shall be counted in the quorum present at the meeting.

102. The Directors may from time to time at their discretion raise or borrow or secure the payment of any sum or sums of money for the purposes of the Company and may secure the payment or repayment of such moneys in such manner and upon such terms and conditions in all respects as they think fit, and in particular, by the issue of debentures or debenture stock of the Company charged upon all or any part of the property of the Company (both present and future), including its uncalled capital for the time being. Any debentures, debenture stock or other securities may be issued at a discount, premium or otherwise and with any special privilege as to redemption, surrender, drawings, allotment of shares, attending and voting at General Meetings of the Company, appointment of Directors and otherwise.

103. All cheques, promissory notes, drafts, bills of exchange, and other negotiable or transferable instruments, and all receipts for moneys paid to the Company, shall be signed, drawn, accepted, endorsed or otherwise executed, as the case may be, in such manner as the Directors shall from time to time by resolution determine.

#### PROCEEDINGS OF DIRECTORS.

104. The Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meetings as they think fit. Questions arising at any meeting shall be determined by a majority of votes. On a show of hands each Director shall be entitled to one vote. A Director who is also an alternate Director shall be entitled in the absence of the Director whom he is representing, to a separate vote on behalf of such Director in addition to his own vote. A Director may, and the Secretary on the requisition of a Director shall, at any time summon a meeting of the Directors. It shall be necessary to give notice of a meeting of Directors to any Director for the time being absent from the United Kingdom. In case of an equality of votes whether on a show of hands or on a poll the Chairman shall have a casting vote.

105. The quorum necessary for the transaction of the business of the Directors may be fixed by the Directors, and unless so fixed at any other number

shall be one. For the purposes of this Article an alternate Director shall be counted in a quorum,

106. The continuing Directors or a sole continuing Director may act notwithstanding any vacancies in their body, but if and so long as the number of Directors is reduced below the minimum number fixed by or in accordance with these Articles, or below the number fixed by or pursuant to these Articles as the quorum of Directors, the continuing Directors or Director may act for the purpose of filling vacancies in their body or of summoning General Meetings of the Company, but not for any other purpose. If there be no Directors or Director able or willing to act, then any two Members may summon a General Meeting for the purpose of appointing Directors.

107. The Company in general meeting shall elect a chairman and vice-chairman of the Company and determine the period for which they are to hold office. No person other than a Director of the Company shall be eligible for election to the office of Chairman or Vice-Chairman. The Chairman or, in his absence, the Vice-Chairman shall preside as Chairman at every meeting of the Directors and every general meeting of the Company. If at any meeting of the Directors or general meeting of the Company neither the Chairman nor the Vice-Chairman shall be present within fifteen minutes after the time appointed for the holding of such meeting or if at such meeting both the Chairman and Vice-Chairman are unwilling to act then the Directors present may choose one of their number to be Chairman of the meeting.

108. A resolution in writing, signed by all the Directors for the time being entitled to receive notice of a meeting of Directors, shall be as effective as a resolution passed at a meeting of the Directors, duly convened and held, and may consist of several documents in the like form each signed by one or more of the Directors.

109. A meeting of the Directors for the time being, at which a quorum is present, shall be competent to exercise all powers and discretions for the time being exercisable by the Directors.

110. The Directors may delegate any of their powers to committees consisting of such members or member of their body as they think fit. Any committee so formed shall in the exercise of the powers so

delegated conform to any regulations that may be imposed on it by the Directors.

111. The meetings and proceedings of any such committee consisting of two or more members shall be governed by the provisions of these Articles regulating the meetings and proceedings of the Directors, so far as the same are applicable and are not superseded by any regulations made by the Directors under the last preceding Article.

112. All acts done bona fide by any meeting of Directors, or of a committee of Directors, or by any person acting as a Director, shall, notwithstanding that it is afterwards discovered that there was some defect in the appointment of any such Director, or person acting as aforesaid, or that they or any of them were disqualified, or had vacated office, or were not entitled to vote, be as valid as if every such person had been duly appointed, and was qualified and had continued to be a Director and had been entitled to vote.

#### MINUTES.

113. The Directors shall cause minutes to be made:-

- (A) of all appointments of officers made by the Directors;
- (B) of the names of the Directors present at each meeting of Directors and of any committee of Directors;
- (C) of all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors.

Any such minute, if purporting to be signed by the Chairman of the meeting at which the proceedings were had, or by the Chairman of the next succeeding meeting, shall be evidence of the proceedings.

#### SECRETARY.

114. The Secretary shall be appointed and may be removed by the Directors.

115. Anything by the Acts required or authorised to be done by or to the Secretary may, if the office is vacant or there is for any other reason no Secretary

delegated conform to any regulations that may be imposed on it by the Directors.

111. The meetings and proceedings of any such committee consisting of two or more members shall be governed by the provisions of these Articles regulating the meetings and proceedings of the Directors, so far as the same are applicable and are not superseded by any regulations made by the Directors under the last preceding Article.

112. All acts done bona fide by any meeting of Directors, or of a committee of Directors, or by any person acting as a Director, shall, notwithstanding that it is afterwards discovered that there was some defect in the appointment of any such Director, or person acting as aforesaid, or that they or any of them were disqualified, or had vacated office, or were not entitled to vote, be as valid as if every such person had been duly appointed, and was qualified and had continued to be a Director and had been entitled to vote.

#### MINUTES.

113. The Directors shall cause minutes to be made:-

- (A) of all appointments of officers made by the Directors;
- (B) of the names of the Directors present at each meeting of Directors and of any committee of Directors;
- (C) of all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors.

Any such minute, if purporting to be signed by the Chairman of the meeting at which the proceedings were had, or by the Chairman of the next succeeding meeting, shall be evidence of the proceedings.

#### SECRETARY.

114. The Secretary shall be appointed and may be removed by the Directors.

115. Anything by the Acts required or authorised to be done by or to the Secretary may, if the office is vacant or there is for any other reason no Secretary

capable of acting, be done by or to any assistant or deputy Secretary or, if there is no assistant or deputy Secretary capable of acting, by or to any officer of the Company authorised generally or specially in that behalf by the Directors: Provided that any provision of the Acts or of these Articles requiring or authorising a thing to be done by or to a Director and the Secretary shall not be satisfied by its being done by or to the same person acting both as Director and as, or in the place of, the Secretary.

SEAL.

116. The Directors shall provide for the safe custody of the Seal and the Seal shall never be used except by the authority of a resolution of the Directors or of a committee of the Directors authorised in that behalf by the Directors. The Directors may from time to time make such regulations as they think fit (subject to the provisions of these Articles in relation to share and debenture certificates) determining the persons and the number of such persons who shall sign every instrument to which the Seal is affixed, and unless and until otherwise so determined every such instrument shall be signed by one Director and shall be countersigned by the Secretary.

117. The Company may have an official seal for use abroad under the provisions of the Acts, where and as the Directors shall determine, and the Company may by writing under the Seal appoint any agent or committee abroad to be the duly authorised agent of the Company for the purpose of affixing and using such official seal, and may impose such restrictions on the use thereof as shall be thought fit. Wherever in these Articles reference is made to the Seal, the reference shall, when and so far as may be applicable, be deemed to include any such official seal as aforesaid.

DIVIDENDS.

118. The profits of the Company available for dividend and resolved to be distributed shall be applied in the payment of dividends to the Members in accordance with their respective rights and priorities. The Company in General Meeting may declare dividends accordingly.

119. No dividend shall be payable except out of the profits of the Company, and no dividend shall

exceed the amount recommended by the Directors.

120. Subject to the rights of persons, if any, entitled to shares with preferential or other special rights as to dividends, all dividends shall be declared and paid according to the amounts paid up on the shares (otherwise than in advance of calls) in respect whereof the dividend is paid. All dividends shall be apportioned and paid pro rata according to the amounts paid up on the shares during any portion or portions of the period in respect of which the dividend is paid, except that if any share is issued on terms providing that it shall carry any particular rights as to dividend, such share shall rank for dividend accordingly.

121. The Directors may, if they think fit, from time to time pay to the Members such interim dividends as appear to the Directors to be justified by the profits of the Company. If at any time the share capital of the Company is divided into different classes, the Directors may pay such interim dividends in respect of those shares in the capital of the Company which confer on the holders thereof deferred or non-preferred rights, as well as in respect of those shares which confer on the holders thereof preferential rights with regard to dividend, and the Directors may also pay half-yearly, or at other suitable intervals to be settled by them, any dividend which may be payable at a fixed rate if they are of opinion that the profits justify the payment. Provided the Directors act bona fide they shall not incur any responsibility to the holders of shares conferring a preference for any damage that they may suffer by reason of the payment of an interim dividend on any shares having deferred or non-preferred rights.

122. The Directors may deduct from any dividend or other moneys payable to any Member on or in respect of a share all sums of money (if any) presently payable by him to the Company on account of calls or otherwise in relation to the shares of the Company.

123. All unclaimed dividends may be invested or otherwise made use of by the Directors for the benefit of the Company until claimed. No dividend shall bear interest as against the Company.

124. Any dividend which has remained unclaimed for a period of twelve years from the date of declaration thereof shall, if the Directors shall so resolve, be forfeited and cease to remain owing by the Company and shall thenceforth belong to the Company absolutely.

125. Any dividend or other moneys payable on or in respect of a share may be paid by cheque or warrant sent through the post to the registered address of the Member or person entitled thereto, and in the case of joint holders to any one of such joint holders, or to such person and such address as the holder or joint holders may in writing direct. Every such cheque or warrant shall be made payable to the order of the person to whom it is sent or to such other person as the holder or joint holders may in writing direct, and payment of the cheque or warrant shall be a good discharge to the Company. Every such cheque or warrant shall be sent at the risk of the person entitled to the money represented thereby.

126. If several persons are registered as joint holders of any share, any one of them may give effectual receipts for any dividend or other moneys payable on or in respect of the share.

127. A General Meeting declaring a dividend may, upon the recommendation of the Directors, direct payment of such dividend wholly or in part by the distribution of specific assets, and in particular of paid-up shares or debentures of any other company, and the Directors shall give effect to such resolution; and where any difficulty arises in regard to the distribution they may settle the same as they think expedient, and in particular may issue fractional certificates, and may fix the value for distribution of such specific assets or any part thereof, and may determine that cash payments shall be made to any Members upon the footing of the value so fixed, in order to adjust the rights of Members, and may vest any specific assets in trustees upon trust for the persons entitled to the dividend as may seem expedient to the Directors, and generally may make such arrangements for the allotment, acceptance and sale of such specific assets or fractional certificates, or any part thereof, and otherwise as they think fit.

#### RESERVES.

128. The Directors may before recommending any dividend, whether preferential or otherwise, carry to reserve out of the profits of the Company (including any premiums received upon the issue of debentures or other securities of the Company) such sums as they think proper as a reserve or reserves, which shall, at the discretion of the Directors, be applicable for any purpose to which the profits of the Company may properly be applied and, pending such application,



may at the like discretion either be employed in the business of the Company or be invested in such investments (other than shares of the Company or its holding company, if any) as the Directors may from time to time think fit. The Directors may also, without placing the same to reserve, carry forward any profits which they may think prudent not to divide.

#### CAPITALISATION.

129. The Company may by Ordinary Resolution, upon the recommendation of the Directors, resolve that it is desirable to capitalise any undivided profits of the Company (including profits carried and standing to any reserve or reserves) not required for paying the fixed dividends on any shares entitled to fixed preferential dividends with or without further participation in profits, or any sum carried to reserve as a result of the sale or revaluation of the assets of the Company (other than goodwill) or any part thereof or, subject as hereinafter provided, any sum standing to the credit of the Company's share premium account or capital redemption reserve fund, and accordingly that the Directors be authorised and directed to appropriate the profits or sum resolved to be capitalised to the Members in the proportion in which such profits or sum would have been divisible amongst them had the same been applicable and had been applied in paying dividends, and to apply such profits or sum on their behalf, either in or towards paying up the amounts, if any, for the time being unpaid on any shares held by such Members respectively, or in paying up in full unissued shares or debentures of the Company of a nominal amount equal to such profits or sum, such shares or debentures to be allotted and distributed, credited as fully paid up, to and amongst such Members in the proportions aforesaid, or partly in one way and partly in the other: Provided that the share premium account and the capital redemption reserve fund may, for the purposes of this Article, only be applied in the paying up of unissued shares to be issued to Members credited as fully paid.

130. Whenever such a resolution as aforesaid shall have been passed, the Directors shall make all appropriations and applications of the profits or sum resolved to be capitalised thereby, and all allotments and issues of full paid shares or debentures, if any, and generally shall do all acts and things required to give effect thereto, with full power to the Directors to make such provisions by the issue of

fractional certificates or by payment in cash or otherwise as they think fit for the case of shares or debentures becoming distributable in fractions, and also to authorise any person to enter on behalf of all the Members entitled to the benefit of such appropriations and applications into an agreement with the Company providing for the allotment to them respectively, credited as fully paid up, of any further shares to which they may be entitled upon such capitalisation, and any agreement made under such authority shall be effective and binding on all such Members.

#### ACCOUNTS.

131. The Directors shall cause proper books of account to be kept in accordance with the Acts.

132. The books of account shall be kept at the Office, or (subject to the provisions of the Acts) at such other place as the Directors think fit, and shall always be open to inspection by the Directors. No Member (other than a Director) shall have any right of inspecting any account or book or document of the Company except as conferred by statute or authorised by the Directors or by the Company in General Meeting.

133. The Directors shall from time to time, in accordance with the provisions of the Acts, cause to be prepared and to be laid before the Company in General Meeting such profit and loss accounts, balance sheets, group accounts (if any) and reports as are specified in the Acts.

134. The Auditors' report shall be read before the Company in General Meeting and shall be open to inspection as required by the Acts.

135. A printed copy of the Directors' and Auditors' reports accompanied by printed copies of the balance sheet, profit and loss account and other documents required by the Acts to be annexed to the balance sheet shall, not be less than twenty-one days before the Annual General Meeting, be delivered or sent by post to the registered address of every Member and holder of debentures of the Company, and to the Auditors for the time being of the Company.

#### AUDIT.

136. Once at least in every year the accounts of the Company shall be examined and the correctness of

the balance sheet, profit and loss account and group accounts (if any) ascertained by an Auditor or Auditors.

137. Auditors shall be appointed and their duties, powers, rights and remuneration regulated in accordance with the provisions of the Acts.

NOTICES.

138. Any notice or document may be given or served by the Company on any Member either personally or by sending it through the post in a prepaid letter addressed to such Member at his address as appearing in the Register of Members. In the case of joint holders of a share, all notices shall be given to that one of the joint holders whose name stands first in the Register of Members in respect of the jointholding, and notice so given shall be sufficient notice to all the joint holders.

139. Any Member described in the Register of Members by an address not within the United Kingdom who shall from time to time give to the Company an address within the United Kingdom at which notices may be served upon him shall be entitled to have notices served upon him at such address, but, save as aforesaid, any Member shall be entitled to receive any notice from the Company by service at the address described in the Register of Members.

140. Any Member present, either in person or by proxy, at any meeting of the Company shall for all purposes be deemed to have received due notice of such meeting, and, where requisite, of the purposes for which such meeting was convened.

141. Every person who by operation of law, transfer or other means whatsoever shall become entitled to any share shall be bound by any notice in respect of such share which, before his name and address are entered in the Register of Members, shall be duly sent to the last registered address of the person from whom he derives his title to such share.

142. Any notice required to be given by the Company to the Members or any of them, and not provided for by or pursuant to these Articles, shall be sufficiently given if given by advertisement which shall be inserted once in at least one leading daily newspaper published in London.

143. Any notice or other document required to

be served by the Company on any Member, if served by post, shall be deemed to have been served three days after the day by way of example only on which the letter containing the same is posted, and in proving such service it shall be sufficient to prove that the letter containing the notice or document was properly addressed and duly posted. A notice to be given by advertisement shall be deemed to have been served on the day on which the advertisement appears.

144. Any notice or document delivered or sent by post to or left at the registered address of any Member in pursuance of these Articles shall, notwithstanding that such Member be then dead, bankrupt, of unsound mind or (being a corporation) in liquidation, and whether or not the Company has notice of the death, bankruptcy, insanity or liquidation of such Member, be deemed to have been duly served in respect of any share registered in the name of such Member as sole or joint holder, unless his name shall, at the time of the service of the notice or document, have been removed from the Register of Members as the holder of the share, and such service shall for all purposes be deemed a sufficient service of such notice or document on all persons interested (whether jointly with or as claiming through or under him) in the share.

#### WINDING UP.

145. If the Company shall be wound up (whether the liquidation is altogether voluntary, under supervision, or by the Court) the Liquidator may, with the authority of an Extraordinary Resolution, divide among the Members in specie the whole or any part of the assets of the Company, and whether or not the assets shall consist of property of one kind or shall consist of properties of different kinds, and may for such purposes set such value as he deems fair upon any one or more class or classes of property, and may determine how such division shall be carried out as between the Members or different classes of Members. The Liquidator may, with the like authority, vest any part of the assets in trustees upon such trusts for the benefit of Members as the Liquidator, with the like authority, shall think fit, and the liquidation of the Company may be closed and the Company dissolved, but so that no Member shall be compelled to accept any shares in respect of which there is a liability.

#### INDEMNITY.

146. Subject to the provisions of the Acts, every

Director or other officer and Auditor of the Company shall be indemnified out of the assets of the Company against all costs, charges, expenses, losses and liabilities which he may sustain or incur in or about the execution of his office or otherwise in relation thereto.

SHARE WARRANTS.

147. The Company, with respect to fully paid-up shares, may issue warrants stating that the bearer is entitled to the shares therein specified, and may provide by coupons or otherwise for the payment of future dividends on the shares included in such warrants. The Directors may determine, and from time to time vary, the conditions upon which share warrants shall be issued, and in particular may determine whether and upon what conditions the bearer of a share warrant shall be entitled to attend and vote at meetings of the Company and separate meetings of the holders of any class of shares of the Company, or a share warrant may be surrendered and the name of the bearer entered in the Register in respect of the shares therein specified or a new share warrant or coupon may be issued in place of one worn out, defaced, lost or destroyed, provided that no new warrant shall be issued except on proof that the original warrant has been destroyed. The bearer of a share warrant shall be subject to the conditions for the time being in force, whether made before or after the issue of such warrant. Subject to such conditions and to the provisions of these Articles, the bearer of a share warrant shall be to the full extent a Member of the Company, provided that he shall not be entitled to receive notice of any meeting of the Company or any separate meeting of the holders of any class of shares of the Company.

X P. G. L. C.

734915/48



28/

COMPANIES ACT 1948

SPECIAL RESOLUTION

(pursuant to Section 143 of the Companies Act 1948)

of

HERAEUS QUARTZ FUSED PRODUCTS LIMITED

PASSED at an Extraordinary General Meeting of the members of the above Company duly convened and held at Unit C,  
120 Oyster Lane, Byfleet, Weybridge, in the county of Surrey  
on the 31st day of May 1977  
the following Special Resolution was duly passed :-

That with the consent of the Board of Trade the name of the Company be changed to HERAEUS SILICA AND METALS LIMITED

R. C. [Signature]  
.....  
Secretary

46



last West 1/10



**CERTIFICATE OF INCORPORATION  
ON CHANGE OF NAME**

No. 734915 / 49

I hereby certify that

**HERAEUS QUARTZ FUSED PRODUCTS LIMITED**

having by special resolution and with the approval of the Secretary of State changed  
its name, is now incorporated under the name of

**HERAEUS SILICA AND METALS LIMITED**

Given under my hand at Cardiff the 5TH JULY 1977

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*D.A. Pendlebury*  
D. A. PENDLEBURY

*Assistant Registrar of Companies*

THE COMPANIES ACTS 1948 to 1967

COMPANY LIMITED BY SHARES

R E S O L U T I O N S

- of -

HERAEUS SILICA AND METALS LIMITED

Passed the 1st day of July 1980

At an EXTRAORDINARY GENERAL MEETING of the Members of the above named company duly convened and held at 120 Oyster Lane, Byfleet, Surrey on Tuesday the 1st day of July 1980 the following Resolutions were duly passed:-

ORDINARY RESOLUTIONS

1. "That the authorised Share Capital be and it is hereby increased from £70,000 to £200,000 by the creation of 130,000 Shares of One Pound each to rank pari passu in all respects with the existing ordinary Share Capital of the Company".
2. "That in accordance with the recommendation of the Directors the sum of £130,000 standing to the credit of General Reserve be appropriated as capital to and amongst the Shareholders of the Company in proportion to the number of Shares held by them respectively and be applied on their behalf in paying up in full 130,000 of the unissued Ordinary Shares of the Company, such Shares to be allotted and distributed credited as fully paid up to and amongst such shareholders in the proportion of thirteen of such shares for every seven held by them respectively in satisfaction of their respective shares and interest in the said capitalised sum".

P. VISCHER

Chairman





G

Please do not write in  
this binding margin ↓Please complete legibly,  
preferably in black type,  
or bold block lettering.\* delete if  
inappropriate† delete as  
appropriate

Note  
This notice and a  
printed copy of the  
resolution authorising  
the increase must be  
forwarded to the Registrar  
of Companies within  
15 days after the passing  
of the resolution

## THE COMPANIES ACTS 1948 TO 1976

## Notice of increase in nominal capital

Pursuant to section 63 of the Companies Act 1948

10

To the Registrar of Companies

For official use

Company number

57

734915

Name of Company

HERAEUS SILICA AND METALS

Limited \*

hereby gives you notice in accordance with section 63 of the Companies Act 1948 that by  
[ordinary] ~~[extraordinary]~~ ~~[special]~~ † resolution of the company dated 1-7-1980  
the nominal capital of the company has been increased by the addition thereto of the sum  
of £ 130,000 beyond the registered capital of £ 70,000

A printed copy of the resolution authorising the increase is forwarded herewith.

The additional capital is divided as follows:

Number of shares	Class or share	Nominal amount of each share
130,000	ORDINARY	£1

(If any of the new shares are preference shares state whether they are redeemable or not)  
The conditions (e.g. voting rights, dividend rights, winding-up rights, etc.) subject to which  
the new shares have been or are to be issued are as follows:

TO RANK PARI PASSU IN ALL RESPECTS  
WITH THE EXISTING SHARE CAPITAL OF THE COMPANY.

Please tick here if  
continued overleaf ☐

Signed

[Director] [Secretary] †

Date

1-7-1980

Presenter's name, address and  
reference (if any):

EVERETT & SON  
CHARTERED ACCOUNTANTS  
13 CHRISTOPHER STREET  
LONDON, EC2A 2AJ

FC8/H101

For official use  
General section

Post room

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**THE COMPANIES ACT 1985**

**COMPANY LIMITED BY SHARES**

**MEMORANDUM**

**AND**

**ARTICLES OF ASSOCIATION**

**OF**

HERAEUS SILICA AND METALS LIMITED

COMPANY NUMBER:- 734915

INCORPORATED THE 10TH DAY OF SEPTEMBER 1962

**D. & D. LAW AGENCY SERVICES LIMITED**  
(Incorporating Dunn & Duncan - Established 1733)

50, Lincoln's Inn Fields, London WC2A 3PF  
Law Stationers, Company Registration Agents and Printers  
Telephone: 01-405-1082 01-405-7215 01-405-1107 01-405-7991  
FAX: 01-831-2088



THE COMPANIES ACT 1985

COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION

-OF-

HERAEUS SILICA AND METALS LIMITED

CERTIFICATION  
WE HEREBY CERTIFY that this print incorporates all alterations made to this Company's memorandum of Association by filed resolutions and is lodged in compliance with the requirements of the European Communities Act 1972.

DATED 2 | 3 | 1987

D & D LAW AGENCY SERVICES LIMITED

1. The name of the Company is HERAEUS SILICA AND METALS LIMITED".

2. The registered office of the Company will be situate in England.

3. The objects for which the Company is established are:-

- (A) To carry on business as workers in quartz silica, ceramic and similar materials, manufacturers of and dealers in chemical, medical, mechanical, electrical and electronic instruments and equipment of all kinds and descriptions; mechanical electrical and electronic engineers, electro-platers, nickel-platers, chromium-platers, bronziers, oxidisers, enamellers,, laquerers, varnishers, painters, polishers, gilders, goldsmiths and silversmiths, metal and alloy makers, refiners and workers cabinet workers, wood workers, carpenters and joiners, and any other business which can, in the opinion of the Directors, be advantageously carried on by the Company in connection with or as ancillary to any of the above businesses.
- (B) To acquire and undertake the whole or any part of the business, property and liabilities of any person or company carrying on any business which this Company is authorised to carry on or possessed of property suitable for the purposes of this Company.
- (C) To erect, construct, lay down, enlarge, alter and maintain any roads, railways, tramways, sidings, bridges, reservoirs, shops, stores, factories, buildings, works, plant and machinery necessary or convenient to the Company's business, and to contribute to or subsidise the erection, construction and maintenance of any of the above.

By Special Resolution passed 19th October 1972 the name of the Company was changed from "QUARTZ FUSED PRODUCTS LIMITED" to "HERAEUS QUARTZ FUSED PRODUCTS LIMITED" and by Special Resolution passed 31st May 1977 the name of the Company was changed from "HERAEUS QUARTZ FUSED PRODUCTS LIMITED" to "HERAEUS SILICA AND METALS LIMITED".



- (D) To pay for any property or rights acquired by the Company, either in cash or shares, with or without preferred or deferred rights in respect of dividend or repayment of capital or otherwise, or by any securities which the Company has power to issue, or partly in one mode and partly in another, and generally on such terms as the Company may determine.
- (E) To apply for, purchase or otherwise acquire, protect, prolong and renew any patents, patent rights, brevets d'invention, licences, concessions and the like, conferring any exclusive or non-exclusive or limited rights to use or any secret or other information as to any invention which may seem capable of being used for any of the purposes of the Company, or the acquisition of which may seem calculated directly or indirectly to benefit the Company, and to use, exercise, manufacture, develop or grant licences in respect of, or otherwise turn to account the property, rights or information so acquired, and to expend money in experimenting upon and testing and in improving or seeking to improve any patents, inventions or rights which the Company may acquire or propose to acquire.
- (F) To enter into partnership or into any arrangement for sharing profits, union of interests, co-operation, joint adventure, reciprocal concession or otherwise with any person or company carrying on or engaged in, or about to carry on or engage in, any business or transaction which this Company is authorised to carry on or engage in, or any business or transaction capable of being conducted so as directly or indirectly to benefit this Company, and to subsidise or otherwise assist any such company, and to give any guarantees.
- (G) To take or otherwise acquire and hold shares in or securities of any company, and to sell, hold, re-issue, with or without guarantee, or otherwise deal with the same.
- (H) To establish and support or aid in the establishment and support of associations, institutions, funds, trusts and conveniences calculated to benefit employees or ex-employees of the Company or the dependants or connections of such persons, and to grant pensions and allowances, and to make payment towards insurances, and to subscribe or guarantee money for charitable or benevolent objects, or for any exhibition or for any public, general or useful object.
- (I) To promote any company or companies for the purpose of acquiring all or any of the property, rights and liabilities of this Company, or for any other purpose which may seem directly or

indirectly calculated to benefit this Company.

- (J) Generally to purchase, take on lease or in exchange, hire or otherwise acquire, rebuild or improve any real or inheritable and personal property, and any rights or privileges which the Company may think necessary or convenient for the purposes of its business, and in particular any land, buildings, concessions, claims, wayleaves, easements, machinery, plant and stock-in-trade.
- (K) To construct, improve, maintain, develop, work, manage, carry out or control any roads, ways, tramways, railways, branches or sidings, bridges, reservoirs, watercourses, wharves, manufactories, warehouses, buildings, residences, workmen's houses, electric works, telegraphs, shops, stores and other works, machinery and conveniences which may seem calculated, directly or indirectly to advance the Company's interests, and to contribute to, subsidise or otherwise assist or take part in the construction, improvement, maintenance, working, management, carrying out or control thereof.
- (L) To invest and deal with the moneys of the Company not immediately required upon such securities, including the purchase of real estate, in such manner as may from time to time be determined, and to sell, vary or otherwise deal with the same.
- (M) To lend money to such persons and bodies and on such terms as may seem expedient, and in particular to customers and others having dealings with the Company, and to companies or firms in which the Company may be directly or indirectly interested, and to guarantee the performance of contracts or the due payment of any moneys, including principal interest and dividends of any shares, stocks or securities, by any company or person.
- (N) To borrow or raise or secure the payment of money in such manner as the Company shall think fit, and in particular by the issue of debentures or debenture stock, perpetual or otherwise, charged upon all or any of the Company's property, both present and future, including its uncalled capital, and to purchase, redeem or pay off any such securities.
- (O) To draw, make, accept, indorse, discount, execute, deal in and issue promissory notes, bills of exchange, drafts, bills of lading, warrants, debentures and other negotiable or transferable instruments.
- (P) To procure the Company to be registered or recognised in any country or place, and to obtain any Provisional Order or Act of Parliament, or any

enactment, decree or other legislative or executive act of any empire, kingdom, state, republic, colony, municipality, or other authority for enabling the Company to carry any of its objects into effect, or for effecting any alteration or modification of the Company's constitution.

- (Q) To sell, improve, manage, develop, exchange, lease, mortgage, dispose of, turn to account or otherwise deal with all or any part of the property and rights, privileges, concessions and easements of the Company for such consideration as the Company may think fit, and in particular for shares, fully or partly paid, debentures or securities of any other company.
- (R) To amalgamate with any other company having objects altogether or in part similar to those of this Company.
- (S) To adopt such means of making known the business and products of the Company as may seem expedient, and in particular by advertising in the press, by circulars, by purchase and exhibition of works of art or interest, by publication of books and periodicals and by granting prizes, rewards and donations.
- (T) To pay all or any part of the expenses of and incident to the formation and establishment of the Company, and to remunerate any person or company for services rendered or to be rendered in placing or assisting to place or guaranteeing the placing of any of the shares in the Company's capital, or any debentures, debenture stock or other securities of the Company, or in or about the conduct of the Company's business.
- (U) To distribute any of the property of the Company in specie among the Members.
- (V) To do all or any of the above things in the United Kingdom or in any part of the world, and as principals, agents, contractors, trustees or otherwise, and by or through trustees, sub-contractors, agents or otherwise, and either alone or in conjunction with others.
- (W) To do all such other things as the Company shall think may be incidental or conducive to the attainment of the above objects or any of them.

And it is hereby declared that the word "Company" in this clause shall be deemed to include any partnership or other body of persons whether incorporated or not incorporated and whether domiciled in the United Kingdom or elsewhere.

And it is hereby further declared that the objects

of the Company in any wise limited by reference to any other paragraph or the order as specified in each of the foregoing paragraphs of this clause (except only if and so far as otherwise expressly provided in any paragraph) shall be separate and distinct objects of the Company and shall not be in which the same occur or the name of the Company.

4. The liability of the members is limited.

5. The share capital of the Company is £1,500, divided into 1,500 shares of £1. each with power to increase and to divide the shares in the capital for the time being whether original or increased and before or after the issue thereof into several classes and to attach thereto respectively, any preferential, deferred, qualified or special rights, privileges or conditions, and with a special or without any right of voting.

\* By Ordinary Resolution passed 29th June 1966 the Share Capital of the Company was increased from £1,500 to £5,000 by the creation of 3,500 shares of £1 each to rank pari passu with the existing Ordinary Shares.

\* By Ordinary Resolution passed 28th March 1972 the Capital of the Company was increased from £5,000 to £10,000 by the creation of 5,000 Ordinary Shares of £1 each ranking pari passu in all respects with the existing Ordinary Shares of £1 each in the capital of the Company.

\* By Ordinary Resolution passed 19th October 1972 the authorised Share Capital of the Company was increased from £10,000 to £70,000 by the creation of 60,000 shares of £1 each to rank pari passu in all respects with the existing ordinary shares in the Capital of the Company.

\* By Ordinary Resolution passed 1st July 1980 the Share Capital of the Company was increased from £70,000 to £200,000 by the creation of 130,000 Shares of £1 each to rank pari passu in all respects with the existing Ordinary Share Capital of the Company.

CERTIFICATION

WE HEREBY CERTIFY that this print incorporates all alterations made to this Company's Articles of Association by filed resolutions and is lodged in compliance with the requirements of the European Communities Act 1972.

DATED 2/3/1987

D & D LAW AGENCY SERVICES LIMITED

THE COMPANIES ACT 1985

COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION

-OF-

HERAEUS SILICA AND METALS LIMITED

(Adopted by Special Resolution passed on the 19th October 1972)

PRELIMINARY

1. The regulations in Table A in the first schedule to the Companies Act, 1948 shall not apply to the Company.

2. In these Articles, if not inconsistent with the subject or context, the following words shall bear the following meanings:-

WORDS	MEANINGS
The Acts	The Companies Acts 1948 to 1967, and every statutory modification or re-enactment thereof for the time being in force.
These Articles	These Articles of Association as originally framed or as from time to time altered.
Office	The registered office for the time being of the Company.
Seal	The common seal of the Company.
The United Kingdom	Great Britain and Northern Ireland.
Paid up	Paid up or credited as paid up.
In writing	Written, printed or lithographed, or visibly expressed in all or any of those or any other modes of representing or reproducing words.





Words importing the singular number shall include the plural number, and vice versa.

Words importing the masculine gender shall include the feminine gender.

The expression "Secretary" shall (subject to the provisions of the Acts) include an assistant or deputy Secretary, and any person appointed by the Directors to perform any of the duties of the Secretary.

Save as aforesaid, any words or expressions defined in the Act shall, if not inconsistent with the subject or context, bear the same meaning in these Articles.

#### CAPITAL

3.\* The share capital of the Company at the date of the adoption of these Articles is £70,000 divided into 70,000 Shares of £1 each.

4. Without prejudice to any special rights for the time being conferred on the holders of any class of shares (which special rights shall not be varied or abrogated except with such consent or sanction as is required by the next following Article), any share in the Company may be issued with such preferred, deferred or other special rights, or such restrictions, whether in regard to dividend, return of capital, voting or otherwise, as the Company may from time to time by Ordinary Resolution determine; and any Preference Share may be issued on the terms that it is, or at the option of the Company is to be liable, to be redeemed, subject to the provisions of the Acts, on such terms and in such manner as may be provided by these Articles.

#### VARIATION OF RIGHTS

5. Whenever the capital of the Company is divided into different classes of shares, the special rights attached to any class may be varied or abrogated, either whilst the Company is a going concern or during or in contemplation of a winding up, with the consent in writing of the holders of three-fourths of the issued shares of the class, or with the sanction of an Extraordinary Resolution passed at a separate meeting of the holders of the shares of the class, but not otherwise. To every such separate meeting, all the provisions of these Articles relating to General Meetings of the Company or to the proceedings thereat shall, mutatis mutandis, apply.

\* By Ordinary Resolution of the Company passed on the 1st July 1980 the authorised capital of the Company was increased from £70,000 to £200,000 by the creation of £130,000 Shares of One Pound each to rank *pari passu* in all respects with the existing shares of the Company.

6. The special rights conferred upon the holders of any class of shares issued with preferred or other special rights shall be deemed to be varied by the reduction of the capital paid up on such shares and by the creation of further shares ranking in priority thereto, but shall not (unless otherwise expressly provided by these Articles or by the conditions of issue of such shares) be deemed to be varied by the creation or issue of further shares ranking *pari passu* therewith or subsequent thereto.

#### SHARES

7. The Company is a Private Company, and accordingly (A) no invitation shall be issued to the public to subscribe for any shares or debentures or debenture stock of the Company; (B) the number of the members of the Company (exclusive of persons who are in the employment of the Company and of persons who having been in the employment of the Company were while in such employment and have continued after the determination of such employment to be members of the Company) shall be limited to fifty, provided that, for the purposes of this provision, where two or more persons hold one or more shares in the Company jointly, they shall be treated as a single member; and (C) the right to transfer the shares of the Company shall be restricted in manner hereinafter appearing.

8. All shares for the time being unissued and all new shares of any class shall, before issue, be offered to the existing holders of the shares in proportion to the number of shares held by them respectively. Every such offer shall be made by notice in writing specifying the number of shares to which the member is entitled and limiting a time within which the offer, if not accepted, will be deemed to be declined. After the expiration of that time, or on receipt of an intimation from the member to whom such notice is given that he declines to accept the shares offered, the shares not taken up by members shall be at the disposal of the Directors who may allot or otherwise dispose of them subject to Article 7 hereof to such persons at such times and generally on such terms and conditions as they think proper, provided that no shares shall be issued at a discount except as provided by Section 57 of the Companies Act, 1948.

9. The Company shall not give, whether directly or indirectly and whether by means of a loan, guarantee, the provision of security or otherwise, any financial assistance for the purpose of or in connection with a purchase or subscription made or to be made by any person of or for any shares of the Company or of its holding company (if any), nor shall the Company make a loan for any purpose whatsoever on the security of its shares or those of its holding company (if any), but nothing in this Article shall be taken to prohibit transactions not prohibited by the Acts.

10. In addition to all other powers of paying commissions, the Company may exercise the powers conferred by the Acts of paying commissions to persons subscribing or procuring subscriptions for shares of the Company, or agreeing so to do, whether absolutely or conditionally, and any such commissions may be satisfied by the payment of cash or by the allotment of fully or partly paid shares of the Company, or partly in one way and partly in the other: Provided that the rate per cent or the amount of the commission paid or agreed to be paid shall be disclosed in the manner required by the Acts and shall not exceed 10 per cent of the price at which the shares in respect whereof the commission is paid are issued or an amount equivalent thereto. The Company may also, on any issue of shares, pay such brokerage as may be lawful.

11. No person shall be recognised by the Company as holding any share upon any trust, and the Company shall not be bound by or recognise any equitable, contingent, future or partial interest in any share, or (except only as by these Articles otherwise provided or as by law required) any interest in any fractional part of a share, or any other right in respect of any share, except an absolute right to the entirety thereof in the registered holder.

#### CERTIFICATES

12. (A) Every person whose name is entered as a member in the Register of Members shall be entitled without payment to one certificate for all his shares of each class, or upon payment of such sum, not exceeding one shilling for every certificate after the first, as the Directors shall from time to time determine, to several certificates, each for one or more of his shares. Every Certificate shall be issued within one month after allotment unless the conditions of issue of such shares otherwise provide, or within 21 days of the lodgment with the Company of any transfer of the shares, not being a transfer which the Company is for any reason entitled to refuse to register and does not register, and shall be under the Seal, and shall specify the number and class and distinguishing number (if any) of the shares to which it relates, and the amount paid up thereon. The Company shall not be bound to register more than three persons as the joint holders of any share or shares (except in the case of executors or trustees of a deceased Member) and in the case of a share held jointly by several persons, the Company shall not be bound to issued more than one certificate therefor, and delivery of a certificate for a share to one of several joint holders shall be sufficient delivery to all. Where a Member transfers part of his holding of shares he shall be entitled to a certificate for the balance of his holding without charge.

(B) If the Directors so resolve, share certificates and, subject to the provisions of any

instrument constituting or securing the same, certificates issued under the Seal in respect of any debentures, need not be signed or countersigned, or the requisite signatures may be affixed thereto by such mechanical means as may be specified in such resolution. Until otherwise so resolved and subject as regards certificates for debentures to any conditions applicable thereto, every such certificate shall bear the autographic signature of one Director and the Secretary.

13. If a share certificate be lost, destroyed, defaced or worn out, it may be renewed on payment of such fee (if any) not exceeding one shilling, and (in case of loss or destruction) on such terms (if any) as to evidence and indemnity as the Directors think fit, and (in case of defacement or wearing out) on delivery up of the old certificate.

#### LIEN

14. The Company shall have a first and paramount lien on every share for all moneys (whether presently payable or not) called or payable at a fixed time in respect of such share; and the Company shall also have a first and paramount lien on all shares registered in the name of a Member as sole registered holder or as a joint holder in respect thereof for all the debts and liabilities of such Member or his estate to the Company, and that whether the same shall have been incurred before or after notice to the Company of any equitable or other interest in any person other than such Member and whether the period for the payment or discharge of the same shall have actually arrived or not, and notwithstanding that the same are joint debts or liabilities of such Member or his estate and any other person, whether a Member of the Company or not. The Company's lien (if any) on a share shall extend to all dividends or other moneys payable thereon or in respect thereof. The Directors may resolve that any share shall for some specified period be exempt from the provisions of this Article.

15. The Company may sell, in such manner as the Directors think fit, any share on which the Company has a lien, but no sale shall be made unless some moneys in respect of which the lien exists are presently payable, and fourteen days have expired after a notice in writing, stating and demanding payment of the moneys presently payable, and giving notice of intention to sell in default, shall have been served on the holder for the time being of the shares or the person entitled by reason of his death or bankruptcy to the shares.

16. The net proceeds of such sale, after payment of the costs of such sale, shall be applied in or towards payment or satisfaction of the debt or liability in respect whereof the lien exists, so far as the same is presently payable, and any residue shall (subject to a like lien for debts or liabilities not presently

payable as existed upon the shares prior to the sale) be paid to the person entitled to the shares at the time of the sale. For giving effect to any such sale the Directors may authorise some person to transfer the shares sold to the purchaser thereof. The purchaser shall be registered as the holder of the shares so transferred and he shall not be bound to see to the application of the purchase money, nor shall his title to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.

#### CALLS ON SHARES

17. The Directors may, subject to the provisions of these Articles and to any conditions of allotment, from time to time make calls upon the Members in respect of any moneys unpaid on their shares (whether on account of the amount of the shares or by way of premium), provided that (except as otherwise fixed by the conditions of application or allotment) no call on any share shall exceed one-fourth of the nominal amount of the share or be payable at less than fourteen days from the date appointed for payment of the last preceding call, and each Member shall (subject to being given at least fourteen days' notice specifying the time or times and place of payment) pay to the Company at the time or times and place so specified the amount called on his shares.

18. A call may be made payable by instalments. A Call may be postponed and a call may be wholly or in part revoked as the Directors may determine. A call shall be deemed to have been made at the time when the resolution of the Directors authorising the call was passed. The joint holders of a share shall be jointly and severally liable to pay all calls in respect thereof.

19. If a sum called in respect of a share is not paid before or on the day appointed for payment thereof, the person from whom the sum is due shall pay interest on the sum from the day appointed for payment thereof to the time of actual payment at the rate of 10 per cent per annum or at such lesser rate as the Directors may agree to accept, but the Directors shall be at liberty to waive payment of such interest wholly or in part.

20. Any sum which by or pursuant to the terms of issue of a share becomes payable upon allotment or at any fixed date, whether on account of the amount of the share or by way of premium, shall for all the purposes of these Articles be deemed to be a call duly made and payable on the date on which, by or pursuant to the terms of issue, the same becomes payable, and in case of non-payment all the relevant provisions of these Articles as to payment of interest, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.

21. The Directors may make arrangements on the issue

of shares for a difference between the holders in the amount of calls to be paid and in the times of payment.

22. The Directors may, if they think fit, receive from any Member willing to advance the same all or any part of the money unpaid upon the shares held by him beyond the sums actually called up thereon as a payment in advance of calls, and such payment in advance of calls shall extinguish, so far as the same shall extend, the liability upon the shares in respect of which it is advanced, and the Company may pay interest upon the money so received, or so much thereof as from time to time exceeds the amount of the calls then made upon the shares in respect of which it has been received, at such rate as the Member paying such sum and the Directors agree.

#### FORFEITURE OF SHARES

23. If a Member fails to pay any call or instalment of a call on the day appointed for payment thereof, the Directors may at any time thereafter, during such time as any part of such call or instalment remains unpaid, serve a notice on him requiring payment of so much of the call or instalment as is unpaid, together with any interest which may have accrued.

24. The notice shall name a further day (not earlier than fourteen days from the date of service thereof) on or before which and the place where the payment required by the notice is to be made, and shall state that in the event of non-payment at or before the time and at the place appointed the shares on which the call was made will be liable to be forfeited.

25. If the requirements of any such notice as aforesaid are not complied with, any share in respect of which such notice has been given may at any time thereafter, before payment of all calls and interest due in respect thereof has been made, be forfeited by a resolution of the Directors to that effect, and such forfeiture shall include all dividends which shall have been declared on the forfeited shares and not actually paid before the forfeiture.

26. A forfeited share may be sold, re-allotted or otherwise disposed of, either to the person who was before forfeiture the holder thereof or entitled thereto, or to any other person, upon such terms and in such manner as the Directors shall think fit, and at any time before a sale, re-allotment or disposal the forfeiture may be cancelled on such terms as the Directors think fit. The Directors may, if necessary, authorise some person to transfer a forfeited share to any other person as aforesaid.

27. A Member whose shares have been forfeited shall cease to be a Member in respect of the forfeited shares, but shall notwithstanding the forfeiture remain liable to pay to the Company all moneys which at the

date of forfeiture were presently payable by him to the Company in respect of the shares, with interest thereon at the rate of 10 per cent per annum from the date of forfeiture until payment, and the Directors may enforce payment without any allowance for the value of the shares at the time of forfeiture.

28. A statutory declaration that the declarant is a Director or the Secretary of the Company, and that a share has been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the share, and such declaration and the receipt of the Company for the consideration (if any) given for the share on the sale, re-allotment or disposal thereof, together with the certificate for the share delivered to a purchaser or allottee thereof, shall (subject to the execution of a transfer if the same be so required) constitute a good title to the share, and the person to whom the share is sold, re-allotted or disposed of shall be registered as the holder of the share and shall not be bound to see to the application of the consideration (if any), nor shall his title to the share be affected by any irregularity or invalidity in the proceedings in reference to the forfeiture, sale, re-allotment or disposal of the share.

#### TRANSFERS

29. Except in the case of a transfer of shares approved in writing by all the members for the time being (including as members for this purpose the personal representatives of any deceased members in whose names shares are still standing) the right to transfer shares in the Company shall be subject to the following restrictions, namely:-

- (A) Before transferring or requiring the Company to register a transfer of any shares, the person, whether a member of the Company or not, proposing to transfer the same, (hereinafter called "the retiring member") shall give a notice in writing (hereinafter called "the transfer notice") to the Company, that he desires to transfer the same, and the transfer notice shall constitute the Company his agent for the sale of the shares therein mentioned at the prescribed price to any member (including as aforesaid). A transfer notice once given shall not be revocable except with the consent of the Directors.
- (B) If the Company within a space of four months after receiving any transfer notice or after the prescribed price for the shares included therein shall have been determined (whichever is the later) shall find members (including as aforesaid) (hereinafter called "the purchasers") willing to purchase all the shares therein mentioned, and shall give notice in writing thereof to the

retiring member, he shall be bound, upon payment of the prescribed price, to transfer the shares mentioned in the transfer notice to the purchaser or purchasers thereof.

- (C) Every notice given by the Company under paragraph (B) stating that it has found purchasers for the shares included in a transfer notice shall state the names and addresses of the purchasers and the number of shares agreed to be purchased by them respectively and the purchases shall be completed at a place and time to be appointed by the Company, not being more than 28 days after the date of the notice.
- (D) If in any case a retiring member, after having become bound to transfer any shares to a purchaser, shall make default in transferring the shares, the Directors may authorise some person to transfer the shares to the purchasers, and the Company may receive the purchase money, and shall thereupon cause the name of the purchasers to be entered in the register as the holders of the shares, and shall hold the purchase money in trust for the retiring member. The receipt of the Company for the purchase money shall be a good discharge to any purchaser, and he shall not be bound to see to the application thereof, and after the name of the purchaser has been entered in the register in purported exercise of the aforesaid powers the validity of the proceedings shall not be questioned by any person.
- (E) If the Company shall not within the space of four months mentioned in paragraph (B) find members desiring to purchase all the shares mentioned in the transfer notice, and give notice in writing thereof to the retiring member, or, if the Company shall within the space aforesaid give to the retiring member notice in writing that it has no prospect of finding purchasers for all those shares, the retiring member shall, at any time within three months thereafter be at liberty (subject only to the restrictions contained in Article 7 so far as applicable) to transfer the shares or any of them to any person at any price.
- (F) By the expression "the prescribed price" used in this Article is meant the sum per share agreed between the retiring member and the Company, acting by the Directors, as the fair value of a share. Failing such agreement before or within two months after the giving of the transfer notice the sum per share shall be determined and certified in writing by an independent Chartered Accountant to be appointed jointly by the retiring member and the Company. Failing such agreement within a further period of four weeks the prescribed price shall be determined and certified in writing by a Fellow or Member of the Institute



of Chartered Accountants to be nominated at the request of either the retiring member or the Company by the President for the time being of the International Chamber of Commerce in Paris. The principals upon which such prescribed price shall be reached either by the said independent Chartered Accountant or the said Fellow or Member shall be according to generally accepted accountancy principles taking into account the value of the assets and the profitability of the Company but not taking into consideration any offers for the shares by third parties. In so certifying the said Independent Chartered Accountant or Fellow or Member as the case may be shall act as an expert and not as an Arbitrator and in so determining and certifying the fair value of the shares included in the transfer notice his decision shall be final. The costs and expenses in relation to the valuation by such independent Chartered Accountant or Fellow or Member as the case may be shall be borne by the retiring member.

- (G) All shares included in any transfer notice shall be offered by the Company for sale at the prescribed price to all the members (including for this purpose the personal representatives of deceased members in whose names shares are still standing but excluding the member giving the transfer notice) on the terms and so that in case of competition the shares so offered shall be allocated and sold to the members accepting the offer in proportion (as nearly as may be and without increasing the number sold to any member beyond the number applied for by him) to their existing holdings of shares. All offers of shares under this paragraph shall be made by writing sent through the post in prepaid letters addressed to the members at their respective registered addresses as appearing in the register, and every such offer shall limit a time (not being less than 14 days nor more than 28 days) within which the offer must be accepted or in default may be treated as declined.

30. If any member shall die or shall be adjudged bankrupt, his personal representatives or his trustees in bankruptcy (as the case may be) shall be bound if and when called upon in writing by the Directors so to do within three months of the date when representation shall be granted to his estate or he shall be adjudged bankrupt, to give to the Company a transfer notice in respect of all the shares registered in the name of the deceased or bankrupt member and, in default of such transfer notice being given within one month of its being so called for, the personal representatives or the trustee in bankruptcy (as the case may be) shall be deemed to have given such notice at the expiration of the said period of one month and the provisions of these presents shall apply accordingly.

31. The Directors may, in their absolute discretion, and without assigning any reason therefor, refuse to register any transfer of shares.

32. The Directors may refuse to register any transfer of shares on which the Company has a lien, or the registration of which would cause the limit hereinbefore imposed upon the number of the members of the Company to be exceeded.

33. A person becoming entitled to a share in consequence of the death or bankruptcy of a member shall be entitled to receive and may give a discharge for all dividends and other moneys payable in respect of the share, and shall also be entitled to exercise all such other rights as are conferred upon members of the Company by Statute or by these Articles of Association, but he shall not (except as otherwise provided by these Articles) be entitled to receive notices of or to attend or vote at meetings of the Company, or, save as aforesaid, to any of the rights or privileges of a member until he shall have become a member in respect of the share. Provided that during a period of six months from the date of the death of a member his executors, if probate of his Will shall have been granted, and his Administrators, if Letters of Administration to his estate shall have been granted, and unless and until probate of his Will shall have been granted the persons named in the Will as his executors (subject to their producing such Will to the Company) shall be entitled to be given notice of and to attend and vote in respect of the shares standing in the name of the deceased member at any meeting held within the said period of six months.

34. All transfers of shares shall be effected by transfer in writing in the usual common form or in any other form approved by the Directors, and need not be under seal.

35. The instrument of transfer shall be signed by or on behalf of the transferor and, in the case of a partly paid share, by the transferee. The transferor shall be deemed to remain the holder of the shares until the name of the transferee is entered on the Register of Members in respect thereof.

36. The Directors may decline to recognise any instrument of transfer, unless:-

(A) the instrument of transfer duly stamped is deposited at the Office or such other place as the Directors may appoint, accompanied by the Certificate for the shares to which it relates, and such other evidence as the Directors may reasonably require to show the right of the transferor to make the transfer; and

(B) the instrument of transfer is in respect of only one class of share.

37. If the Directors refuse to register a transfer of any shares, they shall, within two months after the date on which the transfer was lodged with the Company, send to the transferee notice of the refusal.

38. The registration of transfers of shares or of any class of shares may be suspended at such times and for such periods (not exceeding thirty days in any year) as the Directors may from time to time determine.

39. No fee shall be charged in respect of the registration of any probate, letters of administration, certificate of marriage or death, power of attorney or other document relating to or affecting the title to any shares.

40. All instruments of transfer which shall be registered shall be retained by the Company, but any instrument of transfer which the Directors may refuse to register shall (except in any case of fraud) be returned to the person depositing the same.

41. Nothing in these Articles shall preclude the Directors from recognising a renunciation of the allotment of any share by the allottee in favour of some other person.

#### STOCK

42. The Company may by Ordinary Resolution convert any paid-up shares into stock, and re-convert any stock into paid-up shares of any denomination.

43. The holders of stock may transfer the same or any part thereof in the same manner, and subject to the same regulations, as would have applied to the shares from which the stock arose if they had not been converted, or as near thereto as circumstances admit, but the Directors may from time to time, if they think fit, fix the minimum amount of stock transferable, provided that such minimum shall not exceed the nominal amount of each of the shares from which the stock arose.

44. The holders of stock shall, according to the amount of the stock held by them, have the same rights, privileges and advantages in all respects as if they held the shares from which the stock arose, but no such privilege or advantage (except participation in dividends and profits of the Company and its assets on a winding up) shall be conferred by an amount of stock which would not, if existing in shares, have conferred such privilege or advantage.

45. All the provisions of these Articles applicable to paid-up shares shall apply to stock, and in all such provisions the words "share" and "Member" shall include "stock" and "Stockholder" respectively.

## INCREASE OF CAPITAL

46. The Company may from time to time by Ordinary Resolution increase its capital by such sum, to be divided into shares of such amounts, as the resolution shall prescribe.

47. All new shares shall be subject to the provisions of these Articles with reference to payment of calls, lien, forfeiture, transfer, transmission and otherwise, and, unless otherwise provided by these Articles, by the resolution creating the new shares or by the conditions of issue, the new shares shall be Ordinary Shares.

## ALTERATION OF CAPITAL

48. The Company may by Ordinary Resolution:-

(A) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares;

(B) cancel any shares which, at the date of the passing of the resolution, have not been taken, or agreed to be taken, by any person, and diminish the amount of its share capital by the amounts of the shares so cancelled;

(C) sub-divide its shares, or any of them, into shares of smaller amount than is fixed by the Memorandum of Association (subject nevertheless to the provisions of the Act), and so that the resolution whereby any share is sub-divided may determine that, as between the holders of the shares resulting from such sub-division, one or more of the shares may have any such preferred or other special rights over, or may have such deferred rights, or be subject to any such restrictions as compared with the others as the Company has power to attach to unissued or new shares and may by Special Resolution reduce its share capital and any capital redemption reserve fund and any share premium account in any manner authorised by the Acts.

Whenever as a result of any consolidation of shares any Members would become entitled to fractions of a share, the Directors may for the purpose of eliminating such fractions sell the shares representing the fractions for the best price reasonably obtainable and distribute the proceeds of sale in due proportion among the Members who would have been entitled to the fractions of shares, and for the purpose of any such sale the Directors may authorise some person to transfer the shares representing the fractions to the purchaser thereof, whose name shall thereupon be entered in the Register of members as the holder of the shares, and who shall not be bound to see to the application of the purchase money nor shall his title

to the shares be affected by any irregularity or invalidity in the proceedings in reference to the sale.

#### GENERAL MEETINGS

49. The Company shall in each year hold a General Meeting as its Annual General Meeting in addition to any other meetings in that year; and not more than fifteen months shall elapse between the date of one Annual General Meeting of the Company and that of the next. Subject as aforesaid and to the provisions of the Acts, the Annual General Meeting shall be held at such time and place as the Directors may determine. All General Meetings other than Annual General Meetings shall be called Extraordinary General Meetings.

50. The Directors may call an Extraordinary General Meeting whenever they think fit, and Extraordinary General Meetings shall also be convened on such requisition, or in default may be convened by such requisitionists, as provided by the Acts.

#### NOTICE OF GENERAL MEETINGS

51. An Annual General Meeting and an Extraordinary General Meeting for the passing of a Special Resolution shall be called by twenty one days' notice at the least, and all other Extraordinary General Meetings shall be called by fourteen days' notice at the least. The notice shall be exclusive of the day on which it is served, or deemed to be served, and of the day for which it is given. Every notice shall be in writing and shall specify the place, the day and the time of meeting, and in the case of special business the general nature of such business, and in the case of an Annual General Meeting shall specify the meeting as such. Notices shall be given in manner hereinafter mentioned to all the Members, other than those who under the provisions of these Articles or the conditions of issue of the shares held by them are not entitled to receive the notice, and to the Auditors for the time being of the Company.

52. In every notice calling a meeting of the Company there shall appear with reasonable prominence a statement that a Member entitled to attend and vote is entitled to appoint one or more proxies to attend and vote instead of him and that a proxy need not also be a Member.

53. It shall be the duty of the Company, subject to the provisions of the Acts, on the requisition in writing of such number of Members as is specified in the Act and (unless the Company otherwise resolves) at the expense of the Requisitionists:-

(A) to give to Members entitled to receive notice of the next Annual General Meeting notice of any resolution which may properly be moved and is intended to be moved at that meeting, and

(B) to circulate to Members entitled to have notice of any General Meeting sent to them any statement of not more than one thousand words with respect to the matter referred to in any proposed resolution or the business to be dealt with at that meeting.

54. The accidental omission to give notice of a meeting to, or the non-receipt of notice of a meeting by, any person entitled to receive notice shall not invalidate the proceedings at that meeting.

#### PROCEEDINGS AT GENERAL MEETINGS

55. All business shall be deemed special that is transacted at an Extraordinary General Meeting. All business that is transacted at an Annual General Meeting shall also be deemed special, with the exception of declaring dividends, the consideration of the accounts and balance sheet and the reports of the Directors and Auditors and other documents required to be annexed to the balance sheet, the appointment of Directors in the place of those retiring by rotation or otherwise and the fixing of the remuneration of the Auditors.

56. Where, by any provision contained in the Acts, special notice is required of a resolution, the resolution shall not be effective unless notice of the intention to move it has been given to the Company not less than twenty-eight days (or such shorter period as the Acts permit) before the meeting at which it is moved, and the Company shall give to the Members notice of any such resolution as required by and in accordance with the provisions of the Acts.

57. No business shall be transacted at any General Meeting unless a quorum is present. Save as in these Articles otherwise provided, two Members present in person or by proxy and entitled to vote at the meeting shall be a quorum for all purposes.

58. If within half an hour from the time appointed for the meeting a quorum is not present, the meeting, if convened on the requisition of, or by, Members, shall be dissolved. In any other case it shall stand adjourned to the same day in the next week at the same time and place, or to such other day and at such other time and place as the Directors may determine, and if at such adjourned meeting a quorum is not present within fifteen minutes from the time appointed for holding the meeting, the meeting shall be dissolved.

59. The Chairman (if any) of the Board of Directors, or in his absence some other Directors nominated by the Directors, shall preside as Chairman at every General Meeting of the Company, but if at any meeting neither the Chairman nor such other Director be present within fifteen minutes after the time appointed for holding the meeting, or if neither of them be willing to act as

Chairman, the Directors present shall choose some Director present to be Chairman, or if no Director be present, or if all the Directors present decline to take the Chair the Members present shall choose some Member present to be Chairman.

60. The Chairman may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place, but no business shall be transacted at any adjourned meeting except business which might lawfully have been transacted at the meeting from which the adjournment took place. When a meeting is adjourned for fourteen days or more, seven clear days' notice at the least, specifying the place, the day and the time of the adjourned meeting shall be given, but it shall not be necessary to specify in such notice the nature of the business to be transacted at the adjourned meeting. Save as aforesaid, it shall not be necessary to give any notice of an adjournment.

61. At any General Meeting a resolution put to the vote of the meeting shall be decided on a show of hands, unless a poll is (before or on the declaration of the result of the show of hands) demanded by any member present in person or by proxy and unless a poll is so demanded a declaration by the Chairman that a resolution has on a show of hands been carried or carried unanimously, or by a particular majority, or lost, or not carried by a particular majority, and an entry to that effect in the minute book of the Company shall be conclusive evidence without proof of the number or proportion of the votes recorded in favour of or against such resolution. A proxy shall be entitled to vote both upon a show of hands and on a poll. The demand for a poll may be withdrawn. Any business other than that upon which a poll has been demanded may be proceeded with pending the taking of the poll.

62. If any votes shall be counted which ought not to have been counted, or might have been rejected, the error shall not vitiate the result of the voting unless it be pointed out at the same meeting, or at any adjournment thereof, and it shall in the opinion of the Chairman of the meeting be of sufficient magnitude to vitiate the result of the voting.

63. If a poll is duly demanded, it shall be taken in such manner as the Chairman may direct (including the use of ballot or voting papers or tickets), and the result of a poll shall be deemed to be the resolution of the meeting at which the poll was demanded. The Chairman may, in the event of a poll, appoint scrutineers (who need not be Members), and may fix some place and time for the purpose of declaring the result of the poll.

64. In the case of an equality of votes, whether on a show of hands or on a poll, the Chairman of the meeting at which the show of hands takes place or at which the

poll is demanded shall be entitled to a second or casting vote.

#### VOTES OF MEMBERS

65. Subject to any special rights or restrictions as to voting attached to any shares by or in accordance with these Articles, on a show of hands every Member who (being an individual) is present in person or (being a corporation) is present by a representative or proxy shall have one vote, and on a poll every Member who is present in person or by proxy shall have one vote for every £1 in nominal amount of the Shares of which he is the holder.

66. In the case of joint holders of a share, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders, and for this purpose seniority shall be determined by the order in which the names stand in the Register of Members in respect of the share.

67. A Member of unsound mind in respect of whom an order has been made by any competent Court may vote, whether on a show of hands or on a poll, by his committee, receiver, curator bonis, or other person appointed by such Court (who may on a poll vote by proxy) provided that such evidence as the Directors may require of the authority of the person claiming to vote shall have been deposited at the Office not less than forty-eight hours before the time for holding the meeting or adjourned meeting at which such person claims to vote.

68. No Member shall, unless the Directors otherwise determine, be entitled to vote at any General Meeting either in person or by proxy, or to exercise any privilege as a Member, unless all calls or other sums presently payable by him in respect of shares of the Company have been paid.

69. No objection shall be raised to the qualification of any voter except at the meeting or adjourned meeting at which the vote objected to is given or tendered, and every vote not disallowed at such meeting shall be valid for all purposes. Any such objection made in due time shall be referred to the Chairman of the meeting, whose decision shall be final and conclusive.

70. On a poll votes may be given either in person or by proxy. On a poll a Member entitled to more than one vote need not, if he votes, use all his votes or cast all the votes he uses in the same way.

71. Any person (whether a Member or not) may be appointed to act as a proxy. A Member may appoint more than one proxy to attend on the same occasion.

72. The instrument appointing a proxy shall be in



writing in the usual common form, or such other form as may be approved by the Directors, and shall be signed by the appointor or by his attorney duly authorised in writing, or if the appointor is a corporation shall be either under its common seal or under the hand of an officer or attorney duly authorised in writing.

73. The instrument appointing a proxy and the power of attorney or other authority (if any) under which it is signed, or a notarially certified or office copy of such power or authority, shall be deposited at the Office, or at such other place in the United Kingdom as is specified for that purpose in the notice calling the meeting, or in any instrument of proxy sent out by the Company in relation to the meeting before the time appointed for holding the meeting or adjourned meeting at which the person named in the instrument proposes to vote, and in default the instrument of proxy shall not be treated as valid. No instrument appointing a proxy shall be valid after the expiration of twelve months from the date named in it as the date of its execution, except at an adjourned meeting or on a poll demanded at a meeting or an adjourned meeting in cases where the meeting was originally held within twelve months from such date.

74. A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal, or the revocation of the instrument of proxy or of the authority under which the instrument of proxy was executed, provided that no intimation in writing of such death, insanity or revocation shall have been received by the Company at the Office three hours at least before the commencement of the meeting or adjourned meeting at which the instrument of proxy is used.

75. The Directors may at the expense of the Company send, by post or otherwise, to the Members instruments of proxy (with or without provision for their return prepaid) for use at any General Meeting or at any separate meeting of the holders of any class of the shares of the Company, either in blank or nominating in the alternative any one or more of the Directors or any other persons. If for the purpose of any meeting invitations to appoint as proxy a person, or one of a number of persons, specified in the invitations are issued at the Company's expense, they shall be issued to all (and not to some only) of the Members entitled to be sent a notice of the meeting and to vote thereat by proxy.

#### CORPORATIONS ACTING BY REPRESENTATIVES

76. Any corporation which is a Member of the Company may, by resolution of its Directors or other governing body, authorise such person as it thinks fit to act as its representative at any meeting of the Company, or at any separate meeting of the holders of any class of

shares of the Company, and the person so authorised shall be entitled to exercise the same powers on behalf of the corporation which he represents as that corporation could exercise if it were an individual Member of the Company.

#### DIRECTORS

77. There shall be not less than 3 Directors nor more than 7. A Director shall not be required to hold any share or shares to qualify him for the office of Director.

78. The Directors shall be entitled to remuneration at such rate as the Company by Ordinary Resolution may from time to time determine. The Directors' remuneration shall be deemed to accrue from day to day. The Directors shall also be entitled to be paid all travelling, hotel and other expenses properly incurred by them in connection with the business of the Company, or in attending and returning from meetings of the Directors or of committees of the Directors or General Meetings.

79. Any Director who serves on any committee or who devotes special attention to the business of the Company, or who otherwise performs services which in the opinion of the Directors are outside the scope of the ordinary duties of a Director, may be paid such extra remuneration by way of salary, participation in profits or otherwise as the Directors may determine.

80. The Company shall not make a loan to any person who is its Director or a director of its holding company (if any), nor enter into any guarantee or provide any security in connection with a loan made to such a person by any other person, but nothing in this Article shall prohibit anything not prohibited by the Acts.

81. Any Director may at any time appoint any person approved by the Directors to be an alternate Director of the Company, and may at any time remove any alternate Director so appointed by him from office and subject to such approval as aforesaid, appoint another person in his place. An alternate Director so appointed shall not be required to hold any share qualification. An alternate Director shall (subject to his giving to the Company an address within the United Kingdom at which notices may be served upon him) be entitled to receive notices of all meetings of the Directors, and to attend and vote as a Director at any such meeting at which the Director appointing him is not personally present, and generally to perform all the functions of his appointor as a Director in the absence of such appointor. An alternate Director shall ipso facto cease to be an alternate Director if his appointor ceases for any reason to be a Director. All appointments and removals of alternate Directors shall be effected by notice in writing under the hand of the Director making or

revoking such appointment sent to or left at the Office.

82. An alternate Director shall be an officer of the Company and shall alone be responsible to the Company for his own acts and defaults, and he shall not be deemed to be the agent of or for the Director appointing him. The remuneration of any such alternate Director shall be payable out of the remuneration payable to the Director appointing him, and shall consist of such part (if any) of the last-mentioned remuneration as shall be agreed between the alternate Director and the Director appointing him.

83. A Director, including an alternate Director, may hold any other office or place of profit under the Company (other than the office of Auditor) in conjunction with his office of Director, and may act in a professional capacity to the Company, on such terms as to tenure of office, remuneration and otherwise as the Directors may determine.

84. No Director or intending Director, including an alternate Director, shall be disqualified by his office from contracting with the Company either with regard to his tenure of any other office or place of profit, or as vendor, purchaser or otherwise, nor shall any such contract, or any contract or arrangement entered into by or on behalf of the Company in which any Director is in any way, whether directly or indirectly, interested, be liable to be avoided, nor shall any Director so contracting or being so interested be liable to account to the Company for any profit realised by any such contract or arrangement by reason of such Director holding that office or of the fiduciary relation thereby established.

85. Any Director, including an alternate Director, may continue to be or become a director or other officer or member or otherwise interested in any other company promoted by the Company or in which the Company may be interested, as a member or otherwise, and no such Director shall be accountable for any remuneration or other benefits received by him as a director or other officer or member of, or from his interest in, any such other company. The Directors may exercise the voting power conferred by the shares of any other company held or owned by the Company or exercisable by them as directors of such other company, in such manner in all respects as they think fit (including the exercise thereof in favour of any resolution appointing themselves or any of them directors or other officers of such company, or voting or providing for the payment of remuneration to the directors or other officers of such company), and any Director may vote in favour of the exercise of such voting rights, notwithstanding that he may be, or be about to be, appointed a director or other officer of such other company, or is or may become interested in the exercise of such voting rights.

86. A Director who is in any way, whether directly or indirectly, interested in a contract or proposed contract with the Company shall declare the nature of his interest in manner required by Section 199 of the Companies Act, 1948. A Director may vote in respect of any such contract or proposed contract and if he do so vote his vote shall be counted and he shall be capable of being counted towards the quorum at any meeting of the Directors at which any such contract or proposed contract shall come before the Board for consideration.

87. For the purposes of the last preceding Article a general notice given to the Directors by any Director to the effect that he is a member of any specified company or firm and is to be regarded as interested in any contract which may, after the date of the notice, be made with the company or firm shall (if such Director shall give the same at a meeting of the Directors or shall take reasonable steps to secure that it is brought up and read at the next meeting of the Directors after it is given) be deemed a sufficient declaration of interest in relation to any contract so made.

#### APPOINTMENT, REMOVAL AND DISQUALIFICATION OF DIRECTORS

88. The Directors of the Company shall not be subject to retirement by rotation and shall, without prejudice to the provisions of the Acts, continue in office until they shall be removed from or cease to hold such office pursuant to the provisions of the Acts or of these presents.

89. At the Annual General Meeting of the Company in every year any Director who shall have held office as such Director for a period of three years shall retire but shall be eligible for re-election either for a further period of three years or for such other period as the Company in general meeting may prescribe.

90. The Company may from time to time by Ordinary Resolution increase or reduce the number of Directors.

91. The Directors shall have power at any time, and from time to time, to appoint any person to be a Director, either to fill a casual vacancy or as an additional Director, but so that the total number of Directors shall not at any time exceed the maximum number fixed by or in accordance with these Articles. Subject to the provisions of the Acts and of these Articles, any Director so appointed shall hold office only until the conclusion of the next following Annual General Meeting, and shall be eligible for re-appointment at that meeting.

92. Without prejudice to the provisions of the Acts, the Company may, by Extraordinary Resolution, remove a Director before the expiration of his period of office (but such removal shall be without prejudice to any claim such Director may have for breach of any contract

of service between him and the Company) and may, by Ordinary Resolution, appoint another person in his stead.

93. The office of a Director shall be vacated in any of the following events:-

- (A) if (not being a Director who has agreed to serve as a Director for a fixed term) he resigns his office by notice in writing under his hand sent to or left at the Office;
- (B) if he becomes bankrupt or makes any arrangement or composition with his creditors generally;
- (C) if he becomes of unsound mind;
- (D) if he is absent from meetings of the Directors for six successive months without leave, and his alternate Director (if any) shall not during such period have attended in his stead, and the Directors resolve that his office be vacated;
- (E) if he ceases to be a Director by virtue of, or becomes prohibited from being a Director by reason of, any order made under any provisions of the Acts.

#### RETIREMENT OF DIRECTORS

94. Unless and until otherwise determined by the Company by Ordinary Resolution, either generally or in any particular case, no Director shall vacate or be required to vacate his office as a Director on or by reason of his attaining or having attained the age of seventy and any Director retiring or liable to retire under the provisions of these Articles and any person proposed to be appointed a Director shall be capable of being re-appointed or appointed, as the case may be, as a Director notwithstanding that at the time of such re-appointment or appointment he has attained the age of seventy, and no special notice need be given of any resolution for the re-appointment or appointment or approving the appointment as a Director of a person who shall have attained the age of seventy, and it shall not be necessary to give to the Members notice of the age of any Director or person proposed to be re-appointed or appointed as such. For the purposes of this Article the expression "Director" shall include an alternate Director.

#### EXECUTIVE DIRECTORS

95. The Directors may from time to time appoint any one or more of their body to be the holder of any executive office whether or not for a fixed period and on such terms as they think fit. A Director so appointed shall not be subject to retirement by rotation and shall not be taken into account in determining the rotation of retirement of Directors,

but shall (without prejudice to any claim such Director may have for breach of any contract of service between him and the Company) be subject to the same provisions as to vacation of office as the other Directors of the Company, and if he shall vacate the office of Director or (without prejudice to any such claim as aforeaid) if the Directors resolve that his term of office as the holder of any such executive office be determined, his appointment as such shall ipso facto be determined.

96. The Directors may subject to Article 97 hereof entrust to and confer upon any Director appointed to any such executive office any of the powers exercisable by them as Directors, other than the power to make calls for forfeit shares, upon such terms and conditions and with such restrictions as they think fit, and either collaterally with or to the exclusion of their own powers, and may from time to time revoke, withdraw, alter or vary all or any of such powers.

#### POWERS OF DIRECTORS

97. The business of the Company shall be managed by the Directors, who, in addition to the powers and authorities by these presents or otherwise expressly conferred upon them, may exercise all such powers and do all such acts and things as may be exercised or done by the Company, and are not by Statute or by these presents expressly directed or required to be exercised or done by the Company in General Meeting, subject nevertheless to the provisions of the Statutes and of these presents and to any regulations from time to time made by the Company in General Meeting: Provided that no regulation made shall invalidate any prior act of the Directors which would have been valid if such regulation had not been made: and Provided further that the Directors shall have no power save with the prior consent of a general meeting of the Company either:-

- (a) to buy, sell, dispose of, acquire, lease, charge or otherwise deal with any land or any interest therein in the name of or on behalf of the Company; or
- (b) to commence or terminate the production or manufacture by the Company of any product not previously or previously (as the case may be) produced or manufactured by the Company; or
- (c) to conclude in the name of the Company any licence or royalty agreement for the manufacture or production by any person other than the Company of any product produced or manufactured by the Company; or
- (d) to employ a general manager of the business of the Company; or
- (e) to acquire or dispose of (on behalf of the

Company) any shares in any other company.

98. The Directors may establish any councils, committees, local boards or agencies for managing any of the affairs of the Company, either in the United Kingdom or elsewhere, and may appoint any persons to be members of such local boards, or any managers or agents, and may fix their remuneration, and may delegate to any council, committee, local board, manager or agent any of the powers, authorities and discretions vested in the Directors, with power to sub-delegate, and may authorise the members of any local board, or any of them, to fill any vacancies therein, and to act notwithstanding vacancies, and any such appointment or delegation may be made upon such terms and subject to such conditions as the Directors may think fit, and the Directors may remove any person so appointed, and may annul or vary any such delegation, but no person dealing in good faith and without notice of any such annulment or variation shall be affected thereby.

99. The Directors may from time to time, and at any time, by power of attorney under the Seal, appoint any corporation, firm or person, or any fluctuating body of persons, whether nominated directly or indirectly by the Directors, to be the attorney or attorneys of the Company for such purposes and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the Directors under these Articles) and for such period and subject to such conditions as they may think fit, and any such power of attorney may contain such provisions for the protection and convenience of persons dealing with any such attorney as the Directors may think fit, and may also authorise any such attorney to sub-delegate all or any of the powers, authorities and discretions vested in him.

100. The Directors may cause to be kept in any part of Her Majesty's Dominions outside the United Kingdom, the Channel Islands or the Isle of Man in which the Company transacts business a Branch Register or Registers of members resident in such part of the said Dominions, and the Directors may (subject to the provisions of the Acts) make and vary such regulations as they may think fit respecting the keeping of any such Register.

101. The Directors may establish and maintain, or procure the establishment and maintenance of, any pension or superannuation funds (whether contributory or otherwise) for the benefit of, and give or procure the giving of donations, gratuities, pensions, allowances and emoluments to, any persons who are or were at any time in the employment or service of the Company, or for any company which is a subsidiary of the Company or is allied to or associated with the Company or any such subsidiary or of any of the predecessors in business of the Company or any such other company as aforesaid, or who may be or have been

Directors or officers of the Company, or of any such other company as aforesaid and who hold or have held executive positions or agreements for service with the Company or any such other company as aforesaid, and the wives, widows, families and dependents of any such persons, and also establish, subsidise and subscribe to any institutions, associations, societies, clubs or funds calculated to be for the benefit of, or to advance the interests and well-being of the Company or of any such other company as aforesaid, or of any such person as aforesaid, and make payments for or towards the insurance of any such persons as aforesaid and subscribe or guarantee money for charitable or benevolent objects, or for any exhibition or for any public, general or useful object, and do any of the matters aforesaid either alone or in conjunction with any such other company as aforesaid. Subject to particulars with respect to the proposed payment being disclosed to the Members of the Company and to the proposal being approved by the Company by Ordinary Resolution, if the Acts shall so require, any Director who holds or has held any such executive position or agreement for services shall be entitled to participate in and retain for his own benefit any such donation, gratuity, pension, allowance or emolument. A Director may vote at a meeting of Directors in respect of any matter referred to in this Article, notwithstanding that he is personally interested in such matter, and shall be counted in the quorum present at the meeting.

102. The Directors may from time to time at their discretion raise or borrow or secure the payment of any sum or sums of money for the purposes of the Company and may secure the payment or repayment of such moneys in such manner and upon such terms and conditions in all respects as they think fit, and in particular, by the issue of debentures or debenture stock of the Company charged upon all or any part of the property of the Company (both present and future), including its uncalled capital for the time being. Any debentures, debenture stock or other securities may be issued at a discount, premium or otherwise and with any special privilege as to redemption, surrender, drawings, allotment of shares, attending and voting at General Meetings of the Company, appointment of Directors and otherwise.

103. All cheques, promissory notes, drafts, bills of exchange, and other negotiable or transferable instruments, and all receipts for moneys paid to the Company shall be signed, drawn, accepted endorsed or otherwise executed, as the case may be, in such manner as the Directors shall from time to time by resolution determine.

#### PROCEEDINGS OF DIRECTORS

104. The Directors may meet together for the dispatch of business, adjourn and otherwise regulate their meetings as they think fit. Questions arising at any



meeting shall be determined by a majority of votes. On a show of hands each Director shall be entitled to one vote. A Director who is also an alternate Director shall be entitled in the absence of the Director whom he is representing, to a separate vote on behalf of such Director in addition to his own vote. A Director may, and the Secretary on the requisition of a Director shall, at any time summon a meeting of the Directors. It shall be necessary to give notice of a meeting of Directors to any Director for the time being absent from the United Kingdom. In case of an equality of votes whether on a show of hands or on a poll the Chairman shall have a casting vote.

105. The quorum necessary for the transaction of the business of the Directors may be fixed by the Directors, and unless so fixed at any other number shall be one. For the purposes of this Article an alternate Director shall be counted in a quorum.

106. The continuing Directors or a sole continuing Director may act notwithstanding any vacancies in their body, but if and so long as the number of Directors is reduced below the minimum number fixed by or in accordance with these Articles, or below the number fixed by or pursuant to these Articles as the quorum of Directors, the continuing Directors or Director may act for the purpose of filling vacancies in their body or of summoning General Meetings of the Company, but not for any other purpose. If there be no Directors or Director able or willing to act, then any two Members may summon a General Meeting for the purpose of appointing Directors.

107. The Company in general meeting shall elect a chairman and vice-chairman of the Company and determine the period for which they are to hold office. No person other than a Director of the Company shall be eligible for election to the office of Chairman or Vice-Chairman. The Chairman or, in his absence, the Vice-Chairman shall preside as Chairman at every meeting of the Directors and every general meeting of the Company. If at any meeting of the Directors or general meeting of the Company neither the Chairman nor the Vice-Chairman shall be present within fifteen minutes after the time appointed for the holding of such meeting or if at such meeting both the Chairman and Vice-Chairman are unwilling to act then the Directors present may choose one of their number to be Chairman of the meeting.

108. A resolution in writing, signed by all the Directors for the time being entitled to receive notice of a meeting of Directors, shall be as effective as a resolution passed at a meeting of the Directors, duly convened and held, and may consist of several documents in the like form each signed by one or more of the Directors.

109. A meeting of the Directors for the time being, at which a quorum is present, shall be competent to exercise all powers and discretions for the time being exercisable by the Directors.

110. The Directors may delegate any of their powers to committees consisting of such members or member of their body as they think fit. Any committee so formed shall in the exercise of the powers so delegated conform to any regulations that may be imposed on it by the Directors.

111. The meetings and proceedings of any such committee consisting of two or more members shall be governed by the provisions of these Articles regulating the meetings and proceedings of the Directors, so far as the same are applicable and are not superseded by any regulations made by the Directors under the last preceding Article.

112. All acts done bona fide by any meeting of Directors, or of a committee of Directors, or by any person acting as a Director, shall, notwithstanding that it is afterwards discovered that there was some defect in the appointment of any such Director, or person acting as aforesaid, or that they or any of them were disqualified, or had vacated office, or were not entitled to vote, be as valid as if every such person had been duly appointed, and was qualified and had continued to be a Director and had been entitled to vote.

#### MINUTES

113. The Directors shall cause minutes to be made:-

- (A) of all appointments of officers made by the Directors;
- (B) of the names of the Directors present at each meeting of Directors and of any committee of Directors;
- (C) of all resolutions and proceedings at all meetings of the Company and of the Directors and of committees of Directors.

Any such minute, if purporting to be signed by the Chairman of the meeting at which the proceedings were had, or by the Chairman of the next succeeding meeting, shall be evidence of the proceedings.

#### SECRETARY

114. The Secretary shall be appointed and may be removed by the Directors.

115. Anything by the Acts required or authorised to be done by or to the Secretary may, if the office is vacant or there is for any other reason no Secretary

capable of acting, be done by or to any assistant or deputy Secretary of, if there is no assistant or deputy Secretary capable of acting, by or to any officer of the Company authorised generally or specially in that behalf by the Directors: Provided that any provision of the Acts or of these Articles requiring or authorising a thing to be done by or to a Director and the Secretary shall not be satisfied by its being done by or to the same person acting both as Director and as, or in the place of, the Secretary.

#### SEAL

116. The Directors shall provide for the safe custody of the Seal and the Seal shall never be used except by the authority of a resolution of the Directors or of a committee of the Directors authorised in that behalf by the Directors. The Directors may from time to time make such regulations as they think fit (subject to the provisions of these Articles in relation to share and debenture certificates) determining the persons and the number of such persons who shall sign every instrument to which the Seal is affixed, and unless and until otherwise so determined every such instrument shall be signed by one Director and shall be countersigned by the Secretary.

117. The Company may have an official seal for use abroad under the provisions of the Acts, where and as the Directors shall determine, and the Company may by writing under the Seal appoint any agent or committee abroad to be the duly authorised agent of the Company for the purpose of affixing and using such official seal, and may impose such restrictions on the use thereof as shall be thought fit. Wherever in these Articles reference is made to the Seal, the reference shall, when and so far as may be applicable, be deemed to include any such official seal as aforesaid.

#### DIVIDENDS

118. The profits of the Company available for dividend and resolved to be distributed shall be applied in the payment of dividends to the members in accordance with their respective rights and priorities. The Company in General Meeting may declare dividends accordingly.

119. No dividend shall be payable except out of the profits of the Company, and no dividend shall exceed the amount recommended by the Directors.

120. Subject to the rights of persons, if any, entitled to shares with preferential or other special rights as to dividends, all dividends shall be declared and paid according to the amounts paid up on the shares (otherwise than in advance of calls) in respect whereof the dividend is paid. All dividends shall be apportioned and paid pro rata according to the amounts paid up on the shares during any portion or portions of the period in respect of which the dividend is paid,

except that if any share is issued on terms providing that it shall carry any particular rights as to dividend, such share shall rank for dividend accordingly.

121. The Directors may, if they think fit, from time to time pay to the members such interim dividends as appear to the Directors to be justified by the profits of the Company. If at any time the share capital of the Company is divided into different classes, the Directors may pay such interim dividends in respect of those shares in the capital of the Company which confer on the holders thereof deferred or non-preferred rights, as well as in respect of those shares which confer on the holders thereof preferential rights with regard to dividend, and the Directors may also pay half-yearly, or at other suitable intervals to be settled by them, any dividend which may be payable at a fixed rate if they are of opinion that the profits justify the payment. Provided the Directors act bona fide they shall not incur any responsibility to the holders of shares conferring a preference for any damage that they may suffer by reason of the payment of an interim dividend on any shares having deferred or non-preferred rights.

122. The Directors may deduct from any dividend or other moneys payable to any Member on or in respect of a share all sums of money (if any) presently payable by him to the Company on account of calls or otherwise in relation to the shares of the Company.

123. All unclaimed dividends may be invested or otherwise made use of by the Directors for the benefit of the Company until claimed. No dividend shall bear interest as against the Company.

124. Any dividend which has remained unclaimed for a period of twelve years from the date of declaration thereof shall, if the Directors shall so resolve, be forfeited and cease to remain owing by the Company and shall thenceforth belong to the Company absolutely.

125. Any dividend or other moneys payable on or in respect of a share may be paid by cheque or warrant sent through the post to the registered address of the Member or person entitled thereto, and in the case of joint holders to any one of such joint holders, or to such person and such address as the holder or joint holders may in writing direct. Every such cheque or warrant shall be made payable to the order of the person to whom it is sent or to such other person as the holder or joint holders may in writing direct, and payment of the cheque or warrant shall be a good discharge to the Company. Every such cheque or warrant shall be sent at the risk of the person entitled to the money represented thereby.

126. If several persons are registered as joint holders of any share, any one of the them may give effectual

receipts for any dividend or other moneys payable on or in respect of the share.

127. A General Meeting declaring a dividend may upon the recommendation of the Directors, direct payment of such dividend wholly or in part by the distribution of specific assets, and in particular of paid-up shares or debentures of any other company, and the Directors shall give effect to such resolution; and where any difficulty arises in regard to the distribution they may settle the same as they think expedient, and in particular may issue fractional certificates, and may fix the value for distribution of such specific assets or any part thereof, and may determine that cash payment shall be made to any Members upon the footing of the value so fixed, in order to adjust the rights of Members, and may vest any specific assets in trustees upon trust for the persons entitled to the dividend as may seem expedient to the Directors, and generally may make such arrangements for the allotment, acceptance and sale of such specific assets or fractional certificates, or any part thereof, and otherwise as they think fit.

#### RESERVES

128. The Directors may before recommending any dividend, whether preferential or otherwise, carry to reserve out of the profits of the Company (including any premiums received upon the issue of debentures or other securities of the Company) such sums as they think proper as a reserve or reserves, which shall, at the discretion of the Directors, be applicable for any purpose to which the profits of the Company may properly be applied and, pending such application may at the like discretion either be employed in the business of the Company or be invested in such investments (other than shares of the Company or its holding company, if any) as the Directors may from time to time think fit. The Directors may also, without placing the same to reserve, carry forward any profits which they think prudent not to divide.

#### CAPITALISATION

129. The Company may by Ordinary Resolution, upon the recommendation of the Directors, resolve that it is desirable to capitalise any undivided profits of the Company (including profits carried and standing to any reserve or reserves) not required for paying the fixed dividends on any shares entitled to fixed preferential dividends with or without further participation in profits, or any sum carried to reserve as a result of the sale or revaluation of the assets of the Company (other than goodwill) or any part thereof or, subject as hereinafter provided, any sum standing to the credit of the Company's share premium account or capital redemption reserve fund, and accordingly that the Directors be authorised and directed to appropriate the profits or sum resolved to be capitalised to the

Members in the proportion in which such profits or sum would have been divisible amongst them had the same been applicable and had been applied in paying dividends, and to apply such profits or sum on their behalf, either in or towards paying up the amounts, if any, for the time being unpaid on any shares held by such Members respectively, or in paying up in full unissued shares or debentures of the Company of a nominal amount equal to such profits or sum, such shares or debentures to be allotted and distributed, credited as fully paid up, to and amongst such Members in the proportions aforesaid, or partly in one way and partly in another: Provided that the share premium account and the capital redemption reserve fund may, for the purposes of this Article, only be applied in the paying up of unissued shares to be issued to Members credited as fully paid.

130. Whenever such a resolution as aforesaid shall have been passed, the Directors shall make all appropriations and applications of the profits or sum resolved to be capitalised thereby, and all allotments and issues of full paid shares or debentures, if any, and generally shall do all acts and things required to give effect thereto, with full power to the Directors to make such provisions by the issue of fractional certificates or by payment in cash or otherwise as they think fit for the cash of shares or debentures becoming distributable in fractions, and also to authorise any person to enter on behalf of all the Members entitled to the benefit of such appropriations and applications into an agreement with the Company providing for the allotment to them respectively, credited as fully paid up, of any further shares to which they may be entitled upon such capitalisation, and any agreement made under such authority shall be effective and binding on all such Members.

#### ACCOUNTS

131. The Directors shall cause proper books of account to be kept in accordance with the Acts.

132. The books of account shall be kept at the Office, or (subject to the provisions of the Acts) at such other place as the Directors think fit, and shall always be open to inspection by the Directors. No Member (other than a Director) shall have any right of inspecting any account or book or document of the Company except as conferred by statute or authorised by the Directors or by the Company in General Meeting.

133. The Directors shall from time to time, in accordance with the provisions of the Acts, cause to be prepared and to be laid before the Company in General Meeting such profit and loss accounts, balance sheets, group accounts (if any) and reports as are specified in the Acts.

134. The Auditors' report shall be read before the Company in General Meeting and shall be open to inspection as required by the Acts.

135. A printed copy of the Directors' and Auditors' reports accompanied by printed copies of the balance sheet, profit and loss account and other documents required by the Acts to be annexed to the balance sheet shall, not be less than twenty-one days before the Annual General Meeting, be delivered or sent by post to the registered address of every Member and holder of debentures of the Company, and to the Auditors for the time being of the Company.

#### AUDIT

136. Once at least in every year the accounts of the Company shall be examined and the correctness of the balance sheet, profit and loss account and group accounts (if any) ascertained by an Auditor or Auditors.

137. Auditors shall be appointed and their duties, powers, rights and remuneration regulated in accordance with the provisions of the Acts.

#### NOTICES

138. Any notice or document may be given or served by the Company on any Member either personally or by sending it through the post in a prepaid letter addressed to such Member at his address as appearing in the Register of Members. In the case of joint holders of a share, all notices shall be given to that one of the joint holders whose name stands first in the Register of Members in respect of the jointholding, and notice so given shall be sufficient notice to all the joint holders.

139. Any Member described in the Register of Members by an address not within the United Kingdom who shall from time to time give to the Company an address within the United Kingdom at which notices may be served upon him shall be entitled to have notices served upon him at such address, but, save as aforesaid, any Member shall be entitled to receive any notice from the Company by service at the address described in the Register of Members.

140. Any Member present, either in person or by proxy, at any meeting of the Company shall for all purposes be deemed to have received due notice of such meeting, and, where requisite, of the purposes for which such meeting was convened.

141. Every person who by operation of law, transfer or other means whatsoever shall become entitled to any share shall be bound by any notice in respect of such share which, before his name and address are entered in the Register of Members, shall be duly sent to the last

registered address of the person from whom he derives his title to such share.

142. Any notice required to be given by the Company to the Members or any of them, and not provided for by or pursuant to these Articles, shall be sufficiently given if given by advertisement which shall be inserted once in at least one leading daily newspaper published in London.

143. Any notice or other document required to be served by the Company on any Member, if served by post, shall be deemed to have been served three days after the day by way of example only on which the letter containing the same is posted, and in proving such service it shall be sufficient to prove that the letter containing the notice or document was properly addressed and duly posted. A notice to be given by advertisement shall be deemed to have been served on the day on which the advertisement appears.

144. Any notice or document delivered or sent by post to or left at the registered address of any Member in pursuance of these Articles shall, notwithstanding that such Member be then dead, bankrupt, of unsound mind or (being a corporation) in liquidation, and whether or not the Company has notice of the death, bankruptcy, insanity or liquidation of such Member, be deemed to have been duly served in respect of any share registered in the name of such Member as sole or joint holder, unless his name shall, at the time of the service of the notice or document, have been removed from the Register of members as the holder of the share, and such service shall for all purposes be deemed a sufficient service of such notice or document on all persons interested (whether jointly with or as claiming through or under him) in the share.

#### WINDING UP

145. If the Company shall be wound up (whether the liquidation is altogether voluntary, under supervision, or by the Court) the Liquidator may, with the authority of an Extraordinary Resolution, divide among the Members in specie the whole or any part of the assets of the Company, and whether or not the assets shall consist of property of one kind or shall consist of properties of different kinds, and may for such purposes set such value as he deems fair upon any one or more class or classes of property, and may determine how such division shall be carried out as between the Members or different classes of Members. The Liquidator may, with the like authority, vest any part of the assets in trustees upon such trusts for the benefit of Members as the Liquidator, with the like authority, shall think fit, and the liquidation of the Company may be closed and the Company dissolved, but so that no Member shall be compelled to accept any shares in respect of which there is a liability.



### INDEMNITY

146. Subject to the provisions of the Acts, every Director or other officer and Auditor of the Company shall be indemnified out of the assets of the Company against all costs, charges, expenses, losses and liabilities which he may sustain or incur in or about the execution of his office or otherwise in relation thereto.

### SHARE WARRANTS

147. The Company, with respect to fully paid-up shares, may issue warrants stating that the bearer is entitled to the shares therein specified, and may provide by coupons or otherwise for the payment of future dividends on the shares included in such warrants. The Directors may determine, and from time to time vary, the conditions upon which share warrants shall be issued, and in particular may determine whether and upon what conditions the bearer of a share warrant shall be entitled to attend and vote at meetings of the Company and separate meetings of the holders of any class of shares of the Company, or a share warrant may be surrendered and the name of the bearer entered in the Register in respect of the shares therein specified or a new share warrant or coupon may be issued in place of one worn out, defaced, lost or destroyed, provided that no new warrant shall be issued except on proof that the original warrant has been destroyed. The bearer of a share warrant shall be subject to the conditions for the time being in force, whether made before or after the issue of such warrant. Subject to such conditions and to the provisions of these Articles, the bearer of a share warrant shall be to the full extent a Member of the Company, provided that he shall not be entitled to receive notice of any meeting of the Company or any separate meeting of the holders of any class of shares of the Company.

# HERAËUS SILICA AND METALS LIMITED

THE COMPANIES ACT 1985

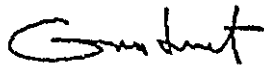
Registered Number: 73915

**COPY SPECIAL RESOLUTION** passed by the members of the Company named above at their Extraordinary General Meeting duly convened and held at 1 Craven Court, Canada Road, Byfleet, Surrey KT14 7JL on 29 December 1994.

## SPECIAL RESOLUTION

That the Articles of Association be altered by inserting instead of Regulation 77 the following Regulation:-

- 77     *There shall be not less than 3 Directors nor more than 10.  
A Director shall not be required to hold any share or  
shares to qualify him for the office of Director*



COMPANY SECRETARY

Dated: 29 December 1994

