

VULCAN

Mechanical Seals

VULCAN





Vulcan Manufacturing

- ◆ New 17,000 Square Metre Facility.
- ◆ Advanced, CNC, Automated Production.
- ◆ Electronic Inspection/Production Control.
- ◆ Quality and Reliability Assured.

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Materials Manufacture: Example Silicon Carbide

- ◆ Raw Silicon Powder Manufacture Through To Final Component.
- ◆ Advanced, Modern, Plant and Equipment.
- ◆ Producing High Specification, Sintered & Reaction Bonded Silicon Carbide.



Electronic Logistics

- ◆ The Electronic Seal Warehouse: To Distributors In Over 70 Countries.
- ◆ Industry Leading Automated Logistics & Service.
- ◆ Unique, Distributor Specific, Web Portals.
- ◆ Unbeatable Stocks, Product, Service & Prices.





THE VULCAN STOCK RANGE

Vulcan offer the broadest range of Single Spring Mechanical Seals available from any one source. Vast stocks are held, on all types shown, with a comprehensive choice of seal face materials and elastomers. Standard, stocked seals only are shown - many other seals are produced to individual customers' specifications.

Guarantee: Every seal and seat type, in all standard face materials listed, in each of Nitrile, EPDM and Viton®, are held ex-stock at our world wide distribution centre in Sheffield, if previously sold twice. Over fifty thousand stock-lines and millions of same day build combinations. You may check our stock at any time as it is constantly updated on our website.



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Types 7D / 8B / 8 / 82 / 8 DIN / 9 / 9L / 12 DIN / 12 / 13 / 13 DIN

3

Vulcan Elastomeric Bellows Seals

Types 14 / 142 / 143 / 19 / 192 / 193 / 1520 / 1511 / 1522 / 1724

4

Vulcan Parallel Spring Diaphragm Seals

Types 10 / 20 / 11 / 22 / 24

5

Vulcan Balanced Diaphragm Seals

Types A1 / A2 / A3 / A4 / A5

6

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Types 95 / 95N / 96 / 97 / 98

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Vulcan Wave Spring Seals

Types 1677 / 1677M / 1678 / 1678M / 1682 / 1688 / 1688L

9

Vulcan Water Pump Seals

Types 18 / 60 / 70 / 65 / 75

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Vulcan Direct Replacement Seals For Common O.E.M Pumps

Types 06 / 8W / 8X / 8Y / 28 / 281 / 121 / 131 / 1688W / 1688Y / 1640 / 192K / 94 & Refrigeration Seals.

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a

Vulcan Direct Replacement Seals For Food, Beverage And Dairy Industries

Complete range of seals for INOXPA®, ALFA LAVAL®, APV, FRISTAM®, & WAUKESHA® Pumps

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b

Vulcan Seat Types, Clamp Rings, Seal Refurbishment, Fitting Instructions, Seal Identification, USA Seal Codes and Vulcan Advantages

Seat Types 8 STD / 19 / 8B / 12 / 12DIN / 13 / 13DIN / 11 / 1511 / 20 / 1520 / 19B / 24 / 21 / 31 / 8 DINS
8 DINL / 24 DINS / 24 DINL / 25 / 27 / 23 / 24 BEZL / 24 BEZS / 32 & Clamp Rings

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“THE BEST ‘STANDARD’ MECHANICAL SEAL COMPANY TO DO BUSINESS WITH”.

INTRODUCTION

Vulcan, with some way over two hundred and fifty staff, in our factories and our world wide distribution centre, are one of the worlds leading mechanical seal manufacturers.

Founded in 1987, Vulcan continues to rapidly grow through our exceptional investments in material and design development, vertically integrated, advanced, modern factories with increasingly automated manufacturing machinery, and electronically controlled extensive stock-holding and distribution.

Vulcan have established new industry standards, with our product range, performance/quality, ex-stock service and price.

We continue to be immensely motivated and dedicated to being the Worlds Best ‘Standard Mechanical’ Seal Company. The key features of this policy goal and our company are;

- Advanced production facilities, automated wherever possible.
- In-house component and material manufacture and development.
- The very best quality and inspection systems, CMM checked and electronically controlled.
- The widest range and stock of seals, available from any company, accessible to our customers, via the internet.
- Well motivated and rewarded staff working in excellent facilities.
- Fully computer controlled, integrated and automated seal ordering, stocking and supply systems.
- **To be The Electronic Mechanical Seal Warehouse to The Industry.**

VERTICALLY INTEGRATED MANUFACTURE

Vulcan’s modern production facilities exceed 17,000 square metres of total floor space. The factories were architecturally designed and built to create world-class facilities. We continue to heavily invest in our production processes, machinery, systems and people. This focus has naturally led to extra-ordinary annual rates of growth in our factories capacity and employment. Growth needed to meet the growth in our customers demands.

DESIGN, RANGE AND STOCK-HOLDING

All Vulcan seals are manufactured in-house to our own production drawings and designs. We have eliminated the faults common in some original and many copy designs, through close attention to design detail and material improvements.

Vulcan have the widest range of “Standard” Mechanical Seals, available from any manufacturer in the world. We back this very extensive range with a guaranteed ex-stock holding, that is accessible to our customers to view on the internet. All seal types, in all sizes and materials, shown in our Mechanical Seal Brochures, are available ex-stock, if previously sold. In total over 50,000 stock lines (with an exceeded 99.8% ex-stock target). We can also manufacture practically any special and will even stock them for you, to agreement, for repeat requirements.

MATERIAL DEVELOPMENT

Most “Single Spring” Seal Companies buy in product or merely assemble components in-house. Previously no manufacturer made all their own parts and components and practically all their own materials.

Vulcan do. We produce all our seals and practically everything for them. For example, all of our eight grades of TC and SIC hard-faced materials are made in-house from raw powder. We mould all of our elastomers and even make the moulds for the same.

This vertical integration enables us to absolutely Quality and Cost Control all parts of the Vulcan seal. With our Can Do Philosophy, this also enables us to produce many special designs of seals for customers, with quantities, costs and lead times lower than our competitors, because we primarily do it all in-house.

Material quality is vital to the capability, performance and life of a seal. So Vulcan only use 99.5% purity Aluminium Ceramics. M106K+ is our standard carbon grade. We have heavily invested in even further developing Reaction and Sintered Sic and Nickel and Cobalt TC sintering processes, so that we can exceed previous Single Spring Seals norms. This focus on the best quality face materials is standard throughout the Vulcan seal range.

QUALITY ASSURANCE

All Vulcan Mechanical and Encapsulated Seals are solely produced in our own modern factories. Our manufacturing facilities have been audited and certified to ISO9001 and our distribution operations are examined and certified to ISO.9001.2000. Vulcan have extremely extensive and intensive Quality, Inspection and Work Documentation Systems. In-depth, electronically integrated, process documents and assessment systems govern all aspects of manufacture, assembly, inspection and supply.

We do not buy seals nor component assemblies from anyone else. Every Vulcan component and seal is produced and processed via our Global Inspection System. This system incorporates all of the above controls cumulating in CNC Co-ordinate Measuring Inspection Machine batch sampling verification, prior to despatch from our factories and then again, upon receipt at our World Wide Distribution Centre.

Thus a Vulcan Seal Means Quality and Reliability Assured.

ELECTRONIC INVESTMENT

Vulcan are firmly focused on the future. Our philosophy is to heavily invest in IT, automation, technology and our people, in order to be the world leaders in “Standard” Mechanical Seals.

Our over-riding ethos is Quality and Efficiency through electronic automation of our entire company processes and operations. Manufacturing is increasingly automated and supported by computer-controlled inspection machines and systems.

Vulcan create individual Web Portals, for each of our customers, to access a vast database of information on our company, products and all commercial or technical detail. This can also be utilised to initiate a complete electronic supply chain, of bar-coded product, moving through all of our processes, from electronic receipt of Portal Enquiry/Order to supply, from our ranks of eight computer integrated and controlled carousel stock machines.

SUPPLY PHILOSOPHY

Our ethos is to do extraordinarily well, whatever the customer reasonably requires. We have a **can-do** mentality, backed by truly exceptional customer service. Vulcan’s commercial policy is to focus on our products, manufacture, stock holding and supply to the seal trade.

It is not our intention to be diverted into becoming an end-user sales organisation. Our strengths lie in our unrivalled product range, quality, service and prices. **Vulcan will maintain its strong distributor and trade sale focus.**

Our vision is to be **The Electronic Seal Warehouse** to the trade and to continue to provide increasing levels of service, product and information to our distributors or resellers in, already, over seventy countries. We enable companies, who wish to sell our products, to market the same, under our Vulcan or their own brand.

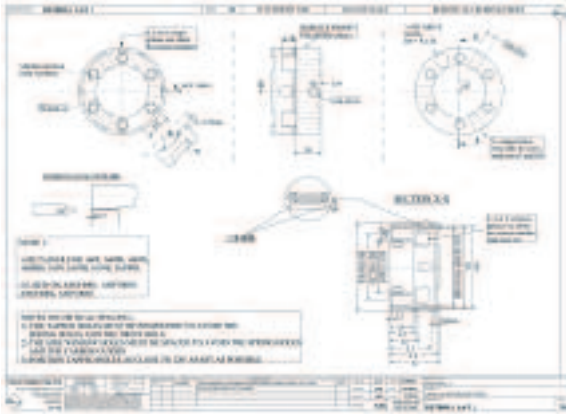
CONCLUSION

People (customers and staff) are our premier concern. In order to see our commitment, facilities and processes in full, please visit us and experience the Vulcan difference.



Unbeatable Designs

All Vulcan Mechanical Seals are manufactured to our designs and drawings. Three Vulcan design departments, at Vulcan Sheffield, NB Vulcan Manufacturing and in New Zealand, are utilised to produce the most advanced designs and carefully controlled engineering detail possible. Competitor seals are studied and tested and improvements are incorporated into our new design. Technical advice is available to combat application problems and extend seal reliability and life.



Comprehensive Engineering Standards

Vulcan's Engineering Department produces and documents, in our Engineering Standards Electronic System and Library, extensive and comprehensive detail on all the key technical features of our Mechanical Seal Design, Manufacture, Fitting, Assembly, Inspection and ultimate Seal Installation. Please contact us for details on any aspect.

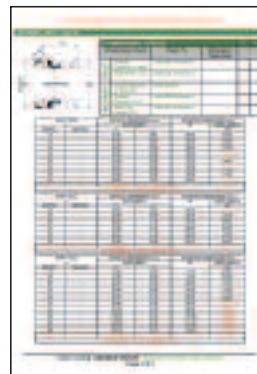
'In-House' Quality Assured

All Vulcan Mechanical Seals are manufactured in Vulcan's high-spec factories, as are practically all our components and materials. We do not purchase any seals from anybody else.

NB Vulcan Mechanical Seals Manufacturing Company Limited is certified to ISO9001 and our world-wide distribution centre to ISO9001.2000.

Modern, increasingly automated, machinery is utilised to produce our designs, via carefully controlled, advanced management and production procedures.

Each stage and final inspection, is governed by electronically documented and managed, extensive and intensive, Inspection Systems and Forms.



Exceptional Materials

We are one of the world's highest volume manufacturers of mechanical seals and associated products.

Vulcan's policy is to produce superior designs of and stock the widest range of, all common mechanical seals, manufactured extremely well and specified to contain high quality materials, especially on the critical faces.

We primarily manufacture these materials ourselves and details of the grades utilised/made are documented on the following pages. For a full listing of the grade of every material in each seal, please contact our Technical Department.

