



ROTODYNE
ENGINEERING
INDUSTRIES

PRODUCT CATALOGUE

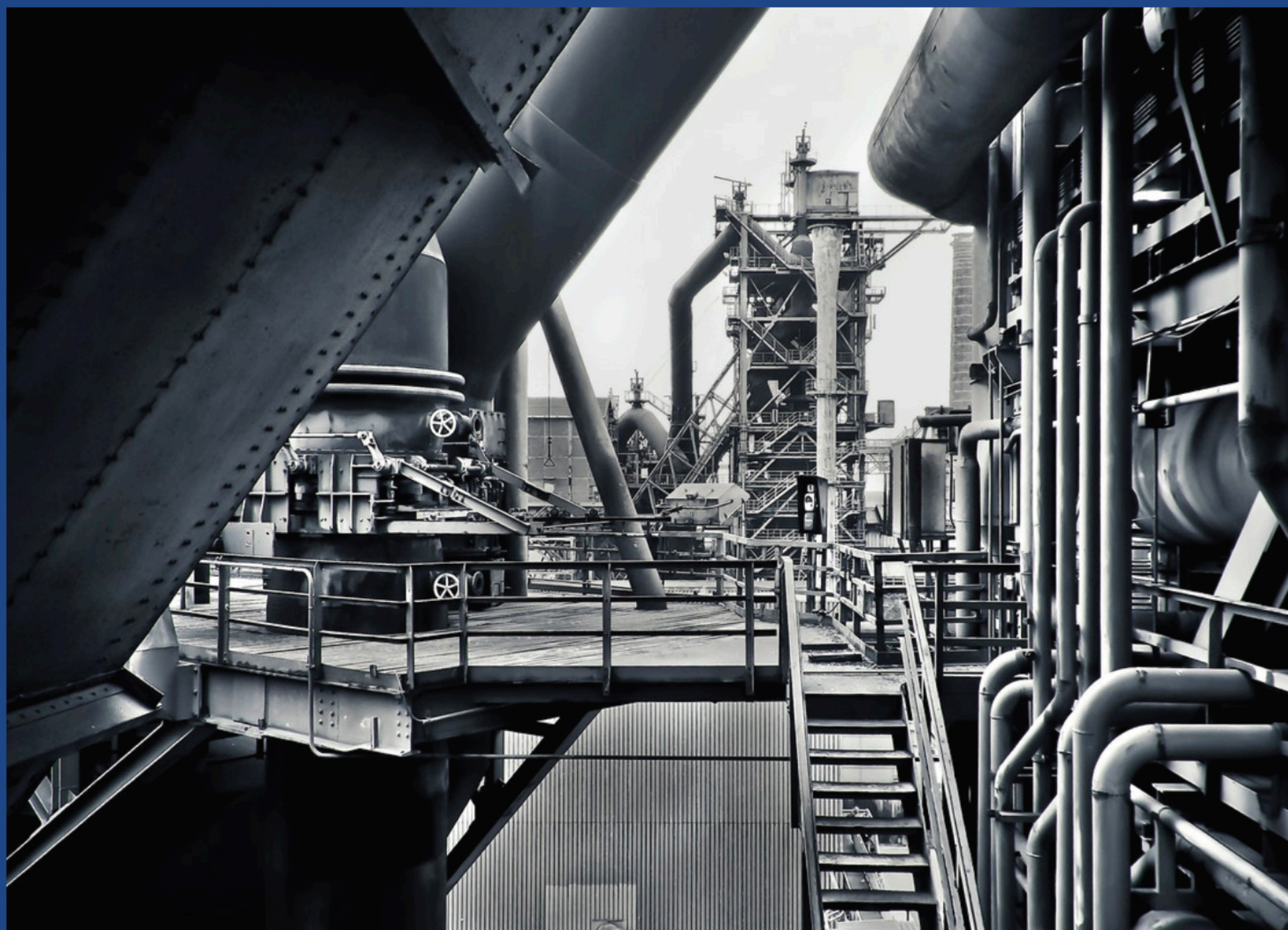
- Mechanical Shaft Seals & Seal Spares
For Pumps, Agitator, Mixer, Compressor & Blowers
- Metal Bellow Seals
- Thermosyphon, Cyclone Separator
- Water Pump Seals & Automobile Seals
- Centrifugal Process Pumps Spares
- Canned Motor Pumps (Spares, Repair & Reconditioning)
- Rotary Joints / Rotating Union
- Gear Coupling & Flexible Diaphragm Coupling
- Triple Segment Ring for Blowers, Fans, Centrifuges & Turbine
- Fasteners in special alloys

**ENGINEERS
MANUFACTURERS
AND SUPPLIERS**

2021

About us

Rotodyne Engineering Industries is a manufacturer of mechanical shaft seals based in Mumbai, India. Catering to the diversified requirements of process industries. Rotodyne Engineering Industries offer a wide range of mechanical seals including : Cartridge Seals, Agitator Seals, High Pressure Agitator Seals, Teflon Bellow Seals, Conical Spring Seals, Double Agitator Seals, Rubber Bellow Seals, Metal Bellow Seals, Wave Spring Seals, Reverse Balanced Seals, test rigs for mechanical seals etc. We can supply & manufacture mechanical seals of our own developed & tested design in various field and industrial applications. We can supply equivalent seals of all internationally renowned manufacturers of seal & allied products to save input cost by replacement of seal spares and complete unit. We can supply, manufacture & redevelop spares for canned motor pumps and centrifugal pumps. We can also recondition the canned motor pump.



OUR CORE VALUES

STRIVING FOR EXCELLENCE IN ALL ASPECTS
OF OUR OPERATION, ALWAYS LEARNING
AND IMPROVING.

**RELIABLE
PUNCTUAL &
TRUSTWORTHY**

1

USPs

Our Products are Durable, High Performance, Reliability, Sturdy construction, Dimensional accuracy. We are the prominent choice of our clients reason is our qualitative range, Robust infrastructure, Customization, Competitive prices, Timely delivery. We have a wide & established network of dealers and distributors, who are fully equipped to cater pre-sales and post sales services.

2

QUALITY ASSURANCE

Being a quality-driven organization, our entire process of manufacturing revolves around ensuring high qualitative features in our diverse product range. The qualitative aim also plays a significant role in the procurement of high grade raw material for better performance and good life cycle cost of finished product.

3

INDUSTRY WE CATER

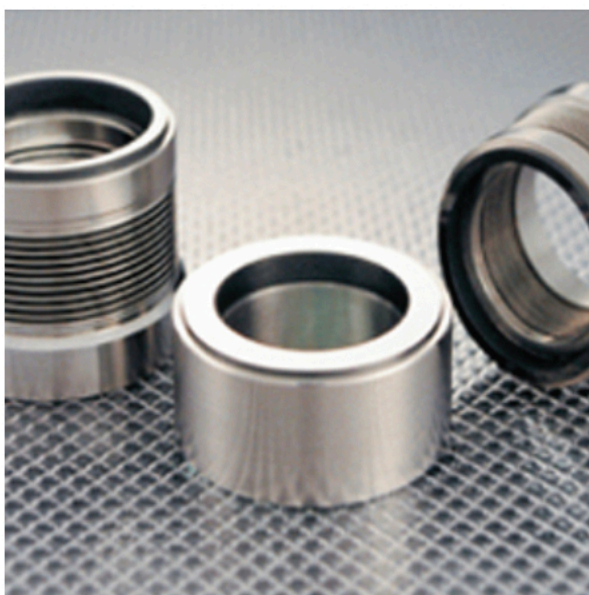
Our wide assortment of Mechanical seals and allied products offer effective engineering solutions to various industries such as chemical, Pesticides, Pigments & Dyes, Petroleum, Pharmaceuticals, Nuclear, Dairy & Distilleries, Paper & Plastic, Food & Cold Storage, Sugar, Fertilizers, High Temperature, Homogenizers, Petrochemicals, Mixers & Agitators and others. We can supply & manufacture mechanical seals of our own developed & tested design in various field and industrial applications. We can supply equivalent seal of all international renowned manufacturer's of seal & allied products to save input cost by replacement of seal spares and complete unit.

We can supply, manufacture & redevelop spares for canned motor pump and centrifugal pumps. We can also recondition the canned motor pump.

Our Products

WELDED METAL BELLOW SEALS

SEAL MBO (SUPERIOR PERFORMANCE)



- INHERENTLY BALANCED
- EXTENSIVELY USED IN ACIDS
- SEAL FOR MODERATE TEMPERATURE

SIMPLE DESIGN, CONSTRUCTED BY WELDING A SERIES OF DIAPHRAGMS. BELLOWS WITH S.S.316, HASTELLOY 'C' AND AM-350

- TANDEM AND BACK TO BACK
- CARTRIDGE AND AGITATOR

OPERATING LIMITS :

DIAMETER : 19..... 100 MM

PRESSURE : 20 BAR

TEMPERATURE : -20°C ... +200°C

SPEED : 20M/S

APPLICATIONS :

PETROLEUM REFINERY

CORROSIVE CHEMICALS

LIGHT HYDROCARBONS-GAS

SEAL MBG (SUPERIOR DESIGN)



- APPARENTLY BALANCED
- SEAL FOR HIGH TEMPERATURE
- GRAFOIL AS SECONDARY SEALING
- METRIC AND INCHES DESIGN

DESIGNED FOR HIGH TEMPERATURE AND TORQUE TRANSMISSION EXERTS NO STRAIN ON THE METAL BELLOWS. MATERIAL OF BELLOWS HASTELLOY 'C' AM-350 AND ALLOY-20.

- TANDEM AND BACK TO BACK
- CARTRIDGE AND AGITATOR

OPERATING LIMITS :

DIAMETER : 14..... 100 MM

PRESSURE : 20 BAR

TEMPERATURE : -20°C ... +400°C

SPEED : 20M/S

APPLICATIONS :

PETROLEUM REFINERY

PETROCHEMICALS

HIGH PRESSURE &

HIGH TEMPERATURE

RUBBER BELLOW SEALS

SEAL RMG 12 (SIMPLIFIED DESIGN)



- EXTENDED BELLOW
- EXCEPTIONAL ADAPTABILITY
- LONGER INSTALLATION LENGTH
- SIMPLE SOLUTION FOR AL

SAME DESIGN AS RMG1 BUT WITH EXTENDED BELLOW TO ACCOMPLISH INSTALLATION LENGTH AS PER DIN 24960. VERY VERSATILE & FITS FOR DIFFERENT APPLICATION RANGE. COMBINATION OF FACES OF ALL POSSIBLE MATERIAL SUITS TO ANY APPLICATION.

OPERATING LIMITS :

DIAMETER : 10..... 100 MM

PRESSURE : 16 BAR

TEMPERATURE : -25°C ... +150°C

SPEED : 25 M/S

APPLICATIONS :

FOOD PROCESSING INDUSTRIES

DAIRY INDUSTRIES

WATER PUMPS

SEAL RB (FLEXIBLE SEAL)



- TYPICAL SIMPLE INSTALLATION
- INSIDE MOUNTED
- SELF ALIGNING AS PUSHER SEAL
- INDEPENDENT OF ROTATION

SINGLE SPRING RUBBER BELLOW SEAL COMPENSATES FOR SHAFT RUN-OUT. RUBBER BELLOW PROVIDES SUPERIOR SEALING AREA. RUBBER BELLOW INCORPORATES THE SELF ALIGNING FEATURE BEING A PUSHER SEAL DESIGN.

OPERATING LIMITS :

DIAMETER : 6..... 100 MM

PRESSURE : 16 BAR

TEMPERATURE : -20°C ... +200°C

SPEED : 13 M/S

APPLICATIONS :

VEGETABLE OIL

WATER PUMPS

GENERAL CHEMICALS

SEAL TYPE 1 & TYPE 2

THE GENERAL SEAL



- SELF ALIGNING
- DRIVE RING NOTCH
- NO SLIPPAGE
- NON-CLOGGING

RUBBER BELLOW SEALS ARE GENERAL SEALS, USED FOR WIDE RANGE OF SERVICE CONDITIONS FROM WATER TO STEAM TO CHEMICALS AND CORROSIVE MATERIALS. THIS SEAL FAMILY IS IDENTIFIED AS ELASTOMERS BELLOW SEAL OR DIAPHRAGM FOR SECONDARY SEALING MEMBER. IN NON-PUSHER SEAL THE END OF BELLOW IS TIGHTENED ON THE SHAFT AND AS THE SEAL WEAR THE CONVOLUTION EXTENDS TO COMPENSATES THE SEAL FACE WEAR.

OPERATING LIMITS :

DIAMETER : 14..... 100 MM

PRESSURE : 40 BAR

TEMPERATURE : -40°C .. +205°C

SPEED : 13 M/S

APPLICATIONS :

GENERAL CHEMICALS

LIGHT HYDROCARBONS-GAS

WATER PUMPS

TEFLON BELLOW SEALS

SEAL TB (FLEXIBLE SEAL)

- FLEXIBLE BELLOW
- ELIMINATES MISALIGNMENT
- LONG LIFE OPERATION
- HYDRAULICALLY BALANCED

TEFLON BELLOW SEALS ARE EXTERNALLY MOUNTED WITH MAXIMUM CORROSIVE RESISTANCE. METAL PARTS ARE ISOLATED FROM PUMPING FLUID. SEAL COMES WITH BOTH REPLACEABLE AND NONREPLACEABLE FACE COMBINATION.

- REPLACEABLE FACE – TB1
- NON-REPLACEABLE FACE – TB2



OPERATING LIMITS :

DIAMETER : 16..... 100 MM

PRESSURE : 13 BAR

TEMPERATURE : -25°C ... +120°C

SPEED : 16 M/S

APPLICATIONS :

CONCENTRATED ACIDS & SALTS

EXTREMELY CORROSIVE CHEMICALS

STRONG OXIDISING AGENTS

CHEMICALLY ACTIVE ORGANIC COMPOUNDS

MULTIPLE SPRING SEALS

SEAL D SERIES

(VERSATILE DESIGN)



- DESIGNED FOR HIGH PRESSURE
- FLEXIBILITY ON INSTALLATION
- INBOARD & OUTBOARD
- NO MISALIGNMENT

SIMPLE DESIGN, MULTI SPRING SEAL

- BALANCED SEAL – DOB DVB
- UN-BALANCED SEAL – DO DV

OPERATING LIMITS :

DIAMETER : 20..... 100 MM

PRESSURE : 1735 BAR

TEMPERATURE : -60°C ... +180°C

SPEED : 25 M/S

APPLICATIONS :

REFINERY GENERAL CHEMICALS

LIGHT HYDROCARBONS

ACID & AQUEOUS SOLUTIONS

SEAL M SERIES

(OPTIMISED DESIGN)



- UNIVERSALLY PREFERRED
- UNIFORM LOAD ON SEAL FACE
- FIELD REPAIRABILITY
- LEAK-FREE PERFORMANCE

SIMPLE DESIGN, MULTI SPRING SEA

- BALANCED SEAL – MOB MWB
- UN-BALANCED SEAL MO MW

OPERATING LIMITS :

DIAMETER : 14..... 100 MM

PRESSURE : 1735 BAR

TEMPERATURE : -60°C ... +180°C

SPEED : 25 M/S

APPLICATIONS :

REFINERY

GENERAL CHEMICALS

LIGHT HYDROCARBONS – GAS

ACID & AQUEOUS SOLUTIONS

SEAL XB

RUGGED CALIBER



- REVERSE BALANCED
- NO CONTACT WITH PUMPING LIQUID
- INBOARD AND OUTBOARD MOUNTED

SEAL DESIGNED FOR STRONG OXIDISING AND ACTIVE ORGANIC COMPOUNDS. MOST COMMONLY USED IN VACUUM PUMP AND APPLICATIONS.

OPERATING LIMITS :

DIAMETER : 19..... 100 MM
PRESSURE : 1535 BAR
TEMPERATURE : -20°C ... +180°C
SPEED : 20 M/S

APPLICATIONS :

CORROSIVE CHEMICALS
SALTS AND ACIDS
ACTIVE ORGANIC COMPOUND
REDUCING AGENTS

WAVE SPRING SEALS

SEAL NC (OBSCURED DESIGN)

- GOOD FOR FLUID CONTAINING SOLIDS
- HIGH VISCOSITY LIQUID
- NO CONTACT OF SPRING WITH LIQUID
- AVOIDS CLOGGING AND STICKING

SPECIFICALLY DESIGNED FOR VISCOUS LIQUIDS SUCH AS SUGAR, PAPER PULP COMPOUNDS. SEAL MOSTLY USED IN DAIRY AND CHOCOLATE APPLICATIONS.

OPERATING LIMITS :

DIAMETER : 20..... 100 MM
PRESSURE : 25 BAR
TEMPERATURE : -20°C ... +150°C
SPEED : 20 M/S

APPLICATIONS :

MINING INDUSTRY
VISCOUS LIQUID LIKE SUGAR
PAPER PULP
SEWAGE & WASTE WATER



SEAL WO SERIES (TROUBLE-FREE)

- EASY INTERCHANGEABLE
- FIELD REPARABILITY
- EASY SOLUTION
- FITS IN ALL CONDITIONS

RETAINER TYPE WAVE SPRING SEAL DESIGNED FOR DIRTY APPLICATIONS AND CLOGGING DOES NOT OCCUR.

- BALANCED SEAL - WOB
- UN-BALANCED SEAL - WO

OPERATING LIMITS :

DIAMETER : 14..... 100 MM
PRESSURE : 1035 BAR
TEMPERATURE : -45°C ... +180°C
SPEED : 25 M/S

APPLICATIONS :

GENERAL CHEMICALS
LIGHT HYDROCARBONS - GAS
WATER PUMPS
PETROLEUM



SINGLE SPRING SEAL

SEAL SR SERIES (JAGGED & CONSISTENT)



- HIGH FLEXIBILITY
- DESIGNED FOR ABRASIVE SERVICES
- COMPACT DESIGN
- LONG LIFE IN ALL CONDITIONS

RETAINER TYPE SINGLE SPRING SEAL DESIGNED FOR HIGH VELOCITY PUMPS

- BALANCED SEAL – SOB SWB
- UN-BALANCED SEAL – SO SW

OPERATING LIMITS :

DIAMETER : 14..... 100 MM
PRESSURE : 1035 BAR
TEMPERATURE : -45°C ... +180°C
SPEED : 25 M/S

APPLICATIONS :

GENERAL CHEMICALS
LIGHT HYDROCARBONS – GAS
WATER PUMPS
PETROLEUM

SEAL S SERIES (NON-CLOGGING)



- MOST ECONOMICAL
- AVOIDS SOLID ACCUMULATION
- INTERCHANGEABLE AT SITE
- WIDE SPECTRUM OF LIQUID

SINGLE SPRING SEAL PRACTICALLY HANDLING ALL INDUSTRIAL FLUIDS SPECIALLY ABRASIVE APPLICATIONS WITH SOLID CONTENT

- BALANCED SEAL – SSOB SSVB
- UN-BALANCED SEAL – SS0 SSV

OPERATING LIMITS :

DIAMETER : 19..... 100 MM
PRESSURE : 1035 BAR
TEMPERATURE : -45°C ... +180°C
SPEED : 20 M/S

APPLICATIONS :

SEWAGE PUMP
CORROSIVE CHEMICALS
GENERAL ACIDS
ABRASIVE SOLUTIONS

SEAL HT SERIES (MOST ECONOMICAL)



- DESIGNED FOR HIGH MELTING LIQUIDS
- INTERLOCKING DRIVE
- HIGH TEMPERATURE LIQUIDS
- SELF CLEANING SEALD

THIS SEAL IS USED IN HIGH TEMPERATURE APPLICATION AS A REPLACEMENT TO METAL BELLOW AND COST EFFECTIVE COMPARE TO METAL BELLOW SINGLE SPRING SEAL FOR SOLID FORMATION LIQUIDS.

- BALANCED SEAL – HTOB HTWB
- UN-BALANCED SEAL – HTO HTW

OPERATING LIMITS :

DIAMETER : 10..... 100 MM
PRESSURE : 2035 BAR
TEMPERATURE : -60°C ... +260°C
SPEED : 25 M/S

APPLICATIONS :

VEGETABLE OIL
THERMAL OIL
FATTY ACID

SEAL TS SERIES (COST EFFECTIVE)



- STANDARD, EASY INSTALLATION
- INSIDE MOUNTED
- UNBALANCED SEAL
- DEPENDENT OF ROTATIOND

CONICAL SPRING SEAL IS SPRING LOADED WITH VARIOUS COMBINATION OF FACE AS SOLID CARBON AND SHRUNK FITTED

- BALANCED SEAL - TSB
- UN-BALANCED SEAL - TS

OPERATING LIMITS :

DIAMETER : 10..... 100 MM
 PRESSURE : 10 BAR
 TEMPERATURE : -20°C ... +120°C
 SPEED : 15 M/S

APPLICATIONS :

FOOD PROCESSING INDUSTRIES
 DAIRY INDUSTRIES
 PHARMACEUTICAL INDUSTRIES
 GENERAL INDUSTRIES

CARTRIDGE SEALS

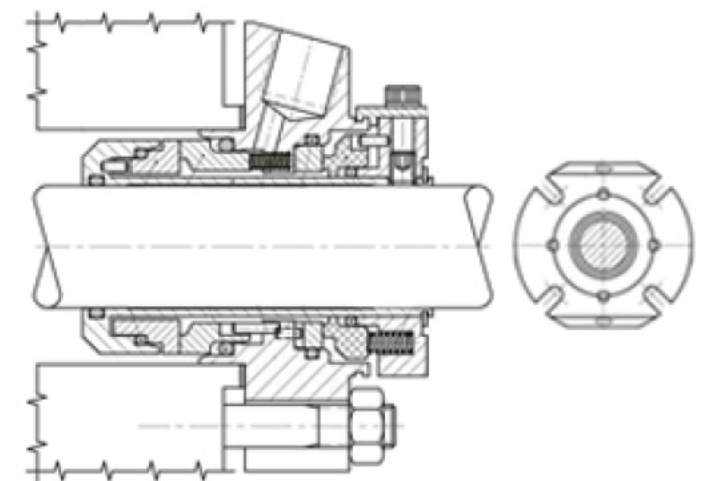
Cartridge mechanical seal is also known as high performance, high pressure seal. Cartridge mechanical seals are pre-assembled at works this seals are usually mounted with gland ring on a sleeve this complete assembled unit fits directly over the pump shaft or shaft sleeve in conventional stuffing boxes of any make / type of pump. Exact/correct installation of a mechanical seal is a critical requirement for its safe and reliable operation. In order to achieve maximum seal life, a seal must be set to its correct working length, the seal face must be fitted to its right position in the housing with clean face, cartridge seal provides a complete and simplified solution to all problems and assures a fool-proof and error-free installation. The major benefit of this type of seals is it doesn't require the specific seal setting requirements for installation. This seals are available in double and single seal arrangement and equipped with all arrangements.

OPERATING LIMITS :

DIAMETER : 18..... 100 MM
 PRESSURE : UP TO 80 BAR
 TEMPERATURE : -20°C ... +220°C
 SPEED : 20 M/S

APPLICATIONS :

ASH SLURRY PUMP
 CLINKER GRINDERS
 PULP PUMPS
 SLUDGE PUMP
 SYRUP PUMPS
 SOFT SLURRY PUMPS
 BOILER FEED WATER PUMPS



AGITATOR SEALS

DRY RUNNING AGITATOR SEAL

Dry-running mechanical seals are designed for sealing of gas blanket (top drive) of mixers and agitators. These mechanical seals have been fully proved and are economical by omission of double acting mechanical seals and expensive supply systems. These mechanical seals are multi spring, externally mounted and balanced. In pharma, bulk drugs, foods and chemical industries mixing of any other liquid will contaminate the product hence these dry running seals are used. Various face materials & elastomers are offered to cater wide applications.

STANDARD STYLE FACE MATERIALS :

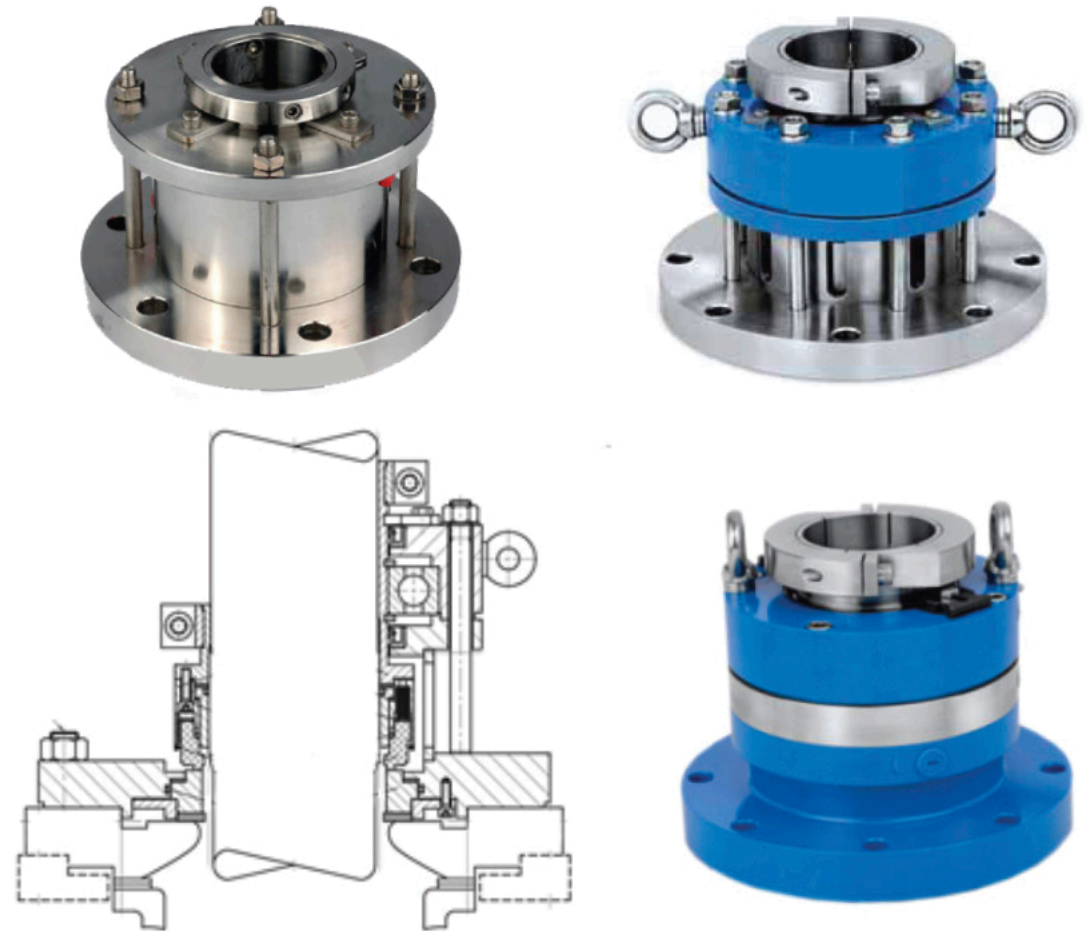
- SILICON CARBIDE
- CARBON
- CERAMIC
- CHROME OXIDE COATING
- TUNGSTEN CARBIDE

METAL PARTS :

- SS 316, SS 304
- HASTELLOY-C, ALLO

APPLICATIONS :

PETRO CHEMICALS & IT'S VAPOURS
GENERAL CHEMICALS & IT'S VAPOURS
LIGHT HYDRO CARBONS & IT'S VAPOURS.



SINGLE AND DOUBLE AGITATOR SEALS

We offer factory assembled single and double Agitator Seal which are duly hydro tested at required pressure. These seals are used in glass lined steel and stainless steel mixers, agitators & reactors with Top, Side and Bottom Entry Drives These are used with non pressurized barrier fluid preferably clean water or oil. These seals can be supplied with cooling water jacket to ensure healthy environmental control near the seal area. These double mechanical seals are designed for handling severe & hazardous fluids. These Mechanical design incorporated bearings located very close to seal to avoid cantilever effect at seal area. As a standard cooling jacket is provided in the seals to dissipate maximum amount of heat generated by the seals.

STANDARD STYLE FACE MATERIALS :

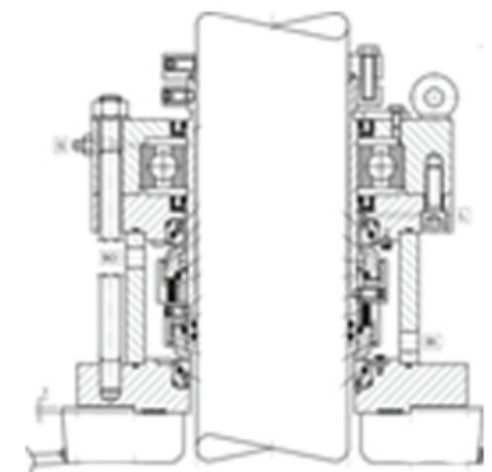
- SILICON CARBIDE
- CARBON
- CERAMIC
- CHROME OXIDE COATING
- TUNGSTEN CARBIDE

METAL PARTS :

- SS 316, SS 304
- HASTELLOY-C, ALLOY 20, MONEL

APPLICATIONS :

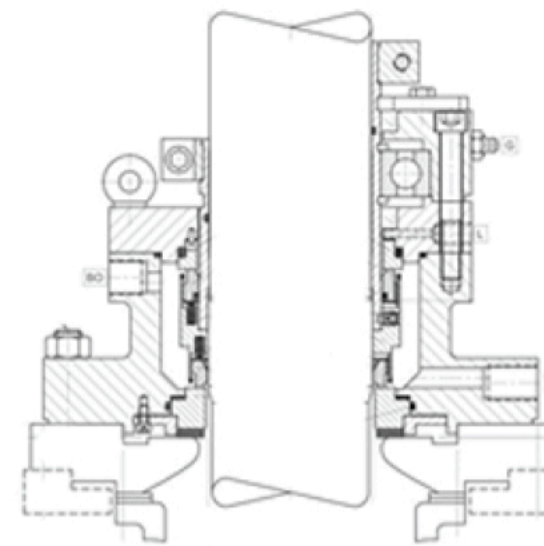
PETRO CHEMICALS & IT'S VAPOURS
GENERAL CHEMICALS & IT'S VAPOURS
LIGHT HYDRO CARBONS & IT'S VAPOURS



AGITATOR SEALS

GLASS LINED REACTOR AGITATOR SEAL

For Top Entry Glass Lined Agitators, Vessels and Mixers Double Acting, Independent of Direction of Rotation. Only seal faces are in contact with highly corrosive & toxic chemical vapours to avoid corrosion on metal parts. Balanced pusher seals which gives better performance in and for sealing environment. The design may either without bearing or with integral bearing. Single or double bearing can be offered as per requirements.



STANDARD STYLE

FACE MATERIALS :

- SILICON CARBIDE
- CARBON
- CERAMIC
- CHROME OXIDE COATING

METAL PARTS :

- SS 316, SS 304
- HASTELLOY-C, ALLOY 20, MONELL

APPLICATIONS :

- TOXIC HAZARDOUS CHEMICAL & ITS VAPOUR IN CHEMICAL.
- PHARMACEUTICAL
- BULK DRUGS



ROTARY JOINT & PUMP SPARES

ROTARY UNION / ROTARY JOINT



Rotary joint is a versatile, compact and comes with a wide range for Air, Coolant, Gas, Hydraulic Service, Steam, Thermc Fluid, Vacuum and Water. It comes in all sizes from 3/8" to 6" and with various type of construction as single direction, bi-direction and multi-passage.

THE PRODUCT BEARS CERTAIN TECHNICAL SPECIFICATIONS SUCH AS:

- NO. OF PASSAGES : 1 TO 12
- ROTATION SPEEDS : UP TO 3000 RPM (WITH BUSH BEARING)
- MAX PRESSURE : 315 BARS
- MAX. FLOW : UP TO 200 LPM

INDUSTRIAL APPLICATIONS :

PAPER INDUSTRIES, ALL DRYERS, & CHEMICALS TEXTILE INDUSTRIES, FOOD PROCESSING INDUSTRIES, PVC FILM INDUSTRIES FOR THEIR CALENDERING & MILL MACHINE SOAP INDUSTRIES.

CANNED MOTOR PUMP SPARES



- CANNED MOTOR PUMP
- BUSH BEARINGS
- CARBON / SILICON CARBIDE / TUNGSTEN
- CARBIDE / CERAMIC
- PUMP SHAFT / IMPELLER / CASING
- SHAFT SLEEVES
- TUNGSTEN CARBIDE / SILICON CARBIDE /
- CERAMIC / STAINLESS STEEL
- WASHER / THRUST WASHERS
- GASKETS & 'O' RINGS
- 'FEP' ENCAPSULATED 'O' RING
- PRECISION ENGINEERING ITEMS.
- OIL SEALS / WIPER SEALS

GEAR COUPLING - GC



This is a power transmission coupling which uses a hub with gear teeth on the outside diameter of the input shaft. Hub on the output shaft is connected by a flange or a sleeve with teeth on the inside diameter, to transmit torque and to accommodate shaft misalignment. This coupling does require lubrication, is very rigid torsionally, and can transmit high torque through relatively small packages. Gear Couplings are distinguished by their mechanical flexibility and designed for compensation of Angular, Parallel and Axial misalignments of the connected shafts. Gear Hubs and the outer sleeves are manufactured from Carbon steel, EN Series.

EXTENSIVE USE IN :

METAL ROLLING MILLS, PAPER MACHINERY CRANES, DREDGERS, RUBBER AND PLASTIC INDUSTRIES, CEMENT PLANTS, CONVEYORS AND ELEVATORS, COMPRESSORS, FANS AND BLOWERS, SCREENS AND OTHER GENERAL INDUSTRIES.

TRIPLE SEGMENT CARBON RINGS



Triple Segment Rings are as diverse as their applications, they provide eminent protection by preventing undesirable leakage into the environment. Carbon rings are preassembled in the units for sealing rotating shafts, e.g. blowers, agitators and dryers. The sealing ring slides on the shaft, is adjustable and has gastight joints having overlapping pins. This reduces the radial gap to the shaft and the leakage rate. The split design avoids the disassembly of machine to replace the sealing rings. Standardized sealing rings can be adapted to the customer's specific installation situation .

- TWO-PART HOUSING
- AXIALLY SHORT
- MULTI-PART SEALING RING, WITH GAS-TIGHT
- JOINTS HAVING OVERLAPPING MORTISE
- SELF ALIGNING SEALING RINGS



ROTODYNE ENGINEERING INDUSTRIES

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