

Sealing with Tribology...

RO-TECH

ENGINEERS



INNOVATIVE DESIGN IN SEALING WITH TRIBOLOGY

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CATALOGUE 2.0

COMPANY PROFILE

RO TECH ENGINEERS was established in Mumbai – MHARASHTRA, 2015. We are able to offer the following services:

MECHANICAL SEALS

01

BEARING ISOLATORS

03

THERMOSIPHON SYSTEMS

02

MAGNETIC BEARING ISOLATORS

04

RO TECH ENGINEERS aim is to maintain a sustainable and developed business where each inquiry is investigated technically in order to foresee the ways of saving customer's costs while having the highest quality, product and/or service.

Our company specializes in various industries: oil and gas (non-API), power generation and supply, agriculture, food processing, mines, pharma industries & chemical industries.

Values and basis for the company success which help us to fulfil the customer's needs are:

SERVICES OF HIGHEST QUALITY

PRODUCTION FACILITIES AND HIGH
STANDARD TECHNOLOGICAL EQUIPMENT

QUALIFIED AND CERTIFIED PERSONNEL

WIDE AND RELIABLE SUPPLIER'S NET



OUR POLICY REGARDING THE QUALITY

We engage ourselves to offer engineering project management services by providing the highest quality products, striving to be a strong trusted partner to our customers and continuously develop our core competencies in order to improve the performance of the international Quality management standard EN ISO 9001: 2015 AUSTRIA.

OUR DESIGN

Our research in sealing and developed our own type HR320S & HR320D Double and Single arrangements seal for Non-Metallic Pump which is very suitable and given satisfactory performance in slurry application. S85 & D85 Double and Single arrangements seal is reliable, cost effective and proven for high slurry application in metallic pump. We also manufacturer (MBI 640) Magnetic Bearing Isolator. Used in pumps, motors, gearboxes etc. We have our own Design of Normal (BI 640) Bearing Isolators.

RO TECH ENGINEERS seals are designed as per International Standard like EN12756 to comply with international norms and regulations on Emission control.

We having vast clientele in all over India and as well as abroad like Europe, Austria, Iran, South Africa etc.

RTR 255-C SERIES – SINGLE DRY SEAL FOR SS REACTORS

Seal Type RTR 255-C Single Dry Mechanical Seals are Externally Mounted Reverse Balance design suitable for Top Entry Agitators, Pharma Reactors, Fermenters, Multi mills, Rotocon Dryers and similar rotating equipment. All Metal Components including spring are Isolated from product. Dry seal also Equipped in addition with a sleeve for trapping any wearing particles from the seal face. Contamination of the medium in the container is thus eliminate. The sleeve can be cleaned through a flushing port. Very cost effective since no lubricating or cooling system is required. Ease of installation and maintenance.



PRODUCT VARIANTS

RTR 255-JC -Single Cartridge Dry Seal with Bottom Jacketed Arrangement

RTR 255-BC -Single Cartridge Dry Seal with Bearing Arrangement

RTR 255-BJC -Single Cartridge Dry Seal with Bearing & Bottom Jacketed Arrangement

OPERATING PARAMETERS

Shaft Dia.: 25mm.....150mm (1.0".....6.0")

Pressure: Vacuum to 10 bar max

Temperature: Amb..... 120°C max (RTR 255-C & RTR 255-BC)

Speed: 320 r.p.m.

(Consult RO-TECH for applications outside above limits)

RTR 256-C & RTR 256-CC SERIES – SINGLE WET SEAL FOR SS REACTORS

Seal Type RTR 256-C Single Wet Mechanical Seals are Externally Mounted Reverse Balance design suitable for Top Entry High Vacuum Reactors Application, and similar rotating equipment. All Metal Components including spring are Isolated from product. These are used with non-pressurized fluid preferable water & oil because of its good heat transfer qualities. RTR 256-CC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Wet seal also Equipped in addition with a sleeve for trapping any wearing particles from the seal face. Contamination of the medium in the container is thus eliminate. The sleeve can be cleaned through a flushing bore. Ease of installation and maintenance.



PRODUCT VARIANTS

RTR 256-JC - Single Cartridge Wet Seal with Bottom Jacketed Arrangement

RTR 256-CJC - Single Cartridge Wet Seal with Bottom & Center Jacketed Arrangement

RTR 256-BC - Single Cartridge Wet Seal with Bearing Arrangement

RTR 256-CBC - Single Cartridge Wet Seal with Bearing and Center Cooling Arrangement.

RTR 256-BJC - Single Cartridge Wet Seal with Bearing & Bottom Jacketed Arrangement

RTR 256-CBJC - Single Cartridge Wet Seal with Bearing, Center Jacket & Bottom Jacketed Arrangement

OPERATING PARAMETERS

Shaft Dia.: 25mm.....150mm (1.0".....6.0")

Pressure: Vacuum to 10 bar max

Temperature: Amb..... 150 °C max (RTR 256-C)

Speed: 320 r.p.m.

(Consult RO-TECH for applications outside above limits)

RTR 257-C SERIES – DOUBLE UNBALANCE BACK-TO-BACK SEAL FOR SS REACTORS

Seal Type RTR 257-C Double Unbalance Back-to-Back Mechanical Seals available in PTFE, GFT Wedge and O-ring arrangement. These seals are design to handle several services including products emitting toxic vapours while reaction process. Double Unbalance Back-to-Back Mechanical seal also Equipped in addition with a sleeve for trapping any wearing particles from the seal face. Contamination of the medium in the container is thus eliminate. The sleeve can be cleaned through a flushing bore. These seals are used with pressurized fluid preferable oil or suitable fluid. RTR 257-CC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Ease of installation and maintenance.



PRODUCT VARIANTS

RTR 257-JC – Double Unbalance Back-to-Back Cartridge Seal with Bottom Jacketed Arrangement

RTR 257-CJC - Double Unbalance Back-to-Back Cartridge Seal with Bottom & Center Jacketed Arrangement.

OPERATING PARAMETERS

Shaft Dia.: 25mm.....150mm (1.0".....6.0")

Pressure: Vacuum to 10 bar max

Temperature: Amb..... 200 °C max (RTR 257-C)

Speed: 600 r.p.m.

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar
(Consult RO-TECH for applications outside above limits)

RTR 258-BC SERIES – DOUBLE UNBALANCE BACK-TO-BACK WITH BEARING SEAL FOR SS REACTORS

Seal Type RTR 258-BC Double Unbalance Back-to-Back with Bearing Mechanical Seals available in PTFE, GFT Wedge and O-ring arrangement. These seals are design to handle several services including products emitting toxic vapours while reaction process. Bearing located very close to mechanical seal which provide smooth and trouble-free operation enabling enhance seal life. Double Unbalance Back-to-Back with bearing Mechanical seal also Equipped in addition with a sleeve for trapping any wearing particles from the seal face. Contamination of the medium in the container is thus eliminate. The sleeve can be cleaned through a flushing bore. These seals are used with pressurized fluid preferable oil or suitable fluid. RTR 258-CBC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Ease of installation and maintenance.



PRODUCT VARIANTS

RTR 258-BJC - Double Unbalance Back-to-Back Cartridge Seal with Bearing & Bottom Jacketed Arrangement

RTR 258-CBJC - Double Unbalance Back-to-Back Cartridge Seal with Bearing, Centre Jacket & Bottom Jacketed Arrangement.

OPERATING PARAMETERS

Shaft Dia.: 25mm.....150mm (1.0".....6.0")

Pressure: Vacuum to 10 bar max

Temperature: Amb..... 200 °C max (RTR 258-C)

Speed: 600 r.p.m.

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar
(Consult RO-TECH for applications outside above limits)

RTR 259-C SERIES – DOUBLE BALANCE BACK-TO-BACK SEAL FOR SS REACTORS

Seal Type RTR 259-C Double Balance Back-to-Back Mechanical Seals available in PTFE, GFT Wedge and O-ring arrangement. These seals are design to handle several services including products emitting toxic vapours while reaction process. Double Balance Back-to-Back Mechanical seal also Equipped in addition with a sleeve for trapping any wearing particles from the seal face. Contamination of the medium in the container is thus eliminate. The sleeve can be cleaned through a flushing bore. These seals are used with pressurized fluid preferable oil or suitable fluid. RTR 259-CC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Ease of installation and maintenance.



PRODUCT VARIANTS

RTR 259-JC – Double Balance Back-to-Back Cartridge Seal with Bottom Jacketed Arrangement

RTR 259-CJC - Double Balance Back-to-Back Cartridge Seal with Bottom & Center Jacketed Arrangement.

OPERATING PARAMETERS

Shaft Dia.: 25mm.....150mm (1.0"6.0")

Pressure: Vacuum to 35 bar max (Consult RO-TECH for above Pressure)

Temperature: Amb..... 200 °C max (RTR 259-C)

Speed: 600 r.p.m.

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar
(Consult RO-TECH for applications outside above limits)

RTR 260-BC SERIES – DOUBLE BALANCE BACK-TO-BACK WITH BEARING SEAL FOR SS REACTORS

Seal Type RTR 260-BC Double Balance Back-to-Back with Bearing Mechanical Seals available in PTFE, GFT Wedge and O-ring arrangement. These seals are design to handle several services including products emitting toxic vapours while reaction process. Bearing located very close to mechanical seal which provide smooth and trouble-free operation enabling enhance seal life. Double Balance Back-to-Back with bearing Mechanical seal also Equipped in addition with a sleeve for trapping any wearing particles from the seal face. Contamination of the medium in the container is thus eliminate. The sleeve can be cleaned through a flushing bore. These seals are used with pressurized fluid preferable oil or suitable fluid. RTR 260-CBC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Ease of installation and maintenance.



PRODUCT VARIANTS

RTR 260-BJC - Double Balance Back-to-Back Cartridge Seal with Bearing & Bottom Jacketed Arrangement

RTR 260-CBJC - Double Balance Back-to-Back Cartridge Seal with Bearing, Centre Jacket & Bottom Jacketed Arrangement.

OPERATING PARAMETERS

Shaft Dia.: 25mm.....150mm (1.0"6.0")

Pressure: Vacuum to 35 bar max (Consult RO-TECH for above Pressure)

Temperature: Amb..... 200 °C max (RTR 260-C)

Speed: 600 r.p.m.

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar
(Consult RO-TECH for applications outside above limits)

RTGR 261-C SERIES – SINGLE DRY SEAL FOR GLR

Seal Type RTGR 261-C Single Dry GLR Mechanical Seals are Externally Mounted (RTGR 261B-C) Balance with extra SiC / Ceramic sleeve and (RTGR 261-C) reverse balance suitable for Top Entry Glass Lined Reactor and similar rotating equipment. All Metal Components including spring are Isolated from product. These Seal specially designed for Top Entry Agitators where no leakage of Highly Acidic Process Gas OR Fluids to the Environment. Very cost effective since no lubricating or cooling system is required. Ease of installation and maintenance.

OPERATING PARAMETERS

Shaft Dia.: 40mm.....160mm

Pressure: Vacuum to 10 bar max

Temperature: Amb..... 150 °C max (RTGR 262-C & RTGR 262-BC)

Speed: 320 r.p.m.

(Consult RO-TECH for applications outside above limits)



PRODUCT VARIANTS

RTGR 262-BC - Single Cartridge Reverse Balance Wet Seal with Bearing Arrangement.

RTGR 262B-BC - Single Cartridge Balance Wet Seal with Bearing Arrangement.



RTGR 262-C SERIES – SINGLE WET SEAL FOR GLR

Seal Type RTGR 262-C Single Wet GLR Mechanical Seals are Externally Mounted (RTGR 262B-C) Balance with extra SiC / Ceramic sleeve and (RTGR 262-C) reverse Balance suitable for Top Entry Glass Lined Reactor and similar rotating equipment. All Metal Components including spring are Isolated from product. These are used with non-pressurized fluid preferable water & oil because of its good heat transfer qualities. These Seal specially designed for Top Entry Agitators where no leakage of Highly Acidic Process Gas OR Fluids to the Environment. Very cost effective since no lubricating or cooling system is required. Ease of installation and maintenance.

OPERATING PARAMETERS

Shaft Dia.: 40mm.....160mm

Pressure : Vacuum to 10 bar max

Speed : 320 r.p.m.

Temperature: Amb..... 120°C max (RTGR 261-C & RTGR 261B-C)

(Consult RO-TECH for applications outside above limits)

RTGR 263-C SERIES – DOUBLE UNBALANCE BACK-TO-BACK SEAL FOR GLR

Seal Type RTGR 263-C Double Unbalance Back-to-Back Mechanical Seals available in PTFE, GFT Wedge and O-ring arrangement. These Seal specially designed for Top Entry Agitators where no leakage of Highly Acidic Process Gas OR Fluids to the Environment. These seals are used with pressurized fluid preferable oil or suitable fluid. RTGR 263-CC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Ease of installation and maintenance.

OPERATING PARAMETERS

Shaft Dia. : 40mm.....160mm

Pressure : Vacuum to 10 bar max

Speed: 600 r.p.m.

Temperature: Amb..... 200 °C max (RTGR 263-C)

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar

(Consult RO-TECH for applications outside above limits)





RTGR 264-BC SERIES – DOUBLE UNBALANCE BACK-TO-BACK WITH BEARING SEAL FOR GLR

Seal Type RTGR 264-BC Double Unbalance Back-to-Back Mechanical Seals with bearing available in PTFE, GFT Wedge and O-ring arrangement. These Seal specially designed for Top Entry Agitators where no leakage of Highly Acidic Process Gas OR Fluids to the Environment. These seals are used with pressurized fluid preferable oil or suitable fluid. RTGR 264-CC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature. Ease of installation and maintenance.

OPERATING PARAMETERS

Shaft Dia. : 40mm.....160mm
Pressure : Vacuum to 10 bar max
Speed: 600 r.p.m.

Temperature: Amb..... 200 °C max (RTGR 264-C)
Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar
 (Consult RO-TECH for applications outside above limits)

RTR 265-C SERIES – DOUBLE SEAL FOR SIDE, BOTTOM AND TOP ENTRY

Seal Type RTR 265-C Double (IB) Balance & (OB) unbalance Mechanical Seals without bearing are designed for Side Entry, Bottom Entry & Top Entry in most of application e.g. Dyno mills, Sand mills, Flooded Reactors, Choppers, Agitated Filter Dryers, and similar rotating equipment. Inboard Seal Design also handle for Slurry Application. Seal Type RTR 265-BC is also available in Double with bearing arrangements. Bearing located very close to mechanical seal which provide smooth and trouble-free operation enabling enhance seal life. These seals are used with pressurized fluid preferable oil or suitable fluid. RTR 265-CBC seals can supply with centre jacket arrangement also, which ensure cool running of seals at a suitable temperature & RPM. Ease of installation and maintenance.



OPERATING PARAMETERS

Shaft Dia.: 25mm.....85mm
Pressure: Vacuum to 10 bar max
Temperature: -40..... 200 °C max (RTR 265-C)
Speed: 1500 r.p.m.

PRODUCT VARIANTS

RTR 265-BC – Double (IB) Balance Slurry & (OB) unbalance Seal with bearing arrangement.
RTR 265-CBC – Double (IB) Balance Slurry & (OB) unbalance Seal with bearing and center jacket arrangement.

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar (Consult RO-TECH for applications outside above limits)

ANF 266-BC SERIES – ANF DOUBLE SEAL WITH DOUBLE TAPER ROLLER BEARING

Seal Type ANF 266-BC Double (IB) Balance & (OB) unbalance Mechanical Seals with double taper roller bearing are design for Agitated Nutsche filter, dryers, Rotary vacuum paddle dryers and Horizontal reactors with expanding shafts and similar rotating equipment. Inboard Seal Design handle for Slurry Application. Bearing located very close to mechanical seal which provide smooth and trouble-free operation enabling enhance seal life. It is Heavy duty sturdy design with two taper roller bearings & Bellow assembly with long fatigue life. Standard Cooling arrangements of Seals which helps to maintain Cool Environment around the Seal.



OPERATING PARAMETERS

Shaft Dia.: 60mm.....150mm
Pressure: Vacuum to 7 bar max
Temperature: -75..... 200 °C max (RTR 266-BC)
Speed: 65 r.p.m.

PRODUCT VARIANTS

ANF 267-BC – Single Balance slurry Seal with double bearing along with bellow assembly arrangement

Barrier Fluid Pressure: Vessel Pressure + 1.5 Bar (Consult RO-TECH for applications outside above limits)

S80-C SERIES – SINGLE CATRIDGE SEAL FOR METLLIC PUMP

S80-C Single Balance seal is designed to handle a wide variety of applications and is easily installed, without modification, in most standard pumps. Stationary mounted seal, no shaft or sleeve wear, flexible components isolated from shaft vibration and the effects of shaft deflection. Springs on atmospheric side of the seal which helps no blockage in springs. Flush, Quench and drain connections as per API plan required. Standard PTFE or Bronze Quench throttle bush to minimise quench leakage. Easy to installation due to pre-assembled unit with suitable API plan.

OPERATING PARAMETERS

Shaft Dia. : 25mm.....100mm (1.0".....4.0")

Pressure : Up to 20 bar max

Temperature: -40 °C to 230 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



D80-C SERIES – DOUBLE CATRIDGE SEAL FOR METLLIC PUMP

D80-C Double Balance seal with integrated pumping arrangement is designed to handle a wide variety of applications and is easy to install without modification, in most standard pumps. There is No Wear on Shaft and Sleeve Contact Area, flexible components isolated from shaft vibration and the effects of shaft deflection. Springs on atmospheric side of the seal which helps no blockage in springs. Easy installation due to pre-assembled unit with suitable API plan.

OPERATING PARAMETERS

Shaft Dia. : 25mm.....100mm (1.0".....4.0")

Pressure : Up to 25 bar max

Temperature: -40 °C to 230 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

M50-C & M55-C SERIES – SINGLE METAL BELLOW CATRIDGE SEAL

M50-C – Oring Type with Single Ply & M55-C Grafoil Type with Single Ply. Wide variety of material options are available making these seals. M50-C & M55-C applicable to general purpose process pumps in oil refining, chemical, petrochemical, steel mills, pulp and paper, indeed anywhere there is a need for secure, economical sealing. High performance, state of the art edge welded metal bellows seal. No dynamic O-rings or other sliding parts to "hang-up" or damage the shaft or sleeve. Pressure balanced for low power consumption and low face wear. Ability to handle abrasive media without separators or clean flushes.

OPERATING PARAMETERS

Shaft Dia.: 25mm.....100mm (1.0".....4.0")

Pressure: Up to 18 bar max (Single Ply)

Temperature: -240 °C to 420 °C (M55-C & ML55-C)

Speed: 3000 r.p.m.

PRODUCT VARIANTS

ML50-C & ML55-C – Single Metal Bellow Lug Type seal in cartridge arrangement with API plan 11 or Suitable API Plan.

ML50-DC & ML55-DC - Double Metal Bellow Lug Type seal in cartridge arrangement with API plan 11 or Suitable API Plan.

(Consult RO-TECH for applications outside above limits)





S85 & D85 SERIES – SINGLE AND DOUBLE SEMI CARTRIDGE SLURRY SEAL FOR METLLIC PUMP

S85 – Single & D85 Double (IB) Balance Seal Designed to handle solids up to 15%. Hydraulically balanced faces for excellent seal reliability. Springs on atmospheric side of the seal. There is no blockage at springs. In Single & Double Seal Flushing helps to lubricate or cool the seal faces from atmospheric side of mechanical seal.

OPERATING PARAMETERS

Shaft Dia. : 28mm.....55mm (1.0".....2.125")

Pressure : Up to 10 bar max

Speed: 3000 r.p.m.

Temperature: -40 °C to 150 °C (S85)

(Consult RO-TECH for applications outside above limits)

S850 & D850 SERIES – SEMI CARTRIDGE SLURRY SEAL FOR METLLIC PUMP

S850 – Single & D850 Double Balance Seal Designed to handle solids up to 55%. Specially Cone Design Stuffing Box Helps to handle max slurry as per design. Hydraulically balanced faces for excellent seal reliability. Helical Springs design on atmospheric side of the seal. There is no blockage at springs. In Single & Double Seal Flushing helps to lubricate or cool the seal faces from atmospheric side of mechanical seal.

OPERATING PARAMETERS

Shaft Dia.: 28mm.....45mm (1.0".....1.750")

Pressure: Up to 10 bar max (S850)

Temperature: -40 °C to 150 °C (S850)

Speed: 3000 r.p.m

(Consult RO-TECH for applications outside above limits)



M50 & M55 SERIES – METAL BELLOW SEAL

M50 – O-ring Type with Single Ply & M55 Grafoil Type with Single Ply, Wide variety of material options are available making these seals. M 50 & M 55 applicable to general purpose process pumps in oil refining, chemical, petrochemical, steel mills, pulp and paper, indeed anywhere there is a need for secure, economical sealing. High performance, state of the art edge welded metal bellows seal. No dynamic O-rings or other sliding parts to "hang-up" or damage the shaft or sleeve. Pressure balanced for low power consumption and low face wear. Ability to handle abrasive media without separators or clean flushes.

OPERATING PARAMETERS

Shaft Dia. : 25mm.....100mm (1.0".....4.0")

Pressure: Up to 18 bar max (Single Ply)

Temperature: -240 °C to 420 °C (M55, ML55, ML60 & ML61)

Speed: 3000 r.p.m.

PRODUCT VARIANTS

ML50 & ML55 – Single Metal Bellow Lug Type seal having special torque transmission through lugs suitable for viscus material.

ML60 – Single Metal Bellow Seal with lug type in semi-Cartridge arrangement with suitable API plan for ease of installation.

ML61 - Single Metal Bellow Seal Stationary Mounted with lug type in semi-Cartridge arrangement with suitable API plan for ease of installation

(Consult RO-TECH for applications outside above limits)



33B SERIES – BALANCE MULTI SPRING SEAL

33B is an Inside mounted Balance Seal. Design eliminates scoring on shaft. Springs outside the medium - no blockage in springs. 33B is a dynamic single seal that has been specially developed as a replacement of unbalance mechanical seal to shortest balance seal without any modification in stuffing box design, in most standard pumps and can be combined with popular stationary arrangements. The mechanical seal is characterised by its universal range of uses and is suitable for many applications.

OPERATING PARAMETERS

Shaft Dia.: 19 ... 100 mm (0.75" ... 4.0")

Pressure: Vacuum to 30 bar

Temperature: -40 °C to +260 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

PRODUCT VARIANTS

33B-C – Single Balance seal in cartridge arrangement with API plan 11 or suitable API Plan.

30U & 40U SERIES – MULTI SPRING SEAL

30U - O-Ring type & 40U – Wedge type. Single and cost-effective Inside mounted Unbalance Seal. The rotating seal face drive mechanism provides excellent torque transmission. Can also provide in cartridge construction in single, double arrangements with a complete range of auxiliary sealing devices and seal support systems. Throughout its pressure range the seal provides a secure and economical solution to a wide range of sealing duties in process pumps and similar equipment.



OPERATING PARAMETERS

Shaft Dia.: 25 ... 100 mm (1" ... 3.94")

Pressure: Vacuum to 10 bar

Temperature: -75 °C to +260 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

PRODUCT VARIANTS

30U-C & 40U-C – O-ring and Wedge Type Single unbalance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

30U-DC & 40U-DC – O-ring & Wedge Type Double Back-to-Back unbalance seal in cartridge arrangement with API plan 54 or Suitable API Plan.

(Consult RO-TECH for applications outside above limits)

22U & 23U SERIES – SINGLE SPRING SEAL

22U - O-Ring type & 23U – Wedge type. Single and cost-effective seal is an Inside mounted Unbalance Seal. The Helical Coil Spring designed Seal help to Seal the Dirty and Clogging type of application. Construction of these Seals designs hold whole Rotary Parts together with the help of Snap Rings which make easy for Installation and Removal. Narrow cross-section allows the seal fitment in narrow stuffing boxes. The rotating seal face drive mechanism provides excellent torque transmission. Throughout its pressure range the seal provides a secure and economical solution to a wide range of sealing duties in process pumps and similar equipment.



OPERATING PARAMETERS

Shaft Dia.: 25 ... 100 mm (1" ... 3.94")

Pressure: Vacuum to 10 bar

Temperature: -75 °C to +260 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

PRODUCT VARIANTS

22U-C & 23U-C – Single unbalance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

(Consult RO-TECH for applications outside above limits)

30B & 40B SERIES – BALANCE MULTI SPRING SEAL

30B - O-Ring type & 40B – Wedge type. Single and cost-effective seal is an Inside mounted Balance Seal. Greater reliability and installation ease assured by rugged components, heavy-duty seal faces and cartridge seal configuration. The rotating seal face drive mechanism provides excellent torque transmission. Can be provided as an engineered cartridge construction in single, double arrangements with a complete range of auxiliary sealing devices and seal support systems. Throughout its pressure range the seal provides a secure and economical solution to a wide range of sealing duties in process pumps and similar equipment.

PRODUCT VARIANTS

30B-C & 40B-C – Single Balance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

OPERATING PARAMETERS

Shaft Dia.: 25 ... 100 mm (1" ... 3.94")

Pressure: Vacuum to 35 bar (Consult RO-TECH for above Pressure)

Temperature: -75 °C to +260 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



22B & 23B SERIES – BALANCE SINGLE SPRING SEAL

22B - O-Ring type & 23B – Wedge type. Single Inside mounted balance Seal. The Helical Coil Spring designed Seal help to Seal the Dirty and Clogging type of application. Construction of these Seals designs hold whole Rotary Parts together with the help of Snap Rings which make easy for Installation and Removal. Narrow cross-section allows the seal fitment in narrow stuffing boxes. The rotating seal face drive mechanism provides excellent torque transmission. Throughout its pressure range the seal provides a secure and economical solution to a wide range of sealing duties in process pumps and similar equipment.



PRODUCT VARIANTS

22B-C & 23B-C – Single balance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

OPERATING PARAMETERS

Shaft Dia.: 25 ... 100 mm (1" ... 3.94")

Pressure: Vacuum to 30 bar max (Consult RO-TECH for above Pressure)

Temperature: -75 °C to +260 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

RT71 SERIES – REVERSE BALANCE SEAL

Seal Type RT71 Mechanical Seals are Externally Mounted Reverse Balance design suitable for metallic and non-metallic centrifugal pump and similar rotating equipment for mainly handling Back pressure in Line. All Metal Components including spring are Isolated from product. The Single Design Seal can be installing as Dual Back-to-Back Arrangement and can operate on Low Barrier Fluid Pressure due to its Reverse Balance Design feature.

OPERATING PARAMETERS

Shaft Dia.: 19mm.....100mm (0.75".....4.0")

Pressure : Up to 18 bar max (Seal with Internal Mounted)

Temperature: -45 °C to 180 °C (Seal with Internal Mounted)

Speed : 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

PRODUCT VARIANTS

RT71-D – Double Reverse Balance Dual Back-to-Back Arrangement design suitable for Non-metallic Pump with API Plan 54.



43U & 45U SERIES – LUG TYPE SINGLE SPRING SEAL

43U - O-Ring type & 45U – Wedge or V Packing type. 43U & 45U Single and cost-effective seal is an Inside mounted Unbalance Design. It can also provide in Balance arrangements 43B & 45B. The seal is driven through a lug drive between seal ring and drive collar, providing excellent torque transmission. Increased durability from robust single-coil spring that resists clogging and chemical attack. Suitable for abrasive, corrosive and viscous fluids. It can also Configure in Solid Face at Rotary part to minimize face distortion and provide long life on above 120-degree temp.

PRODUCT VARIANTS

43U-C & 45U-C – Single unbalance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

43B-C & 45B-C – Single balance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

OPERATING PARAMETERS

Shaft Dia.: 25 ... 100 mm (1" ... 3.94")

Pressure: Vacuum to 10 bar (43U & 45U)

Temperature: -75 °C to +260 °C (Check O-Ring resistance)

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



46U & 48U SERIES – SINGLE SPRING SEAL

46U - O-Ring type & 48U – Wedge or V Packing type. 46U & 48U Single and cost-effective seal is an Inside mounted Unbalance Design. It can also provide in Balance arrangements 46B & 48B. Increased durability from robust single-coil spring that resists clogging and chemical attack. Suitable for abrasive, corrosive and viscous fluids. It can also Configure in Solid Face at Rotary part to minimize face distortion and provide long life on above 120-degree temp.

OPERATING PARAMETERS

Shaft Dia.: 25 ... 100 mm (1" ... 3.94")

Pressure: Vacuum to 10 bar (46U & 48U)

Temperature: -75 °C to +120 °C

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

PRODUCT VARIANTS

46U-C & 48U-C – Single unbalance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

46B-C & 48B-C – Single balance seal in cartridge arrangement with API plan 11 or Suitable API Plan.



38U SERIES – CONICAL OR TAPER SPRING SEAL

Single and cost-effective seal 38U is an Inside mounted Unbalanced Mechanical Seal. It can also design in Balance type (38B) for suitable application. Torque transmission via conical OR taper spring. No damage of the shaft by sets screws. 38U Seals used for universal general-purpose application e.g., Chemical industry Pulp and paper industry Water and waste water technology Low solids content media, Water and sewage pumps and similar rotating equipment

OPERATING PARAMETERS

Shaft Dia. : 12mm to 80mm (38U)

Pressure: 10 bar max (38U)

Temperature: -20 °C to +120 °C

Speed : 3000 r.p.m.

PRODUCT VARIANTS

38U-C – Single unbalance seal in cartridge arrangement with API plan 11 or Suitable API Plan.

38B-C – Single balance seal in cartridge arrangement with API plan 11 or Suitable API Plan.



P60 SERIES – PTFE BELLOW SEAL

P60 is a Single and Cost-effective solution for highly corrosive media. All Metal Components including springs are Isolated from corrosive media. Seal Faces are moulded with Glass Filled PTFE, SiFT & CFT with Highly Flexible PTFE Bellow. P60 is Outside Mounted Seal having No dynamic O-Ring, no hang-up, no shaft-sleeve damage. Simple removable faces for easy to replacement.



PRODUCT VARIANTS

P60-Z – Single Spring Type PTFE Bellow seal having metallic parts to be Xylan coated for better or increase in mechanical seal life in highly corrosive media.

OPERATING PARAMETERS

Shaft Dia. : 19mm.....60mm (0.75"2.375")

Pressure: Up to 5 bar max

Temperature: -20 °C to 110 °C

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



P61 SERIES – PTFE REPLACEABLE BELLOW SEAL

P61 is a Single and Cost-effective solution for highly corrosive media. All Metal Components including springs are Isolated from corrosive media. Replaceable Seal Faces (SiC, SiFT, CFT & GFT) is easily Replaceable and Positively Driven by Integral Lugs on Bellow. These Lugs Imparts Smooth Drive to the face. P61 is Outside Mounted Seal having No dynamic O-Ring, no hang-up, no shaft-sleeve damage. Simple removable faces for easy replacement.



PRODUCT VARIANTS

P61-Z – Single Spring Type PTFE Replaceable Bellow seal having metallic parts to be Xylan coated for better or increase in mechanical seal life.

OPERATING PARAMETERS

Shaft Dia: 19mm.....60mm (0.75"2.375")

Pressure: Up to 5 bar max

Temperature : -20 °C to 110 °C

Speed : 3000 r.p.m.



(Consult RO-TECH for applications outside above limits)

RT72 SERIES – REVERSE BALANCE SEAL WITH CLAMP

Seal Type RT72 Mechanical Seals are Externally Mounted Reverse Balance design with multiple faces (SiC / Carbon / GFT) as per application suitable for non-metallic centrifugal pump. All Metal Components including spring are Isolated from product. The Single Design Seal can be installing as Dual Back-to-Back Arrangement and can operate on Low Barrier Fluid Pressure due to its Reverse Balance Design feature. Extra Clamp feature provide torque transmission to rotary without any damage on brittle parts of sleeve.



PRODUCT VARIANTS

RT72-D – Double Reverse Balance Dual Back-to-Back Arrangement design suitable for Non-metallic Pump or Suitable API Plan.

RT73 – Single Reverse Balance seal having Unique clamping arrangement specially Design to make cost effective by removing Extra Clamp Feature from rotary.

OPERATING PARAMETERS

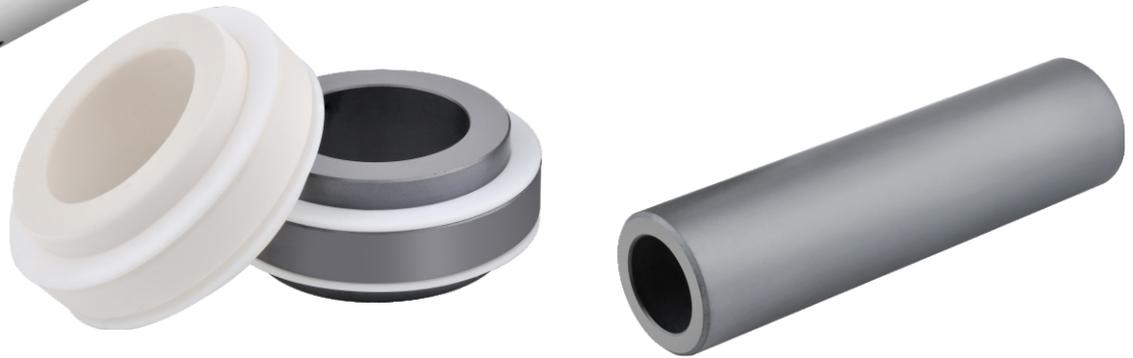
Shaft Dia.: 19mm.....100mm (0.75”.....4.0”)

Pressure: Up to 8 bar max (Seal with Outside Mounted)

Temperature: -45 °C to 120 °C (Seal with Outside Mounted)

Speed : 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



RT 1 & RT1-L SERIES – RUBBER BELLOW SEAL

Single and cost-effective seal type RT1 (SHORT BELLOW) & RT1-L (LONG BELLOW) Seals used for universal general-purpose application e.g., Water or Water Based Solutions and Other Fluids and even with some Content of Sludge in Centrifugal Pump, Gear Pumps etc. It has a non-clogging design spring. It is also suitable for Drive END and Non-Drive End in Multi stage and split Casing Pump. It has a Unitize easy-to-fit design.



PRODUCT VARIANTS

RT1-C & RT1-LC- Unitize easy-to-fit design seals also provide in single cartridge version with API plan 11 or Suitable API Plan.

OPERATING PARAMETERS

Shaft Dia.: 10mm to 100mm

Pressure: Up to 12 bar max

Temperature: -20 °C to 180 °C

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

RT2 SERIES – RUBBER BELLOW SEAL

Single and cost-effective seal Type RT2 is a Compact Rubber Bellow Seals used for universal general-purpose application e.g., Water or Water Based Solutions and Other Fluids. Loosely inserted seal face provides self-adjusting capability. It has a non-clogging design spring. It is also suitable for Drive END and Non-Drive End in Multi stage and split Casing Pump. It has a Unitize easy-to-fit design.

PRODUCT VARIANTS

RT2-C - Unitize easy-to-fit design seals also provide in single cartridge version with API plan 11 or Suitable API Plan.

OPERATING PARAMETERS

Shaft Dia.: 10mm to 100mm

Pressure: Up to 12 bar max

Temperature: -20 °C to 180 °C

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



RJMF 200 & RJDF 201 – ROTARY JOINT

Series RJMF 200 (mono flow) and RJDF 201 (dual flow) design rotary joints are used on equipment for cooling, drying, humidification etc. Self-supporting on two precision Ball Bearings enough to reduce vibration & wobbling. Rotary Joint is versatile, compact & can be used in systems & applications like Water, Intermittent Steam or Oil. All sizes from 3/8" to 4" are available with mono & duo flow services.

OPERATING PARAMETERS

Size Range: 3/8" to 4.0"

Pressure: 10 bar max

Temperature: 120 °C

(Consult RO-TECH for applications outside above limits)

SG20 – SEGMENTED CARBON RINGS

Multi-part seal rings with radially cut carbon rings. Split housing design for ease of installation without dismantling equipment. Very small operation gap with low leakage. Operate in Dry running. Self-adjusting seal rings on shaft OR Sleeve. Seal rings running contact-free - sliding faces and equipment consume no additional power.

OPERATING PARAMETERS

Shaft Dia.: 45mm.....160mm (1.75"6.3")

Pressure: Vacuum to 1.5 bar max

Temperature: -120 °C to +400 °C

Speed: 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)



BEARING BUSHES SPARES OF MAGNETIC PUMP & CANNED MOTOR PUMP BEARING BUSHES – SIC, CARBON & TC

The pump liquid is circulating between the rotating and static parts to ensure lubrication and cooling of bearing bushes. Bush bearings Design with straight or helical grooves for circulation of lubricating medium in Magnetic & Canned Motor Pump.



RHP-02 – HAND PUMP FOR THERMOSYPHON SYSTEM

Portable Hand Feed Pump series RHP-02 is specially designed for Thermosyphon System. This is normally recommended for API plans 53A, 53B and 53C. The function of the Feed Pump is to recharge the Thermosyphon Vessel to make up for the lost barrier fluid of double mechanical seal.



PRODUCT VARIANTS

RPH-02 – Is in CS (2 ltr)

RPH-02S – Is in Stainless Steel (2 ltr)

OPERATING PARAMETERS

Capacity: 2 ltr

Design Pressure: 30 Bar

Operating Pressure: 24 Bar

Working Temperature: 100 °C

(Consult RO-TECH for applications outside above limits)

RTTS-L & RTTS-H –API PLAN – 52 THERMOSYPHONE SYSTEM

Series RTTS-L & RTTS-H is used as a storage & pressurising unit of mechanical seal barrier fluid. Used in double & tandem mechanical seal arrangement. This is equipped with cooling coil inside the shell to bring down the temperature of barrier fluid coming from seal to Thermosyphon Vessel. Higher capacity up to 20 ltr. can also be offered as per requirement.

OPERATING PARAMETERS

Capacity: 7...9...10....12 ltr
Design Pressure: 30 Bar Max (FOR 9 LTR) (RTTS-L & RTTS-H)
Operating Pressure: 24 Bar Max (FOR 9 LTR)(RTTS-L & RTTS-H)
Working Temperature: 160 °C (FOR 9 LTR) (RTTS-L & RTTS-H)
Cooling water flow rate recommended: 6-7 ltrs/min (FOR 9 LTR)
 (Consult RO-TECH for applications outside above limits)

PRODUCT VARIANTS

RTTS-L – Is in Low Pressure available in CS & Stainless Steel in different Capacity e.g. 7, 9, 10 & 12 ltr.
RTTS-H – Is in High Pressure available in CS & Stainless Steel with different Capacity e.g. 7, 9, 10 & 12 ltr.



RFLS-40 – FORCE LUBRICATION SYSTEM (API PLAN 54)

The barrier pressure for circulation is generated by a gear pump. Barrier pressure units of the RFLS range perform all the functions of a barrier system essential for operating double seals (circulation and cooling of the barrier medium, pressurization of the barrier fluid and compensation of leakage). Compact and easy to operate. Multiple Design also available with suitable instrumentation on basis of required cooling rates of barrier fluids for mechanical seal.



PRODUCT VARIANTS

RFLS-40 - Reservoir Capacity 40 LTR
RFLS-100 - Reservoir Capacity 100 LTR

OPERATING PARAMETERS

Reservoir Capacity: 40....100 ltr
Operating Pressure: 40 Bar Max (RFLS-40)
Flow Rate: 8 lpm (RFLS-40)
 (Consult RO-TECH for applications outside above limits)

BI 640 – PB BRONZE BEARING ISOLATOR

Most of contamination finds its way into bearing housings through openings where equipment shafts surface through bearing housings, or at vents and breathers provided somewhere on the oil-lubricated assembly. bearing failure impacts equipment reliability across all industries. Historically the most common way of protecting bearings was to use a lip seal. Due to this, they eventually wear at the point of contact or groove the shaft and becoming ineffective. Eliminate seal failure and increase equipment reliability with a permanent sealing solution which is BI 640 Bearing Isolator. BI 640 Bearing isolator with different material which protect bearing of rotating equipment, including pumps, motors, pillow blocks, gearboxes and more.



PRODUCT VARIANTS

- BI 640 – In PB Bronze
- BI 641 – In Stainless Steel
- BI 642 – In PTFE

OPERATING PARAMETERS

- Shaft Dia.: 19mm.....203mm (0.75".....8.0")
- Pressure: Atmospheric
- Temperature: -40 °C to +200 °C
- Speed: 3000 r.p.m.
- (Consult RO-TECH for applications outside above limits)



MBI 640 – PB BRONZE MAGNETIC BEARING ISOLATOR

Bearing failure impacts equipment reliability across all industries. Historically the most common way of protecting bearings was to use a lip seal. Due to this, they eventually wear at the point of contact or groove the shaft and becoming ineffective. Eliminate seal failure and increase equipment reliability with a permanent sealing solution which is MBI 640 Magnetic Bearing Isolator. BI 640 Magnetic Bearing isolator with different material protect bearing of rotating equipment, including pumps, gearboxes and more. Magnetic energy is used to create a closing force keeping the seal faces in positive contact. Enables use of closed-loop oil mist systems. Prevents contamination of the bearings. Prevents leakage of oil lubrication, grease and oil mist form the environment. Increases the life of the bearings. Efficient in bearing seal, statically and dynamically.

OPERATING PARAMETERS

Shaft Dia.: 19mm.....203mm (0.75".....8.0")

Pressure: 0.3 bar max

Temperature: -40 °C to +200 °C

Speed : 3000 r.p.m.

(Consult RO-TECH for applications outside above limits)

PRODUCT VARIANTS

MBI 640 – In PB Bronze

MBI 643 – In Stainless Steel





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