

ISO 9001-2015 CERTIFIED COMPANY



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Innovation. Standardization. Continual Improvement.

### **ABOUT US:**

Gipfel Engineering is an ISO 9001:2015 Certified company also registered with the Ministry of MSME & NSIC & engaged in the Designing, Manufacturing, Export and Supply of all types of Component Mechanical Seal, Engineered Mechanical Seal, API Seal, Gas Seal, Seal Support System, Carbon Floating Seal Ring, Carbon Segmented Ring for Turbine, Bearing Isolator, Rotary Joint, Expansion Joint, Compression Packing, Spiral Wound Gasket, Chemical Process Pump & Pump's Spare. We also undertake refurbishment of all other Makes of Mechanical Seals & Redevelopment of existing Pumps.

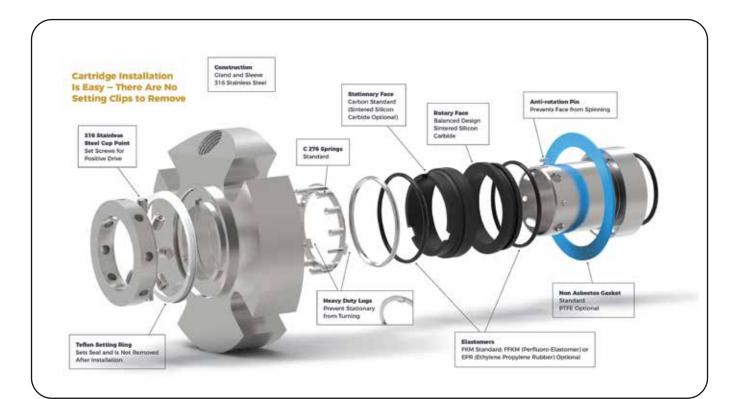
We are also solution provider for mechanical problems, impeller imbalance issues, efficiency improvement for pumps & blowers and provide Seal & Pump installation services (AMC & ARC). We also offer Technical Consultancy related to Pumps and Mechanical Seals.

### Our Seals conforms to the following standards:

- ISO 3069
- ISO 21049
- API 682 (Compliance)
- DIN EN 12759

### **Our Registrations:**

- ISO 9001-2015
- NSIC
- MSME UDYAM Registration
- GEM Registration



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# **COMPONENT MECHANICAL SEALS**

### Single Spring Type Mechanical Seals







ST100

**CS110** 

SS120

	Faces	Carbon / Ceramic / Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Nitrile (NBR) / Viton (FKM) / EPDM / Aflas / PTFE
	Hardwares	SS 304 / SS 316 / Hastelloy – C 276 / Alloy 20
	Size	12 mm to 100 mm (1/2" to 4")
Operating	Pressure	14 bar
Limits	Temperature	-20 to +180 Deg. C
	Speed	2900 RPM

### Multi Spring Type Mechanical Seals





**MS200** 

MS210



MR220



MI250C



**MF260S** 



MF270D



**ME280D** 

	Faces	Carbon / Silicon Carbide / Tungsten Carbide / Lecrolloy
Materials	Elastomers	Nitrile (NBR) / Viton (FKM) / EPDM / Aflas / PTFE / TTV / Kalrez (FFKM)
	Hardwares	SS 304 / SS 316 / Hastelloy – C / Alloy – 20 / Monel / Titanium
	Size	14 mm to 250 mm (1/2" to 10")
Operating	Pressure	35 bar
Limits	Temperature	-50 to +180 Deg. C
	Speed	2900 RPM

## Wave Spring Type Mechanical Seals







WS300

WS310



	Faces	Carbon / Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Nitrile (NBR) / Viton (FKM) / EPDM / Aflas / PTFE / TTV / Kalrez (FFKM)
	Hardwares	SS 304 / SS 316 / Hastelloy - C / Alloy - 20 / Titanium
	Size	20 mm to 150 mm (1/2" to 6")
Operating	Pressure	20 bar
Limits	Temperature	-45 to +180 Deg. C
	Speed	2900 RPM

## **Rubber Bellow Type Mechanical Seals**



**RB10** 



**RB20** 



**RB30** 



**RB40** 



**RB50** 



**RB60** 

	Faces	Carbon / Ceramic / Silicon Carbide / Tungsten carbide
Materials	Elastomers	Nitrile (NBR) / Viton (FKM) / EPDM
	Hardwares	SS 304 / SS 316
Operating Limits	Size	12 mm to 100 mm (1/2" to 4")
	Pressure	6 bar
	Temperature	-20 to +160 Deg. C
	Speed	2900 RPM

## Teflon Bellow Type Mechanical Seals









**TB420** 

Materials —	Faces	GFT / CFT (Faces of the Seal is Composite Molded with Highly Flexible) / Ceramic / Silicon Carbide
Matorialo	Elastomers	PTFE
	Hardwares	SS 316 / Hastelloy-C / Alloy-20 / Titanium
	Size	20 mm to 100 mm (3/4" to 4")
Operating	Pressure	6 bar
Limits	Temperature	-20 to +80 Deg. C
	Speed	2900 RPM

## Metal Bellow Type Mechanical Seals







**MB500** 

**MB510L** 

**MB520S** 

	Faces	Carbon / Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Viton (FKM) / Kalrez (FFKM) / Grafoil
Wateriais	Hardwares	SS 316L / Hastelloy-B & C / Alloy-20
	Bellow Material	AM-350 / Alloy 20 / Hastelloy-C / Inconel 625
Operating Limits	Size	20 mm to 150 mm (3/4" to 6")
	Pressure	14 bar
	Temperature	-20 to +300 Deg. C
	Speed	2900 RPM

# ENGINEERED MECHANICAL SEALS

Cartridge Type Mechanical Seals







SC600

SC610G

**SC620F** 



SC630





DC660

	Faces	Carbon / Ceramic / Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Nitrile (NBR) / Viton (FKM) / EPDM / EPR / Aflas / PTFE / TTV / Kalrez (FFKM)
Hardwares		SS 304 / SS 316 / Hastelloy-B & C / Alloy-20 / Titanium / Duplex SS
	Size	20 mm to 300 mm (3/4" to 12")
Operating	Pressure	40 bar
Limits	Temperature	-50 to +220 Deg. C
	Speed	2900 RPM

## Metal Bellow Cartridge Type Mechanical Seals







**BS700** 

**BS710** 

BC720







BC730

**BD740** 

BD750

	Faces	Carbon / Silicon Carbide / Tungsten Carbide
	Elastomers	Grafoil / PTFE / Kalrez
Materials	Hardwares	SS 316L / Hastelloy-B & C / Alloy-20 / Titanium
	Bellow Material	AM-350 / Alloy 20 / Hastelloy-C / Inconel 625 / Titanium
	Size	20 mm to 200 mm (3/4" to 8")
Operating Limits	Pressure	25 bar
	Temperature	-20 to +350 Deg. C
	Speed	2900 RPM



	Faces	Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Viton (FKM) / Aflas / EPR / PTFE / TTV / Kalrez (FFKM)
	Hardwares	SS 316 / Hastelloy-B & C / Alloy-20 / Duplex SS / High Chrome Iron / Titanium
	Size	20 mm To 300 mm (3/4" to 12")
	Pressure	20 bar
Operating	Temperature	Ambient to 140 Deg. C
Limits	Speed	2900 RPM
	Solids	40% Maximum solids by weight
	Particle Size	5000 Microns Maximum
	Particle Hardness	9 MOH Maximum







SD900

DD910

ES920



ES930





ED940

ED950

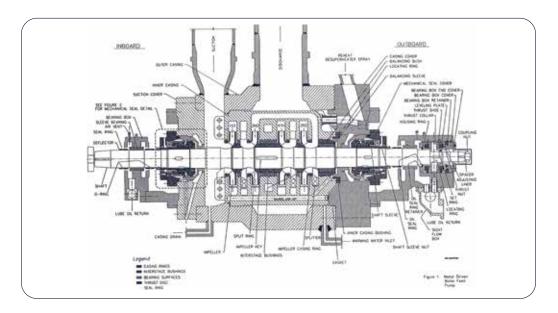
	Faces	Carbon / Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Viton (FKM) / EPDM / Neoprene / Aflas / PTFE / TTV / Kalrez (FFKM)
	Hardwares	SS 304 / SS 316 / Hastelloy-B & C / Alloy-20 / Titanium
	Size	20 mm to 300 mm / (3/4" to 12")
Operating	Pressure	Vacuum to Vessel pressure +60 bar
Limits	Temperature	-20 to +250 Deg. C
	Speed Range	100 RPM to 1450 RPM

# HIGH PRESSURE MECHANICAL SEALS (BOILER FEED PUMP SEAL)

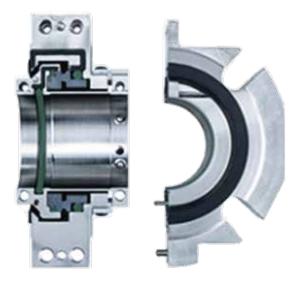


### HP760

	Faces	Carbon / Silicon Carbide / Tungsten Carbide
Materials	Elastomers	Viton (FKM) / EPDM / PTFE / TTV / Alfas / Kalrez (FFKM)
	Hardwares	SS 316 / Hastelloy-B & C / Alloy-20 / Titanium
Operating Limits	Size	20 mm to 300 mm (3/4" to 12")
	Pressure	160 bar
	Temperature	-20 to +250 Deg. C
	Speed	3600 RPM



# SPLIT TYPE MECHANICAL SEALS



### SPT770

Materials	Faces	Carbon / Silicon Carbide / Ceramic
	Elastomers	Viton (FKM) / EPDM / FFKM
	Hardwares	SS 316 / Hastelloy C / Monel K400
Operating Limits	Size	50 mm to 300 mm (2" to 12")
	Pressure	19 bar
	Temperature	-18 to +140 Deg. C
	Speed	3600 RPM (As Pump Seal) & 140 RPM (As Dry Running Seal)

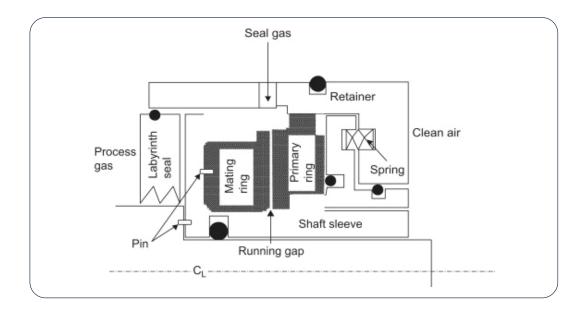


# **GAS SEALS**



### **GS780**

Materials	Faces	Carbon / Tungsten Carbide
	Elastomers	Viton (FKM) / Kalrez (FFKM)
	Hardwares	SS 316 / Hastelloy-B & C / Alloy-20
Operating Limits	Size	20 mm to 300 mm (3/4" to 12")
	Pressure	280 bar
	Temperature	-20 to +200 Deg. C
	Speed	3600 RPM



# **API 682 MECHANICAL SEALS**

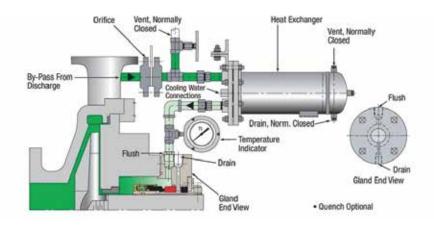


Materials	Faces	Carbon / Silicon Carbide / Tungsten Carbide
	Elastomers	Viton (FKM) / PTFE / Grafoil / Kalrez (FFKM)
	Hardwares	SS 316 / SS316L / Hastelloy-B & C / Alloy-20
Operating Limits	Size	20 mm to 300 mm ( 3/4" to 12")
	Pressure	28 bar
	Temperature	-20 to +350 Deg. C
	Speed	2900 RPM



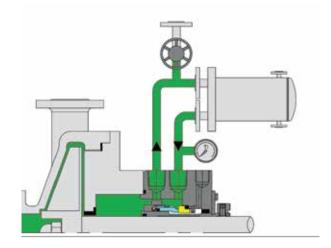
# SEAL SUPPORT SYSTEMS (API PLAN)

### API PLAN 21



Temperature	-20 to +180 Deg. C
Pressure	62 bar
Capacity	10.5 kW
МОС	SS 316 (Coil), CS & SS (Shell)

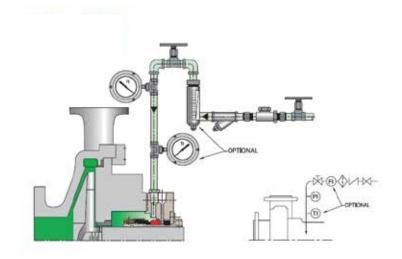
### API PLAN 23



Temperature	-20 to +180 Deg. C
Pressure	62 bar
Capacity	10.5 kW
мос	SS 316 (Coil), CS & SS (Shell)

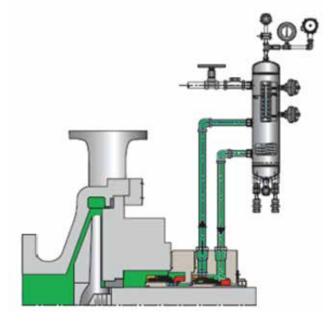
# SEAL SUPPORT SYSTEMS (API PLAN)

## API PLAN 32



Temperature	-20 to +140 Deg. C
Pressure	38 bar
мос	To Suit Media

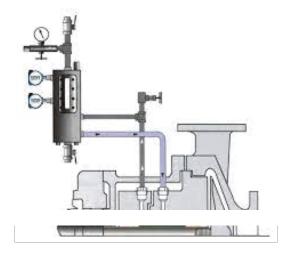
## API PLAN 52



Temperature	-20 to +180 Deg. C
Pressure	32 bar
Capacity	10 kW
мос	SS 316 (Coil), CS & SS (Shell)

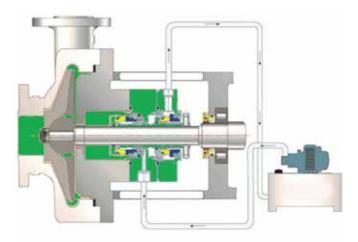
# SEAL SUPPORT SYSTEMS (API PLAN)

API PLAN 53A



Temperature	-20 to +220 Deg. C
Pressure	65 bar
Capacity	8 Litres to 32 Litres
MOC	SS 316 (Coil), CS & SS (Shell)

## API PLAN 54



Temperature	-20 to +300 Deg. C
Pressure	120 bar
Capacity	400 Litres
мос	SS 316 (Coil), CS & SS (Tank)

# **ROTARY JOINTS**



,

RJ1210 Single Pass



RJ1215 Double Pass



RJ1220 Double Pass



1230 Multiple Pass

Size	12 mm to 150 mm (1/2" to 6")
Temperature	-20 to +180 Deg. C
Pressure	10 bar
Speed	220 RPM
мос	C.I. / SS 304 / SS 316

# **SWIVEL JOINT**



Size	8 mm to 300 mm (3/8" to 12")
Temperature	-30 C to +180 Deg. C
Pressure	100 bar
MOC	CI / SS 304 / SS 316
Rotation Angle	360°

## **OTHER PRODUCTS**



Carbon Floating Seal Rings (Labyrinth Seals)



#### **Carbon Segmented Rings**



**Bearing Isolators** 



### **Compression Packings**



**Track Roller Seals** 



**Expansion Joints** 



#### **Spiral Wound Gaskets**



**Oil Lubricators** 

# **INSTRUMENT VALVES**



# **INSTRUMENT FITTINGS**



## MECHANICAL SEAL SERVICING (AMC & ARC)





### **BEFORE SERVICING**

### **AFTER SERVICING**

Due to industrial recession and growing responsibility of maintenance staff to reduce cost, we follow the concept of reconditioning of mechanical seals. By virtue of technical skill, vast experience and rational approach, we are able to provide relief to customers by reconditioning of Agitator Mechanical Seals, Single & Double Dry Mechanical Seals, Glass Lined Reactor Mechanical Seals, Single & Double Cartridge Mechanical Seals, Boiler Feed Pump Mechanical Seals, High Pressure Pipe-Line Mechanical Seals, Slurry Mechanical Seals, Cartridge and Non-Cartridge Metal Bellow Mechanical Seals, API standard Mechanical Seals, Gas Seals. We also undertake refurbishment of Rotary Joints, Seal Support Systems (Thermosyphon systems), Centrifugal Horizontal, Vertical, Metallic, Non-Metallic Pumps and Vertical Inline Pumps. We have large number of reputed customer satisfied with our services. Reports include photographic evidence, wear or damage data for key components and also the possible failure causes.

We repair all brand and styles of Mechanical Seals, during our reconditioning process the Mechanical Seals are observed, cleaned or sand blasted as required, then inspected to factory tolerance. If new faces are required, the old ones are replaced otherwise they are refinished by lapping to industry standards (2-3 light bands). The seals are re-assembled using new spring, screw and O-rings.

Refurbished Seal are dynamically tested prior to dispatch with assured life.

We also offer our services under AMC Contract.

#### After Sales Services;

Our engineers are trained properly to tackle all service problems effectively and promptly. We are committed to attend all service problems of our customers at a short notice and provide necessary spares immediately. Our engineers also provide training to maintenance staff of customer to handle emergencies.

### **Industry Wise**

Paint Industries, Textile Industries, Chemical Industries, Mining & Mineral Industries, Oil & Gas Industries, Food, Dairy & Beverage Industries, Metal & Steel Industries, Petrochemical Industries, Pharmaceutical & Biotech Industries, Pulp & Paper Industries, Automotive Industries, Refining Technologies, Polymer Technologies, Biofuel Technologies, Aerospace Technologies, Scientific Technologies, Co-Generation Plants, Water & Wastewater Treatment Plants, Solvent Extraction Plants, Nuclear Power Plants, Hydro Electric Power Plants, Coal-Fired Power Plants, Diesel-Fired Power Plants, Thermal Power Plants, GeoThermal Power Plants, Gas-Fired Power Plants, Solar Power Plants, Wind Power Plants, Tidal Power Plants, Cement Plants, Corn Wet & Molasses Based Milling & Ethanol Plants, Sugar Factories & Distilleries, Marines, Shipbuilding & Transportation, Refrigeration Systems, Slurry & Infrastructure Processes.

### **Equipment Wise**

Process Pumps, Utility Pumps, Split Casing Pumps, Boiler Feed Pumps, Condensate Extraction Pumps, Vacuum Pumps, Vertical Pumps, Turbine Pumps, Inline Pumps, Progressive Cavity Pumps (Screw Pumps), Milk & Hygienic Pumps, Gear Pumps, Turbines, Agitators (Top, Side & Bottom Entry), Agitated Nutsche Filters, Agitated Nutsche Filter Dryers, Bottom Entry Choppers, Blenders, Ribbon Blenders, V Blenders, Vacuum Blenders, Screw Conveyors, Extruders (Rotary Joints), Autoclaves, Polycondensation Autoclaves, Bio-Fermenters, Bio-Reactors, Lab Fermenters, Blowers, Hot Air Blowers, Air Classifier Blowers, FRB Blowers, Clinker Grinder, Compressor, Drying Mill, Peddle Dryers, Rotocone Dryers, Drum Dryers, Filter Dryers, Twin Shaft Screw Dryers, Vacuum Dryers, Mixers & Reactors, Ross Inline Mixers, Nauta Mixers, Plough Shear Mixers, Contra Rotary Mixers, Ball Mill Mixers, Twin Shaft Peddle Mixers, Pilot Plant Mixers, Ross Inline Mixers, Vacuum Mixers, Glass Lined Reactors, Gas Induction Reactors, Gas Induction Agitators, Gas Induction Hydro Generators, Gas Induction Turbines, Gas Roasters, Marmalade Cookers, Ice Cream Machines, Homogenizers, High Speed Dispersers, Hydro Turbines, Hydrogenations Plants, Impact Mills, Jet Mills, Multi Mills, Balls / Sand / Colloid / Beed Mills, Paint Mills, Pin Mills, Roller Mills, Turbo Mills, Industrial Photo Reactors, Laboratory Mixer, Lump breakers for RCVD, Pulp Pressure Screens, Rotary Valves, Rotary Kiln Sealing Systems, Steam Turbines, Tunnel Drilling Machines & Vacuum Processing Units.

### Our product design is customized to suit the following Pump Make & Models

1. Micro Finish	: 0K, 1K, 2K & 3K
2. SPX Johnson	: KGEN, CN, FRE & CCR all units.
3. KSB (Single Stage)	: Mega-Chem, CPK, MCPK, Etanorm & Etaline
(Multi-Stage)	HDA, HGC, WK, WL & WKL
4. Kirlosker	: KPD, DB, CE, CPHM, SHM, SHL, MF, UP, RKB & BHR
5. Flowserve	: CPX, CPXR, CPXN, CPXP, MEN &
6. Sintech	: UMOR, UMHQ, SWP, SSHQ, SMF, SCS, CPS & CPSQ
7. Investa:	: SCP-LC, SCP-SM, SCP-MD, SCP-LT, SCP-XT, STR, MTR, LTR, XTR, CIP, XIP, XNP & STP
8. SULZER	: CZ, CPT, ZE, MBN & MC
9. Mather + Platt	: ETN ISO, ET, PN, SD-SN & RNPB
10. PSP	: A, D, HD, P, SC & Vacuum pumps
11. Grundfos	: CR, CM, CH, NB, NK, TP & HS Series.
12. ROTO	: Progressive Cavity Pumps & Screw Pumps
13. PPI	: Vacuum Pumps
14. Other Makes	: Sam Turbo, Kishore, Gita, Wilo, Flow More, Antico, Leak Proof (Rajedia), JEE, Moniba, Process, Chemlin, AK, Ebara, Flygt, Fristam, IDMC, Lowara, & CNP's Limited Models.



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