

## **COMPANY PROFILE**

New Generation of the family of Maruti Seals now been further improve through extensive products development to increase machinability for customers the new generation of Maruti Seals present ever better opportunities to reduce maintenance cost, mention application electric pump maintenance break down and increase life pump giving productivity improvement therefore significant cost.

#### ABOUT MARUTI SEALS PVT. LTD.

Founded in 1993 as one of the manufacturer of seals. The Maruti Seals is recognized globally for intellectual. Leadership and ongoing innovation across every major states of India and known as one of the most published name of sealing technology and has the powerful network as well as in many other countries. Informed by depth Maruti Seal research and globally experience of sealing technology.

### **APPLICATION**

To prevent the leakage of valuable pumping fluid, toxic gases Slurries, Water, Pharma, Clear Juice, Sulphur Juice, Raw Juice, Vaccum under water, Vaccum for pumps, Agitator, Compressors, Filters, Turbine Blowers, autoclaves mixer Steam, Alkalis, Oil Gas, Paste, Food Processing Industries & all Other equipments which have rotating shaft.

#### **SERVICES**

We stock mechanical seals for Kirloskar, KSB, Johnson, Microfinish, Alfa laval Pumps etc to supply on committed time delivery & services back up etc.

#### QUALITYASSURANCE

We predetermined by customer oriented policy and quality management system, the main objective of which is to comply with all demands and expectation of our customer and enhance their satisfaction to ensure that each manufactured product confirm to international standards of excellence. Keeping the quality aspect utmost in our mind, we follow a system of quality control as per international standard.

#### WE ALSO OFFER

Tailer made Seals Repairing & Reconditioning of seals. Seal installation Single Coil Spring, Multi Spring , Wave Spring, Double Mechanical & Custom Build Seals which can be used under various corrosive, viscous, toxic and highly inflammable pumping fluid applications Pump Services.

#### SPECIFICATION RANGE

Size 10-500mm Temperature -23' To 450' C Speed up to 10000 RPM Manufacturing Standard BS 5257 din 24960

## **INTRODUCTION**



Office



Servicing Of Mechanical Seals



**CNC Machining Center** 



## 501 - CONICAL SPRING SEAL

## **PRODUCTS**



#### **SPECIFICATION**

Shaft Diameter (dl)	10 to 100mm
Pressure (pr)	10 bar
Temperature (t)	(-)20 to 180 Deg C
Velocity (v)	15m/s
Axial Moment	(+)1mm

#### **APPLICATION**

- 1) Circulating pumps of water & heating systems Chemical process pumps.
- 2) Submerged pumps Sewage pumps.
- 3) Distillery:- Pumps of spirit alcohol, liquor, wash handling etc. Pumps.

#### **FEATURES**

- Single Acting, Unbalanced
- · Dependent on direction of rotation
- Conical Spring
- · Inside mounted
- 4) Sugar Industry: Pumps for mill strained / unstrained juice Sulphured & clear juice, masriation water quadriple or desuperheater or centrifugal machine hot water, pan condensate, sulphited / unsulphited syrup,injection, spray etc

## **502 - MULTI SPRING SEAL (BALANCED)**

#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 160mm
Pressure (pr)	35 bar
Temperature (t)	(-)45 to 300 Deg C
Velocity (v)	26m/s
Axial Moment	(+) 1mm

#### **FEATURES**

- · Single acting, unbalanced
- Dependent on direction of rotation
- · Conical Spring
- · Inside mounted



#### **APPLICATION**

- 1) Chemical pumps for fertilizer & Petrochemical industries.
- 2) Acid Pumps.
- 3) Corrosive chemical pumps.

## 503 - MULTI SPRING SEAL (UNBALANCED)



### **SPECIFICATION**

Shaft Diameter (dl)	16 to 160mm
Pressure (pr)	16 bar
Temperature (t)	(-)45 to 300 Deg C
Velocity (v)	26m/s
Axial Moment	(+) 0.5mm

- 1) Chemical Pumps for fertilizer & Petrochemicals Industries.
- 2) Acid Pumps.

**APPLICATION** 

3) Corrosive chemical pumps.

### **FEATURES**

- Unbalanced, Inside & Outside Mounted
- Compact Design
- Easy To install
- Independent of direction of rotation

#### **FACES MOC**

· Carbon, TC, SIC, Stelite, Chrome Oxide, Etc.

## 504 - TEFLON BELLOW SEAL A & B

#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 75 mm
Pressure (pr)	7 bar
Temperature (t)	UPTO 120 Deg C
Velocity (v)	10m/s
Axial Moment	(+) 0.5mm

#### **FEATURES**

- Balanced Flexible virgin Teflon Bellow
- · Extremely mounted
- Low pressure
- Independent of direction of rotation.



#### **APPLICATION**

Suitable for extremely corrosive Service like oxidizing/ reducing agents, solvents, salts alkalis, nitric oxide, etc. Chemical plants, Concentrated acid manufacturing o" shore drilling etc.

## **PRODUCTS**

## 505 - TEFLON BELOW MULTI SPRING SEAL



#### **SPECIFICATION**

Shaft Diameter (dl)	18 to 100 mm
Pressure (pr)	10 bar
Temperature (t)	(-) 45 TO 50 Deg C
Velocity (v)	14m/s
Axial Moment	(+) 1mm

#### **FEATURES**

- Single acting, outside mounted balance type.
- PTFE Bellow with replaceable seal ring
- Independent of direction of rotation.

#### **APPLICATION**

- 1) Concentrated acids, salts and chemically active organic compounds.
- 2) Corrosive and abrasive liquid.

## **506 - STRAIGHT SPRING SEAL**

#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 100 mm
Pressure (pr)	10 bar
Temperature (t)	Upto 400 Deg C
Velocity (v)	26m/s
Axial Moment	(+) 1mm

#### **FEATURES**

- · Handles high Pressure
- · Balanced/ Unbalanced
- · Sturdy and long spring
- Independent of direction of rotation.



#### **APPLICATION**

- 1) Suitable for high viscosity fluid.
- 2) Light abrasive and sewage handling pumps.
- 3) Handles abrasive slurries of moderate cone.
- 4) Lime pumps in sugar industry.

## 507 - STAR MECHANICAL SEAL



#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 140 mm
Pressure (pr)	15 bar
Temperature (t)	98 to 270Deg C
Velocity (v)	26m/s
Axial Moment	(+) 0.8mm

#### **FEATURES**

- · Single acting, unbalanced
- Dependent on direction of rotation
- Conical Spring
- Inside mounted

#### **APPLICATION**

- 1) Circulating pumps for water & heating systems.
- 2) Chemical process pumps.
- 3) Submerged pumps.
- 4) Sewage pumps sugar industry: Mud slurry pumps handling highly viscous fluids.

## 508 - DOUBLE MECHANICAL SEAL

#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 140 mm
Pressure (pr)	15 bar
Temperature (t)	98 to 270Deg C
Velocity (v)	26m/s
Axial Moment	(+) 0.8mm

#### **FEATURES**

- Unbalanced, multi spring, double seal.
- · Easy to Install & replace.
- Independent on direction of rotation.



#### **APPLICATION**

Pumps handling highly volatile and toxic Fluids.

## 509 - WAVE SPRING SEAL



#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 160 mm
Pressure (pr)	17.5 bar
Temperature (t)	40 to 260Deg C
Velocity (v)	26m/s
Axial Moment	(+) 1mm

#### **FEATURES**

- Balanced
- · Uniform face loading
- · Double acting
- · Inside mounted

#### **APPLICATION**

- 1) Agitator and mixer condensate, pyre stock to sludge and river water.
- 2) Surface vessels.

## 510 - HEAVY DUTY SEAL

#### **SPECIFICATION**

Shaft Diameter (dl)	18 to 160 mm
Pressure (pr)	35 bar
Temperature (t)	(-) 45 to 260Deg C
Velocity (v)	26m/s
Axial Moment	(+) 0.5mm

#### **FEATURES**

- Balanced
- · Uniform face loading
- Double acting
- · Inside mounted



#### **APPLICATION**

- 1) Chemical pumps for fertilizer & petrochemical industries
- 2) Acid & corrosive Chemical sugar Industry :- Falling Film evaporator , Hot/clear juice circulation, fermented/spent wash, etc.pump

## 514 - CARTRIDGE SEAL



#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 100 mm
Pressure (pr)	un-10,bal-20 bar
Temperature (t)	(-) 50 to 260Deg C
Velocity (v)	26m/s
Axial Moment	(+) 0.5mm

#### **FEATURES**

- Fast & Easy installation.
- Available in single & multi spring types.
- Complete mechanical seal with sleeve & gland plate.

#### **APPLICATION**

- 1) Petroleum products, fertilizers, chemicals, solvents, Pulp, Paper etc. industries pumps.
- 2) Mixers, agitators and other equipment's.
- 3) Food And Distilleries

## 515 - STEEL BELLOW SEAL

#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 100 mm
Pressure (pr)	25 bar
Temperature (t)	450 Deg C
Velocity (v)	26m/s
Axial Moment	(+) 0.5mm

## **FEATURES**

- · Balanced & unbalanced type spring sea
- Independent on direction of rotation
- · Inherently pressure balanced
- Rigid & strong metal bellow



#### **APPLICATION**

- 1) Suitable for high temperature highly viscous fluids.
- 2) Ideal for slurry handling pumps.

## **517 - DRY SEAL**

#### **SPECIFICATION**

Shaft Diameter (dl) 16 to 100 mm		
Pressure (pr)	Vacuum 14 bar	
Temperature (t)	120 Deg C max	
Velocity (v)	2100m/s	
Axial Moment	(+) 0.5mm	

#### **APPLICATION**

- 1) Mixers, Agitators, Feeders
- 2) Autoclave & fermenters
- 3) Most of top entry vessel types.

#### **FEATURES**

- · Balanced externally mounted.
- Robust design.
- Easy to install & most reliable.
- · Seal faces of dry running capability.





## 518 - SPLIT TYPE

#### **SPECIFICATION**

Shaft Diameter (dl)	16 to 100 mm	
Pressure (pr)	un-10,bal-20 bar	
Temperature (t)	(-) 50 to 260Deg C	
Velocity (v)	26m/s	
Axial Moment	(+) 0.5mm	

#### **FEATURES**

- · Balanced Type.
- Compact and easy to install

#### **APPLICATION**

- 1) Agitators & mixers condensate, pyre stock to sludge & river water.
- 2) Surface vessels.

## 519 - BOILER FEED PUMP SEAL

#### **SPECIFICATION**

**APPLICATION** 

Shaft Diameter (dl)	16 to 100 mm	
Pressure (pr)	25 bar	
Temperature (t)	450 Deg C	
Velocity (v)	26m/s	
Axial Moment	(+) 0.5mm	

## **FEATURES**

- Single Seal
- Balanced
- Pumping Screw
- Independent on direction of rotation
- · Cartridge Design.

# 1) Boiler feed water system.

- 2) Boiler circulation system.
- 3) Crude water injection
- 4) Miscellaneous services
- 5) Products pipeline.
- 6) Condensate system





#### **SPECIFICATION**



Shaft Diameter (dl)	20 bar	
Pressure (pr)		
Temperature (t)		
Velocity (v)		
Axial Moment	(+) 1mm to (+) 1.5mm	

#### **APPLICATION**

- 1) Used for pressure screens.
- 2) High viscous liquids.
- 3) Independent on direction of rotation.
- 4) Spring product protected.
- 5) Easy to install.



#### 529 - DOUBLE CARTRIDGE ASSEMBLY

#### **FEATURES**

- Wave / Multi spring,
   Gland plate mounted spring
- Balanced
- Independent on direction of rotation
- · Spring product protected

#### **APPLICATION**

- 1) Suitable for operating in highly viscous fluids or with fluids containing solid particles
- 2) Pulp & paper industry
- 3) Pharmaceutical Industry
- 4) Petroleum Industry
- 5) Chemical Industry

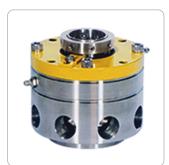
## 556 - AGITATOR SEAL SINGLE WITH BEARING

#### **SPECIFICATION**

Shaft Diameter (dl)	25 to 150 mm	
Pressure (pr) 10 bar		
Temperature (t)	(-) 3 TO 300 Deg C	
Velocity (v)	25 m/s	
Axial Moment	(+) 1mm	

#### **FEATURES**

- · Unbalanced, Inside & Outside Mounted
- Compact Design
- · Easy To install
- Independent of direction of rotation



#### **APPLICATION**

- 1) Chemicals.
- 4) Solvents, Fertilizers
- 2) Petrochemicals plant
- 5) Pharmaceuticals Industries.
- 3) Oil Refineries

## 558 - AGITATOR DOUBLE BEARING SEAL



#### **SPECIFICATION**

Shaft Diameter (dl)	25 to 150 mm	
Pressure (pr)	10 bar	
Temperature (t)	(-) 3 TO 300 Deg C	
Velocity (v)	25 m/s	
Axial Moment (+) 1mm		

#### **FEATURES**

- · Double seal with bearing
- · Balanced /Unbalanced Seal
- · Cartridge type seal
- · Cooling jacket for high temperature.
- · With bearing seal improve seal life.

#### **APPLICATION**

- 1) Slurry liquids consisting solid particles pharmaceuticals industries and chemical plants.
- 2) Oil and gas paper and pulps
- 3) Food and Breweries

## **561 - ROTARY UNOIN**

#### **FEATURES**

- · Automobiles industries.
- · Polyfilm industries
- · Pharmaceutical industries
- Pulp & paper Industry

#### **SPECIFICATION**

Shaft Diameter (dl)	1⁄4"-4' mm	
Pressure (pr)	Water And Steam 10 Ba	
Temperature (t)	(-) 30 TO 300 Deg C	
Velocity (v)	25 m/s	
Axial Moment	(+) 1mm	

### **APPLICATION**

- 1) Capable to contain very high pressure.
- 2) With balanced mechanical seal
- Options: with bearing /
   Without bearing rotary union

## **THERMOSYPHONE**



#### **APPLICATION**

Thermosiphoning is used for circulation of liquid and volatile gases heating and cooling applications such as heat pumps, water heaters, boilers and furnaces.

## **RUBBER BELLOW SEAL**









(CRANE TYPE)

(OPEN TYPE)

(CLOSE TYPE)

(CONICAL TYPE)

#### **SPECIFICATION**

Shaft Diameter (dl)	6 to 60 mm	
Pressure (pr)	6 bar	
Temperature (t)	(-)20 to 150 deg.C	
Velocity (v)	20 m/s	
Axial Moment	(±)0.8mm	

### **APPLICATIONS**

- 1. Mass-produced cold water forms of non critical applications.
- 2. Centrifugal pumps plastic immersion Firms vortex vacuum pumps.
- 3. Reduction gear boxes for cane carrier, rack carrier, bagasse Elevators crystallizer and cane gearbox.
- 4. Compressor for refrigeration and ammonia and freon gases.

## **SEALS FOR DISTILLERIES AND DAIRIES**









FM-III, GM-1, FM05

HMT PUMP

FLFN 50, 75, 100

LKH 10 & LKH 20

## **SPECIFICATION**

Shaft Diameter (dl)	6 to 60 mm	
Pressure (pr)	6 bar	
Temperature (t)	(-)20 to 150 deg.C	
Velocity (v)	20 m/s	
Axial Moment	(±)0.8mm	

#### **APPLICATIONS**

Mass Produced Cold Water Pumps for Non-critical applications Centrifugal Pumps, Plastic immersion Pumps, Vortex Vacuum Pumps, Alcohol Transfer, Wash pumps, milk Transfer hot Water, DM water etc. Pumps



# MECHANICAL SEAL FAILURE ROOT CAUSES

Sr No	Symptoms	Possible Causes	Corrective Procedure
1	O' Ring Burnout & Smoke come out.	Stationary, Rotary rotates from its original Position.	Check anti pin/spring hook     or rotation pin & provide it.     Check locking of rotary assembly.
2	O' Ring Hard, flat or cracked.	High temperature or chemical attack.	Reduce heat or check MOC of elastomer feasibility
3	O' Ring flat.	Too high temperature.	Reduce temp. also check 'O' Ring groove dimensions.
4	O' Ring Wom- out, corrosion, reaction pitting.	Elastomer material not suit to given application.	Change MOC of elastomer. Ask to seal manufacturer.
5	O' Ring Cuts or Nicks	Sharp edges to shaft / sleeve.	Provide champfer & smooth surface to shaft / sleeve.
6	O' Ring Swollen	Chemical attack.	Change MOC of elastomer / Check MOC feasibility.
7	Spring Break / Fatigue	Improper pump alignment.	Realignment of pump.
8	Spring Jam	Flushing connection or plan 11 not given	Given flushing connection or plan-11 to pump.     Check spring seal free length & operating length.
9	Spring less tension	High temperature or chemical attack	Reduce temperature or change cooling plan.
10	Rotary Face / Stationary face Burn or found break	Dry running of mechanical seal.     Overheating of mechanical seal.	<ol> <li>Check, Don't run pump dry.</li> <li>Provide cooling connection to gland plate.</li> </ol>
11	Rotary Face /Stationary face Burn or found break	Dry running of mechanical seal.     Overheating of mechanical seal.	Check, Don't run pump dry.     Provide cooling connection to gland plate.
12	Rotary Face /Stationary face Burn or found break	Flushing connection or plan 11 not given	Given flushing connection or provided Plan-11 to pump seal.
13	Rotary Face / Stationary Face break	Mishandling of seal while installation     Bearing Failure.     Extra pressure in rotary assembly	Take care while installation.     Check bearing.     Check operating length -     Installation Dimension.
14	Sleeve Damage.	Bearing Failure Grub screw or lock pin loose on sleeve & seal rotates from its original position	Check Bearing.     Check Locking of seal & tight it Check sleeve key.
15	Sleeve Damage.	Material not suitable for application	Check Seal Manufacturer for other Material.     Check material feasibility.

## CERTIFICATES





#### HINDUSTAN LEVER LIMITED

#### To Whom It May Concern:

We sincerely thank Maruti Seals (P) Limited for being supplying high quality seals for our centrifugal pumps, ammonia lube pumps, screw compressors and reciprocatory compressors. They have been our suppliers for the last six years and have provided excellent service and quality.

#### KIRLOSKAR BROTHERS LIMITED

To M/s Maruti Seals (P)Ltd., D-1/38 Ambad, Nashik - 440 010.



KIRLOSKARVADI

Sub : Approved drawing No .5031100UB -CRTG/KPD.

Sending herewith above drg. (10 pages) for your ready reference. These drawings are already APPROVED

by KEL Kirloskarvadi.



#### TO WHOM SOEVER IT MAY CONCERN

This is to Certify that M/s Maruti Seals (P) Ltd., Nashik supplied us "Maruti" Brand Mechanical Seals from last 10 years. This seals gives excellent statisfactory performance and the company have giving consentrated services after sales for seal installation also.



#### हिंन्दुस्तान पेट्रोलियम कॉपॉरेशन लिमिटेड

HINDUSTAN PETROLEUM CORPORATION LIMITED

M/s Maruti Seals (P) Ltd Plot No D-1/38, MIDC Ambad, Nashik – 422 010

SUB: SUPPLY OF MECHANICAL SEAL FOR GREAVES MAKE WATER PUMP.

Ref: YOUR OUOTATION NO MSPLO/032/2003/KRP DATED 28/04/2003.

With reference to your above offer, (Copy Enclosed), we are placing order on you





#### TO WHOM SOEVER IT MAY CONCERN

We are a regular customer of M/s. Maruti Sales (P) Ltd. Since last six years. They are supplying us Maruti Brand Mechanical seals, shaft, sleeves and spares and various types of centrifugal pumps, compressors etc.

We found them best in quality and service

Thanking you,

FOR RAYMOND STEEL



Gram: NIFAD SUGAR Bhaucahebnagar Phone: 43524/43525/43532 (02550 FAX: 02550-43671

NIPHAD SAHAKARI SAKHAR KARKHANA LTD; PIMPLAS.

Post -- BHAUSAHEB NAGAR Taluka : Niphad, Dist : Nashik (M. S.) Pin Code No. 422301

ENGG/99-2000/ No 2 2 4 7

CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that M/s.MARUTI
ENGINEERS INDUSTRIES, Nasik Who has supplied
us "MARUTI" Brand Mechanical Seals since
last Seven years for our various pumps.
These seals give excellent satisfactory
performance and company have concentrated
after sales services for seal installation
also.



Shree Kamrej Vibhag Sahakari Khand Udyog Mandli Ltd.

શ્રી કામરેજ વિભાગ સહકારી ખાંડ ઉદ્યોગ મંડળી લી.

: નેશનલ હાઇવે નં. ૮, મું. નવી પારડી, પીન કોડ ન. ૩૯૪૧૫૦, તા. કામરેજ, ઝુ. સુરત (ગુજર કોન નં. : (૦૨૬૨૧) (ઓ) ૨૯૦૩૩૫ મો.: ૯૦૯૯૯૪૨૦૩૯

Ref.No: KSF/CE/CERT/2017-18/ 2-7/63

## CERTIFICATE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that M/s. MARUTI SEALS PVT LTD, Nashik has supplied us

These Seals gives excellent satisfactory performance and also they have concentrated on after sales services for Seal installation also.



E.I.D. - Parry (India) Limited

#### CERTIFICATE

To Whom So Ever It May Concern

These Is So Certify M/S MARUTI SEALS PVT.LTD. Nasik Who Has Supplied Us "MARUTI" Brand Mechanical Seals For Our Various Pumps.

These Seals Give Excellent Satisfactory Performance and Also Company Have Concentrated After Sales and Services For Seal Installation Also.The quality workmen ship of the seal is also excellent



#### CERTIFICATE

#### TO WHOM SO EVER IT MAY CONCERN

This is to certify that M/S Maruti seals Pvt. Ltd. Nashik supplied Brand Mechanical Seals From last from 5 years. This Seals gives excellent satisfactory performance and the company have giving consentrated services after sales for seals installation also.

SULA



#### TO WHOM SO EVER IT MAY CONCERN

This is to Certify that Mys Manuti Seals (P) Ltd., D-1/38, MIDC, AMBAD, Nashik is supplying us Mechanical Seals for our various Reactors, Pumps, Mixer used in manufacturing Chemical, Pharmaceutical companies.

We found them prompt in service and performance. Their Seals are found satisfactory and durable with good quality materials.

For (Company Name)



## **BRANDS WE HAVE WORKED WITH...**

























































AND MANY MORE.....





The Brand In Sealing Technology



# MARUTI SEALS (P) LTD.

**An ISO 9001-2015 Company** 

MANUFACTURER & EXPORTER
OF MECHANICAL SEALS AND PUMP SPARES

Factory: Plot No. D-1/38, Near XLO Point, M.I.D.C.,

Ambad, Nashik- 422010, Maharashtra, (India.)

Phone: +91 0253 - 2947331 / 32

Cell : +91 8888512306, +91 7030753130, +91 7798421230

Email : marutiseals@gmail.com, sales@marutisealsindia.com,

info@marutisealsindia.com

