





# **Super** MECHANICAL SEAL PVT. LTD.®

An ISO 9001-2015 Certified Company

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# Think Safety \* Think Super

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Gandhidham:

Marketing Engineer

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Near Valia Chowkadi, G.I.D.C., Ankleshwar - 393 002 (Gujarat) **Mr. S. N. Mishra** - 09825304622

# Ahmedabad:

23, Santdev Tenament, Jamfalwadi, C.T.M. Ahmedabad - 382 449 (Gujarat) Mr. K. P. Singh - 09825304621 Area Manager

# Vadodara::

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Mr. T. P. Tiwari Chairman

Super Mechanical Seal Pvt. Ltd. an ISO 9001:2015 certified Company has always strived to present the latest "Seal Technology" at Unbelievable Price and great Value Added Services to the people we treasure the most like you.

We take this opportunity to introduce ourselves as a leading organization having more than three decades of experience in the field of designing and manufacturing of International Quality Mechanical Seals with Proven Performance Capability meeting the requirements of International Market.

SUPER's high quality oriented "Mechanical Seals" are suitably designed to fit into every Rotating Equipment like Pumps, Agitators, Mixers, Blowers Compressors etc. Catering the needs of virtually all segments of Industries such as - Chemicals, Fertilizers, Petrochemicals, Refineries, Power Stations, Solvent Extraction Plants, Textile & Sugar Industries, handling all kinds of fluids like Acids, Chemicals, Hazardous Corrosive Slurries etc. operating under different temperature and pressure conditions.

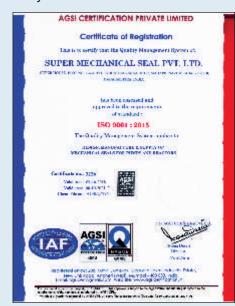
We have highly qualified and technically trained Engineers in Design & Development as well as Quality

Control Department engaged in continuous development to ensure the best quality and to keep the system updated to meet the changing trends of the Global Market.

Our Company has a well established Ultra-Modern Manufacturing Plant at Navi Mumbai, India having 12000 Sq. Ft. operational area with enough spare capacity for enormous future expansion and to provide a continuous innovative product with Total Customer Satisfaction.

We are continuously exporting huge quantity of Mechanical Seals in Gulf countries and hence to meet their service requirement and cope-up the market for new materials, we have set up our full fledged Mechanical Seal manufacturing company at Al-Jubail, Saudi Arabia to provide services to our clients all they need and a little more.

We have created new market by replacing our competitors of International Brands in many companies with our most efficiently designed seals which provide total solution to our esteemed clients with matchless consistency and superior performance. For your any leakage problem contact us at our service centre as convenient to you.





Mr. & Mrs. T. P. Tiwari receiving Trophy from Honourable Governor Dr. A. R. Kidwai



Design Department



**CNC Shop** 



Lapping Department



Agitator Seal Testing Machine



# API STANDARD 682 FOURTH EDITION SUPER MECHANICAL SEAL RANGE

### SA 1190

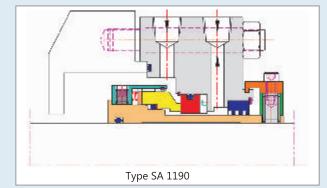
# Cartridge single Mechanical Seals Arrangement -1

Size : 1" to 4"

Pressure : Vacuum to 40Kg/cm2

Temp : -40° to 200°C Configuration : 1CW - FX

1 CW-FX, Contacting Single wet seal With a Fixed throttle bushing.

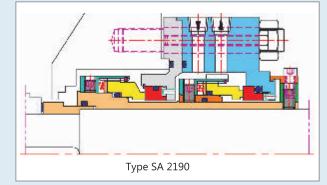


### SA 2190

### Cartridge Dual Mechanical Seals Arrangement -2

Size : 1" to 4"

Pressure : Vacuum to 40Kg/cm2
Temp : -40° to 200°C
2 CW-CW, Contacting wet seals in a face to back Configuration tandem.



### SA 3290

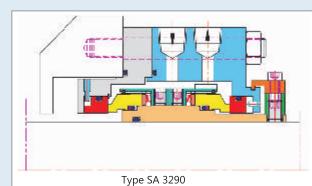
# Cartridge Dual Mechanical Seals Arrangement -3

Size : 1" to 4"

Pressure : Vacuum to 40Kg/cm2

Temp : -40° to 200°C 3 CW-BB, Contacting wet seals in a

back to back Configuration.



# SA 3390

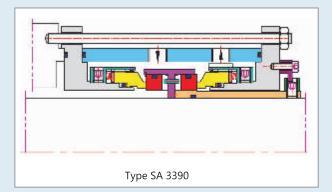
# Cartridge Dual Mechanical Seals Arrangement -3

Size : 1" to 4"

Pressure : Vacuum to 40Kg/cm2

Temp : -40° to 200°C 3 CW-FF, Contacting wet seals in a

face to face Configuration.



# **API Standard 682**

The American Petroleum Institute (API) is the primary trade association representing the oil and natural gas industry in the United States.

The latest API specifications set strict standards for the design and supply of mechanical seals. This rotating equipment standard is adopted by most refineries, petrochemical and offshore platforms around the world.



# 9101 Unbalanced Multi Springs Seal In Retainer with 'O'ring 9111 Unbalanced Multi Springs Seal In Retainer With Wedge Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

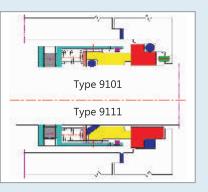
Pressure : up to 8 Kg/cm2

Temp : -40° to 200°C

Application : Petrochemicals, General Chemicals,

Oil Refineries, Food and Beverage

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



# 9201 Unbalanced Multi Springs Seal Lug Drive With 'O'ring 9211 Unbalanced Multi Springs Seal Lug Drive With Wedge

Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 8 Kg/cm2

Temp : -40° to 150°C

Application : Petrochemicals

General Chemicals

Oil Refineries

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.

Type 9201
Type 9211



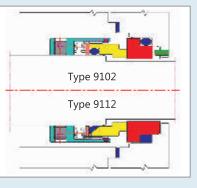
# 9102 Balanced Multi Springs Seal In Retainer With 'O'ring 9112 Balanced Multi Springs Seal In Retainer With Wedge Independent Direction of Rotation (Inside Mounted)

Size : 1" to 4"

Pressure : up to 40Kg/cm2
Temp : -40° to 200°C
Application : Petrochemicals,

General Chemicals, Oil Refineries, Food and Beverage

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



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# **Balanced Multi Springs Slurry Seal**

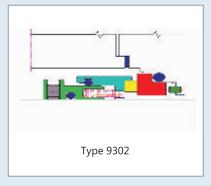
Independent Direction of Rotation (Inside Mounted)

Size : 1" to 4"

Pressure : up to 25Kg/cm2
Temp : -40° to 150°C
Application : Petrochemicals,

Mining Industries, Chemicals,
Oil Refineries, Food and Beverage

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.







# Balanced Multi Springs Seal With Inbuilt Sleeve 'O'ring Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 40Kg/cm2

Temp : -40° to 200°C

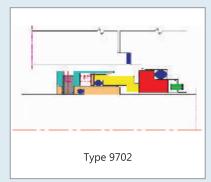
Application : Petrochemicals, General Chemicals,

Oil Refineries, Food and Beverage

 $\hbox{M.O.C. of Secondary Seal According to Fluid \& Temp.}\\$ 

Various Hard & Soft Faces As Per Liquid.

No Need to Maintain a Step on Sleeve for balancing.





# Reverse Balanced Multi Springs Seal Independent Direction of Rotation (Outside Mounted)

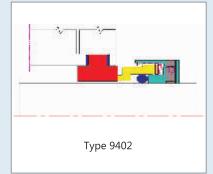
Size : 0.5" to 4"

Pressure : vacuum to 25Kg/cm2
Temp : -40° to 200°C

Application : Corrosive Chemicals,

Hydrocarbon, Abrasive Services

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.





# Unbalanced Open Single Spring Seal With 'O'Ring Single Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 8Kg/cm2

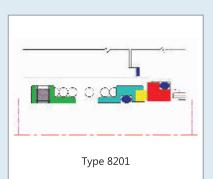
Temp : -40° to 150°C

Application : Petrochemicals,

: Petrochemicals, General Chemicals,

> Oil Refineries, Suspended Particles, Slurry

Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.





# Unbalanced Open Single Spring Seal With Split Face Single Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 8Kg/cm2

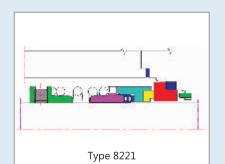
Temp : -40° to 150°C

Application : Petrochemicals,

Petrochemicals, General Chemicals,

Suspended Particles, Slurry, Mild Corrosive & Slurry Services

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



# 5202 CR Dry Running Seal Super Style

For Top Entry Agitator, Vessels and mixers Single Seal, Independent of Direction of Rotation

Size : 1" to 8"

Pressure : up to 8Kg/cm2

Temp : Amb to 120°C

Speed : 400 RPM.

Application : Food Products and its Vapors

Petrochemicals Products & its Vapors
Light Hydrocarbons and its Vapors

MOC. SS316, SS304, ALLOY-20, Monel, Hastelloy-C, Titanium.



# 5202 DB H Wet Running Seal Super Style

For Top Entry Agitator, Vessels and mixers Single Seal, Independent of Direction of Rotation

Size : 1" to 8"

Pressure : up to 8Kg/cm2
Temp : Amb to 120°C
Speed : 400 RPM.

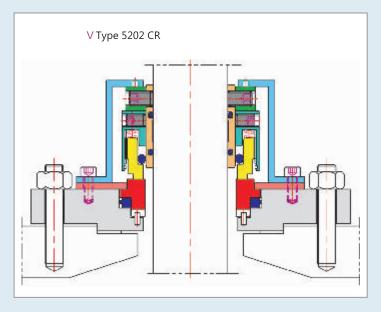
Application : Food Products and its Vapors

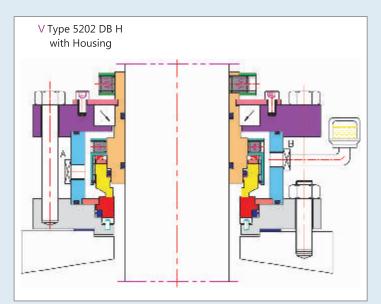
Petrochemicals Products & its Vapors Light Hydrocarbons and its Vapors

MOC. SS316, SS304, ALLOY-20, Monel, Hastelloy-C, Titanium.

This is a single multi spring externally mounted, reverse balanced seal specifically designed for agitator and vessels.

The 5202 seal design can be applied to all top entry agitator shafts, where the seal chamber is subjected only to gas or vapors. The dry running design eliminates the need for costly buffer fluid systems and prevents contamination of the product. The out side seal design permits easy installation and inspection whether mounted directly on the shaft or mounted as a cartridge.





The design specifically is engineered to accommodate the run-out condition, up to 0.5mm. large clearance between rotation shaft / sleeve and mating ring permits higher deflection of the shaft.

5202 DB H Wet Running Seals are used with non pressurized barrier fluid preferably clean soft water because of its good heat transfer qualities fluids like oil, hydrocadon, solvents etc. can also be used as buffer fluid by considering the corrosion resistance of wetted parts and compatibility with main media to be sealed.



5101/5101 Unbalanced Double Back to Back With 'O'Ring Agitator seal For Top Entry

5111/5111 Unbalanced Double Back to Back With Wedge Agitator seal For Top Entry

5102/5102 Balanced Double Back to Back With 'O'Ring Agitator seal For Top Entry

5112/5112 Balanced Back to Back With Wedge Agitator seal For Top Entry Bottom Entry Seals Are Also Available

Size : 1" to 8"

Pressure : up to 8Kg/cm2 (Unbalanced)

Pressure : up to 35Kg/cm2 (Balanced)

Temp : -40° to 200°C

Application : Chemicals and its Vapors

Petrochemicals and its Vapors

Light Hydrocarbons and its Vapors

MOC. SS316, SS304, ALLOY-20, Monel



### 5411/5412 Unbalanced / Balanced Double Seal Super Style

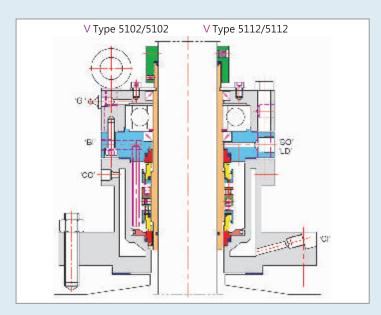
For Top Entry Glass Lined Reactor

Size : 1" to 8"

Pressure : Vacuum to 8Kg/cm2
Temp : Amb to 120°C

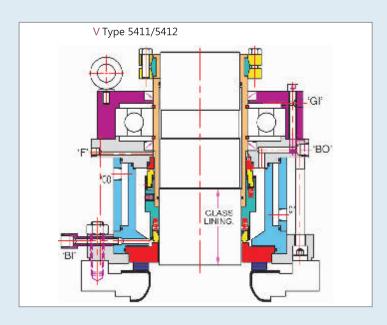
Application : All Acids Except HF & Alkalis up to 100°C

MOC. SS316, SS304, Carbon Steel Hastelloy - C



These Cartridge Seal units are designed for Mixer, Agitators and Glass Lined Reactors. The heavy duty construction of the 50 series provides long seal life and excellent repairability. The design incorporates bearing located very close to seal. The design specifically is engineered to accommodate the run-out conditions, up to 0.5mm. large clearance between rotating shaft / sleeve and mating ring permits higher deflection of the shaft.

For higher temperature application, the seal assembly has got jacketed chamber to circulate chilled water to bring down the temperature. Also normally chilled / plain water is passed through the cooling coll of Thermosyphon to bring down the temperature of compatible barrier fluid circulated in seal housing to maintain the continuous cooling. Bottom portion of seal housing is also designed with heat trapping jacketed cooling to reduce the temperature around the bottom seal face.





# Unbalanced Open Single Spring Seal Bi-Directional Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 8Kg/cm2 Temp : -40° to 150°C

Application : Petrochemicals, General Chemicals,

Suspended Particles.

Mild Corrosive & Slurry Services

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.

\*Also Available Balance Seal

Type 8202, 8222





# Unbalanced Conical Spring Seal With 'O'Ring Single Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

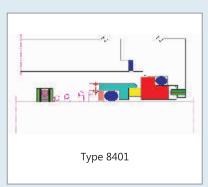
Pressure : up to 8Kg/cm2
Temp : -40° to 150°C
Application : Petrochemicals,

General Chemicals, Oil Refineries.

Suspended Particles, Slurry

 $M.O.C.\ of\ Secondary\ Seal\ According\ to\ Fluid\ \&\ Temp.$ 

Various Hard & Soft Faces as Per Liquid.





# 8101 Unbalanced Single Spring Seal In Retainer With 'O'ring 8111 Unbalanced Single Spring Seal In Retainer With Wedge

Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 8Kg/cm2
Temp : -40° to 200°C

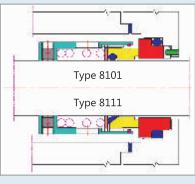
Application : Petrochemicals, General Chemicals,

Oil Refineries, Suspended Particles,

Mild Slurry Services

M.O.C. of Secondary Seal According to Fluid & Temp.

Various Hard & Soft Faces As Per Liquid.





# 8102 Balanced Single Spring Seal In Retainer With 'O'ring 8112 Balanced Single Spring Seal In Retainer With Wedge

Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4"

Pressure : up to 40Kg/cm2
Temp : -40° to 200°C

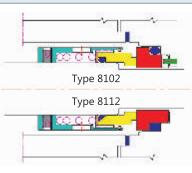
Application : Petrochemicals, General Chemicals,

Oil Refineries, Suspended Particles,

Mild Slurry Services

M.O.C. of Secondary Seal According to Fluid & Temp.

Various Hard & Soft Faces As Per Liquid.







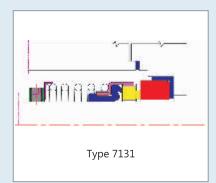
### **Unbalanced Rubber Bellow Seal With Split Face**

Single Direction of Rotation (Inside Mounted)

Size : 0.5" to 4" Pressure : up to 8Kg/cm2 : -40° to 150°C

: Water, Mild Chemicals, Oil Application M.O.C. of Secondary Seal According to Fluid & Temp.

Various Hard & Soft Faces As Per Liquid.





### Unbalanced Rubber Bellow Seal With Split Face

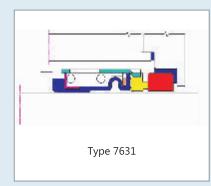
: 0.5" to 4" Size Pressure : up to 8Kg/cm2 Temp : -40° to 150°C

: Water, Mild Chemicals, Oil Application M.O.C. of Secondary Seal According to Fluid & Temp.

Various Hard & Soft Faces As Per Liquid.

### \*Also Available Seal

Type 7431, 7231 (Close Type), 7331 (Open Type)





# **Teflon Bellow Seal With Combined Face**

Independent Direction of Rotation (Outside Mounted)

Size : 0.5" to 4" Pressure : up to 3.5Kg/cm2 : -40° to 110°C Temp Application : Chemicals

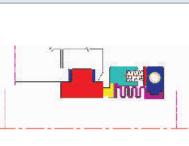
Aggressive Corrosive Application

Various Faces SiCFT, GFT, Ceramic.

# \*Also Available

Type 6242, Teflon Bellow Seal With Split Face

Type 6342, Teflon Bellow Single Spring Seal With Split Face





# Metal Bellow Balanced Seal With Grafoil Packing Independent Direction of Rotation (Inside Mounted)

Size : 0.5" to 4" Pressure : up to 15Kg/cm2 : -75° to 450°C Temp

Application Petrochemicals,

General Chemicals, Oil Refineries, Corrosive and Abrasive

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.

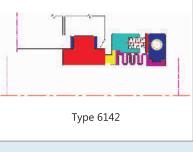
# \*Also Available Seal

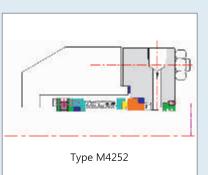
Type M4202, Metal Bellow Seal With 'O' Ring

Type M4352, Metal Bellow Seal With Grafoil Packing (Sleeve Type)

Type M4452, Metal Bellow Seal With Grafoil Packing (Bellow as

Stationary)









# **Balanced Multi Springs Slurry Seal**

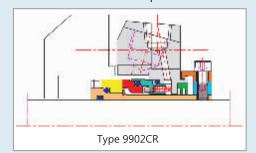
Independent Direction of Rotation (Cartridge)

: 0.5" to 4" Size Pressure up to 25Kg/cm2 -40° to 200°C Temp

Petrochemicals, General Chemicals, Application

Waste Water, Mining Industries Pulp Sludge Abrasive Services

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



# **Balanced Multi Springs Slurry Seal**

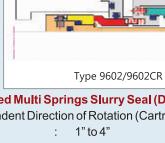
Independent Direction of Rotation (Cartridge)

Size : 1" to 4" Pressure up to 25Kg/cm2 -40° to 200°C Temp

: Petrochemicals, General Chemicals, Application

> Waste Water, Mining Industries Pulp Sludge Abrasive Services

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



# Balanced Multi Springs Slurry Seal (DOUBLE SEAL)

Independent Direction of Rotation (Cartridge)

Size

Pressure up to 25Kg/cm2 -40° to 200°C Temp

Application Petrochemicals, General Chemicals,

Toxic Liquids, Hazardous Liquids,

Suspended Abrasive, Corrosive Liquids

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



# Balanced Multi Springs Slurry Seal (DOUBLE SEAL)

Independent Direction of Rotation (Cartridge)

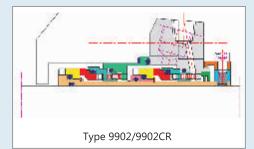
Size : 1" to 4"

Pressure : up to 25Kg/cm2 : -40° to 200°C Temp

Toxic Liquids, Hazardous Liquids, Application

Suspended Abrasive, Corrosive Liquids

M.O.C. of Secondary Seal According to Fluid & Temp. Various Hard & Soft Faces As Per Liquid.



# **Balanced Multi Springs Slurry Seal (DOUBLE SEAL)**

Independent Direction of Rotation (Cartridge)

Size : 1" to 4"

Pressure : up to 25Kg/cm2 -40° to 200°C Temp

Application Toxic Liquids, Hazardous Liquids,

Suspended Abrasive, Corrosive Liquids

M.O.C. of Secondary Seal According to Fluid & Temp.

Various Hard & Soft Faces As Per Liquid

