

# **MECHANICAL SEALS**



### **WELCOME & INTRODUCTION**

Firstly, welcome and thank you for your interest in our Company.

SUPER PROOF is one of the leading designers and manufacturers of world-class Mechanical Seal for Pumps, Compressors, Agitators, Mixers and Reactors. We manufacture mechanical seal according to international standards and also conforms to EN 12756 (DIN 24960) and ISO 3069 with same design and fittings. We have computer aided design facility for designing and developing mechanical seal of interest to our customers.

SUPER PROOF feels its strength especially in fields where specific innovative solutions for sealing with mechanical seal systems are demanded.

At SUPER PROOF Engineers, "We give the Total Customer Satisfaction - High Quality Products, 24/7 Technical Support, and Rush Delivery of standard products."



**QUALITY** To ensure long life of product, we use the best quality raw materials coming from INDIA and different suppliers around the world. Raw materials, parts and complete assemblies are inspected by using latest instruments in all stages to prevent any lapse in quality. To conform to the strict quality control, our customized mechanical seals undergo pressure and leak testing before being sent out to our customers.

**COST** - SUPER PROOF products cost cheaper than other manufacturer or mechanical seal distributor. Through modular design techniques, we minimized production cost thus lowering the prices of our products.

**DELIVERY** - We have sufficient personnel and production facilities in order to support immediate requirements and rush deliveries of standard and special design seals according to the needs of our customers.

**PERFORMANCE** - Based on customer evaluations, we are able to assess that our products performed equally or even superior compared to expensive and well-known mechanical seals brand.

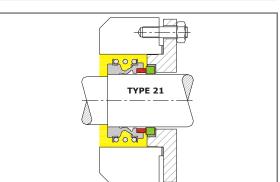
**RESEARCH & DEVELOPMENT:** The SUPER PROOF Policy for Research & Development is a simple thinktank for the analysis of local and global advanced sealing solutions, with the ultimate objective of offering comprehensive solutions to difficult applications.

**WARRANTY** - Due to strict quality control from start of production until shipment, our products are warranted against defects and workmanship. We at SUPER PROOF are able to guarantee our customers reliability and back-up in providing leak proof solutions.

**REPAIR & SERVICE:** With a group of experienced and skilled service team and appropriate machines and equipments, our clients can have all their mechanical seals repaired in one location. We are able to evaluate worn-out seals and to refurbish quickly and economically.

We will also ensure that we consider all aspects of the seal condition and operation history to determine the root cause of any problems. We offer our support in the assembly and start-up of more critical systems.







#### **Features**

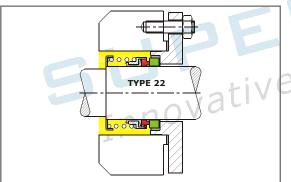
Unbalanced Long Elastomer Bellows Independent of direction of rotation

### **Operating Parameters:**

Size Range : 10 to 100mm Pressure : 10 kg/cm<sup>2</sup>

Temperature : -20°C to +120°C Speed : Up to 10 m/s





# **Super Proof Type 22**

#### **Features**

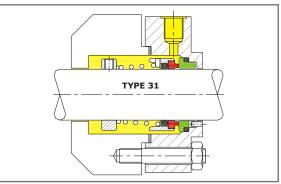
Unbalanced
Short Elastomer Bellows
Independent of direction of rotation

### **Operating Parameters:**

Size Range : 10 to 100mm Pressure : 10 kg/cm²

Temperature : -20°C to +120°C Speed : Up to 10 m/s





# **Super Proof Type 31**

### **Features**

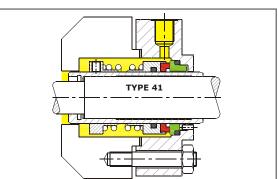
Unbalanced Conical spring Dependent of direction of rotation O-Ring as a Secondary Seal

### **Operating Parameters:**

Size Range : 12 to 80mm Pressure : 10 kg/cm²

Temperature : -20°C to +180°C Speed : Up to 10 m/s







#### **Features**

Unbalanced
Parallel spring
Independent of direction of rotation
O-Ring as a Secondary Seal

### **Operating Parameters:**

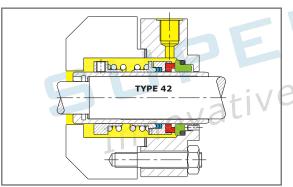
Size Range : 12 to 80mm

Pressure : 10 kg/cm²

Temperature : -20°C to +180°C

Speed : Up to 10 m/s





# **Super Proof Type 42**

#### **Features**

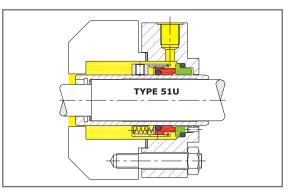
Unbalanced
Parallel spring
Independent of direction of rotation
PTFE Packing as a Secondary Seal

### **Operating Parameters:**

Size Range : 12 to 80mm Pressure : 10 kg/cm²

Temperature : -20°C to +180°C Speed : Up to 10 m/s





# **Super Proof Type 51U**

#### **Features**

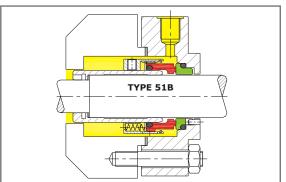
Unbalanced Multiple springs Independent of direction of rotation O-Ring as a Secondary Seal

### **Operating Parameters**

Size Range : 14 to 200mm Pressure : 12 kg/cm<sup>2</sup>

Temperature : -25°C to +250°C Speed : Up to 20 m/s







# **Super Proof Type 51B**

#### **Features**

Balanced Multiple springs Independent of direction of rotation O-Ring as a Secondary Seal

### **Operating Parameters:**

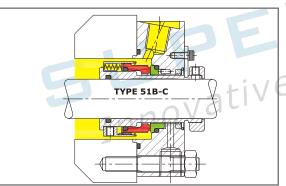
Size Range : 18 to 200mm

Pressure : 25 kg/cm²

Temperature : -25°C to +250°C

Speed : 20 m/s





# **Super Proof Type 51BC**

#### **Features**

Balanced Seal
Cartridge Construction
Multiple springs
Independent of direction of rotation
O-Ring as a Secondary Seal

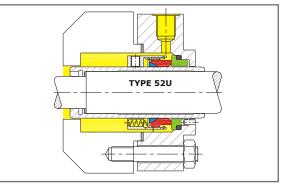
### **Operating Parameters:**

Size Range : 18 to 200mm Pressure : 25 kg/cm<sup>2</sup>

Temperature : -25°C to +250°C

Speed : 20 m/s





# **Super Proof Type 52U**

#### **Features**

Unbalanced Single Seal Multiple springs Independent of direction of rotation PTFE Wedge as a Secondary Seal

### **Operating Parameters:**

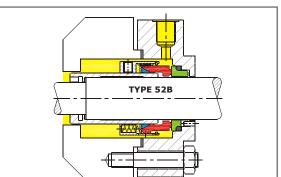
Size Range : 14 to 200mm

Pressure : 12 kg/cm²

Temperature : -25°C to +250°C

Temperature : -25°C to +250°C Speed : Up to 20 m/s







# **Super Proof Type 52B**

#### **Features**

Balanced Multiple springs Independent of direction of rotation PTFE Wedge as a Secondary Seal

### **Operating Parameters**

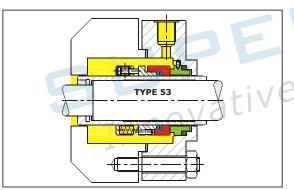
Size Range : 18 to 200mm

Pressure : 25 kg/cm²

Temperature : -25°C to +250°C

Speed : 20 m/s





# **Super Proof Type 53**

### **Features**

Unbalanced Single Seal
Multiple springs
Interchangeable Seal face
Independent of direction of rotation
PTFE Packings as a Secondary Seal

### **Operating Parameters:**

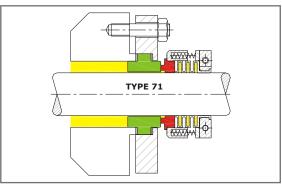
Size Range : 14 to 200mm

Pressure : 12 kg/cm²

Temperature : -25°C to +250°C

Speed : Up to 20 m/s





# **Super Proof Type 71**

### **Features**

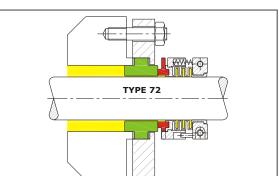
Unbalanced
Outside mounted
Teflon Bellow with GFT face
Product protected Springs
Independent of direction of rotation

### **Operating Parameters**

Size Range : 19 to 80mm Pressure : 5 kg/cm<sup>2</sup>

Temperature : -30°C to +120°C Speed : Up to 10 m/s







#### **Features**

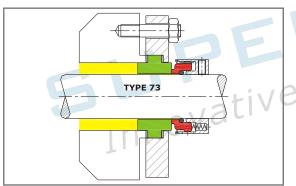
Unbalanced
Outside mounted
Teflon Bellow with replaceable SiC face
Product protected Springs
Independent of direction of rotation

### **Operating Parameters:**

Size Range : 19 to 80mm Pressure : 5 kg/cm²

Temperature : -30°C to +120°C Speed : Up to 10 m/s





# **Super Proof Type 73**

#### **Features**

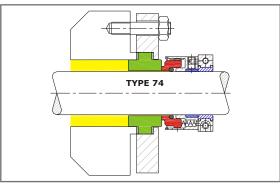
Reverse balanced
Outside mounted
Product protected Springs
Independent of direction of rotation

### **Operating Parameters:**

Size Range : 19 to 100mm Pressure : 8 kg/cm<sup>2</sup>

Temperature : -30°C to +120°C Speed : Up to 10 m/s





# **Super Proof Type 74**

### **Features**

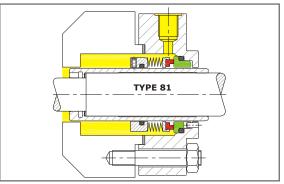
Outside mounted Product protected Springs Independent of direction of rotation Suitable for non metallic pump

### **Operating Parameters:**

Size Range : 19 to 100mm Pressure : 8 kg/cm<sup>2</sup>

Temperature : -30°C to +120°C Speed : Up to 10 m/s







#### **Features**

Balanced Metal Bellow Independent of direction of rotation O-Ring as a Secondary Seal

### **Operating Parameters:**

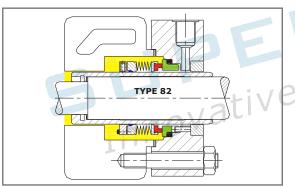
Size Range : 16 to 100mm

Pressure : 25 kg/cm²

Temperature : -40°C to +250°C

Speed : Up to 20 m/s





# **Super Proof Type 82**

#### **Features**

Balanced
Metal Bellow
Independent of direction of rotation
Grafoil as a Secondary Seal

### **Operating Parameters**

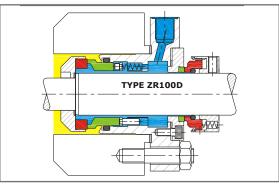
Size Range : 25 to 150mm

Pressure : 25 kg/cm<sup>2</sup>

Temperature : -20°C to ±400

Temperature : -20°C to +400°C Speed : Up to 20 m/s





# **Super Proof Type ZR 100D**

#### **Features**

Balanced Double Seal Product protected Springs Stationary spring design Independent of direction of rotation Suitable for liquids containing 20% Slurry O-Ring as a Secondary Seal

### **Operating Parameters**

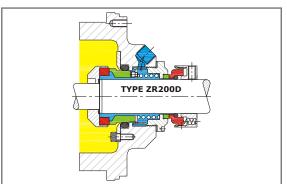
Size Range : 25 to 100mm

Pressure : 25 kg/cm²

Temperature : -25°C to +250°C

Speed : 20 m/s







### **Super Proof Type ZR 200D**

#### **Features**

Balanced Double Seal Product protected Springs

Stationary spring design 
Independent of direction of rotation

Supplied with Conical Stuffing box

Suitable for liquids containing 30-40% Slurry

O-Ring as a Secondary Seal

To be used as a replacement of Double Seal

(back to back arrangement)

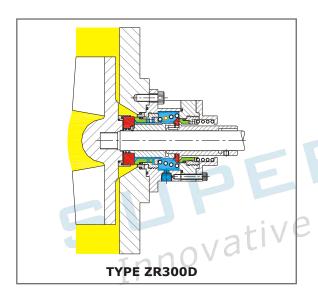
No need for costlier Thermosyphon system

### **Operating Parameters**

Size Range : 25 to 100mm Pressure : 25 kg/cm²

Temperature: -25°C to +250°C

Speed : 20 m/s



# **Super Proof Type ZR 300D**

#### **Features**

Balanced Double Seal Metal free contact seal Product protected Springs Stationary spring design Independent of direction of rotation Suitable for highly aggressive/corrosive media containing 30% Slurry

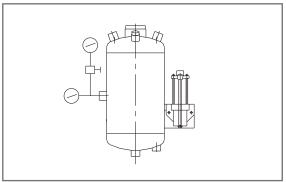
O-Ring as a Secondary Seal

#### **Operating Parameters**

Size Range : 25 to 100mm Pressure : 25 kg/cm² Temperature : -25°C to +250°C

Speed : 20 m/s





# **Thermosyphon System**

#### **Technical data**

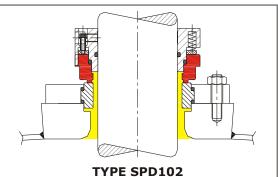
Contents of tank : 9 litres Operating Volume : 2 litres

Operating Pressure : 20 kg/cm<sup>2</sup>- **Type ST- 20LP** 

: 40 kg/cm<sup>2</sup>- Type ST- 20HP

Operating Temperature : -60°C to +200°C Cooling capacity normal circulation: 1.5kW Cooling capacity forced circulation : 4 kW







# **Super Proof Type SPD 102**

#### **Features:**

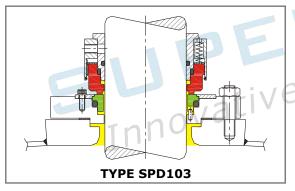
Single Seal
Balanced
Dry Running Seal
Positive Drive thru drive lugs
Independent of direction of rotation
O-Ring as a Secondary Seal

### **Operating Parameters:**

Size Range : 25 to 150mm

Pressure : Full Vacuum to 6 kg/cm²
Temperature : -40°C to +150°C
Speed : Up to 2 m/s





# **Super Proof Type SPD 103**

#### **Features**

Balanced

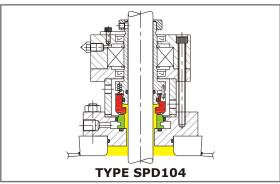
Dry Running Seal
Economic version
Independent of direction of rotation
O-Ring as a Secondary Seal

#### **Operating Parameters:**

Size Range : 25 to 150mm

Pressure : Full Vacuum to 6 kg/cm²
Temperature : -40°C to +150°C
Speed : Up to 2 m/s





# **Super Proof Type SPD 104**

#### **Features**

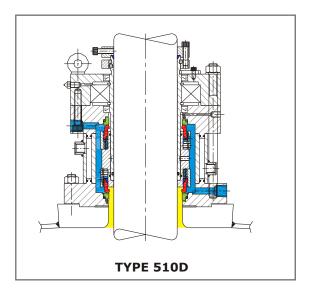
Balanced
Dry Running Seal
Specially for High Speed applications
Independent of direction of rotation
O-Ring as a Secondary Seal

### **Operating Parameters:**

Size Range : 25 to 150mm

Pressure : Full Vacuum to 6 kg/cm<sup>2</sup>
Temperature : -40°C to +150°C
Speed : Up to 5 m/s





# **Super Proof Type 510D**

#### **Features**

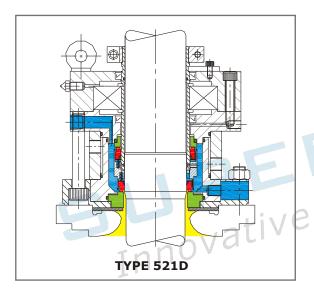
For Stainless Steel Vessels and Agitators Double Seal Independent of direction of rotation Cartridge unit O-Ring as a Secondary Seal

### **Operating Parameters:**

Size Range: 25 to 200mm

Pressure: Full Vacuum to 16 kg/cm<sup>2</sup> Temperature: -30°C to +200°C

Speed: Up to 2 m/s



# **Super Proof Type 521D**

#### **Features**

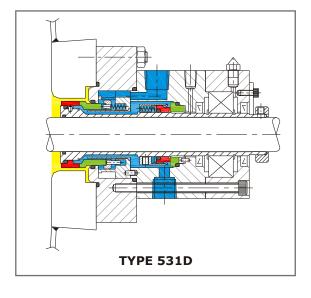
For Glass-lined Vessels
Double Seal
Independent of direction of rotation
Cartridge unit
PTFE packing as a Secondary Seal

#### **Operating Parameters:**

Size Range: 40 to 150mm

Pressure: Full Vacuum to 16 kg/cm<sup>2</sup> Temperature: -30°C to +180°C

Speed: Up to 2 m/s



# **Super Proof Type 531D**

#### **Features**

For Bottom & Side Entry Vessels Double Seal Independent of direction of rotation Cartridge unit O-Ring as a Secondary Seal

### **Operating Parameters:**

Size Range: 25 to 150mm

Pressure: Full Vacuum to 16 kg/cm<sup>2</sup> Temperature: -30°C to +200°C

Speed: Up to 5 m/s





Distributed by:	



# SUPER PROOF ENGINEERS

23, 2nd Floor, Shamroz Industrial Estate, Opp. Movie Star Cinema, Ram Mandir Road, Goregaon (W), Mumbai - 400 104. Tel: +91-22-2676 4504 Telefax: +91-22-2676 4505

E-mail: spsales@superproofseals.com • Website: www.superproofseals.com