

MECHANICAL SEALS



quality
is essential
to the success

A photograph of an industrial facility, likely a power plant or refinery, featuring two prominent tall smokestacks with blue and white horizontal stripes. The facility is situated near a body of water, and the scene is captured during twilight or dawn, with a soft orange and blue sky. The image is partially obscured by a large white rectangular area on the right side of the page, which contains the main text.

INTRO

Nandodyne Engineering LLP is an organisation committed to customers total satisfaction in the field of sealing systems.

We manufacture highly efficient and reliable mechanical seals for rotating equipment like centrifugal pumps, compressors, autoclaves, mixers, agitators, textile machines, etc.

We cater the needs of chemical process industries, petrochemicals and refinery plants, fertilizers, solvent extraction plants, food and pharmaceutical industries, sugar industries, dairies and dairy equipment, power generations, shipping industries etc.

Our features are:

- Simple well-proven designs
- A wide selection of materials of construction
- User-friendly designs to install and maintain
- Customer satisfaction with quality.
- Technical support.

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SINGLE SPRING SEAL

MODEL: ND-201

Features:

- Single Seal
- Unbalanced
- Inside Mounted
- Single Helical Spring
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Ceramic • Stellite • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- Nitrile • EPDM • Viton

Metal Parts:

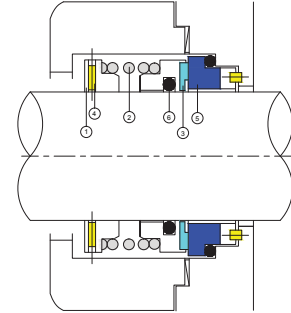
- S.S. 316

Applications:

- Water • Oil • Mild Chemicals

Operating Parameters:

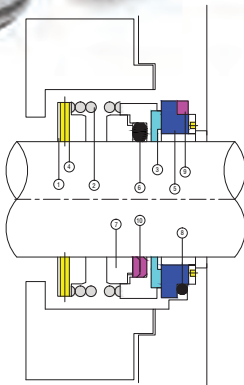
Sizes	: 12mm to 80mm
Pressure	: Vacuum to 5 Bars
Temperature	: -20°C to +130°C
Speed	: Up to 20m/s



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	SETSCREW
5	STATIONARY FACE
6	ROTARY 'O' RING



SINGLE SPRING SEAL



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	SET SCREW
5	STATIONARY FACE
6	ROTARY 'O' RING
7	THRUST PLATE
8	STATIONARY 'O' RING
9	SQ. PACKING
10	'V' PACKING

MODEL: ND-202 A/B

Features:

- Single Seal
- Unbalanced
- Inside Mounted
- Single Helical Spring
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Ceramic • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- LS-101-S0: EPDM, Viton, FEP
- LS-101-SW: PTFE, GFT

Metal Parts:

- S.S. 316 • Alloy-20 • Hastelloy-C • Titanium etc.

Applications:

- Food & Pharmaceutical • Oil/Solvent Extraction Plants
- Chemical Industries • Pulp & Paper

Operating Parameters:

Sizes	: 25mm to 110mm
Pressure	: Vacuum Upto 5 Bars
Temperature	: -20°C to +200°C
Speed	: Upto 20m/s

SINGLE SPRING SEAL (CLUTCH TYPE)

MODEL: ND-203 A/B

Features:

- Single Seal
- Unbalanced
- Inside Mounted
- Single Helical Spring
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Ceramic • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- EPDM • Viton • PTFE • GFT • FEP

Metal Parts:

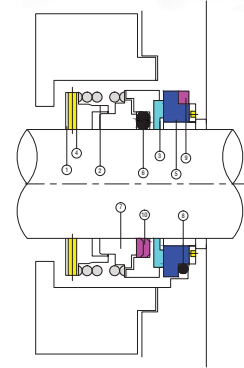
- S.S. 316 • Alloy-20 • Hastelloy-C etc.

Applications:

- Slurries • Alkalies • Solvents • Effluents
- Petrochemical • Acids • Oil Refineries
- Soap Industries • Viscous liquids etc.

Operating Parameters:

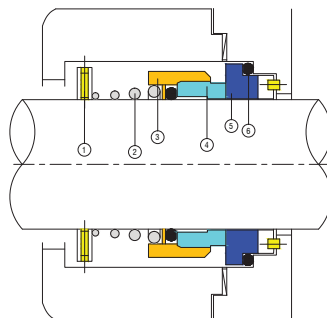
Sizes	: 16mm to 90mm
Pressure	: Vacuum Up to 10 Bars
Temperature	: -20°C to +150°C
Speed	: Up to 20m/s



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	SET SCREW
5	STATIONARY FACE
6	ROTARY 'O' RING
7	THRUST PLATE
8	STATIONARY 'O' RING
9	SQ. PACKING
10	'V' PACKING



CONICAL SPRING SEAL



PART NO	DESCRIPTION
1	SPRING HOLDER
2	SPRING
3	THRUST RING
4	ROTARY FACE
5	STATIONARY FACE
6	STATIONARY 'O' RING

MODEL: ND-204

Features:

- Single Seal
- Unbalanced
- Inside Mounted
- Single Helical Spring
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Ceramic • Stellite • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- Nitrile • EPDM • Viton

Metal Parts:

- S.S. 316

Applications:

- Water Pumps
- Vacuum Pumps
- Submersible Pumps

Operating Parameters:

Sizes	: 12mm to 80mm
Pressure	: Vacuum to 5 Bars
Temperature	: -20°C to +130°C
Speed	: Up to 20m/s

MULTI SPRING SEAL

MODEL: ND-301 A/B

Features:

- Single Seal
- Unbalanced
- Multiple Springs
- Inside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Ceramic • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- LS-101-0: EPDM, Viton, FEP, Kalrez
- LS-101-W: PTFE, GFT

Metal Parts:

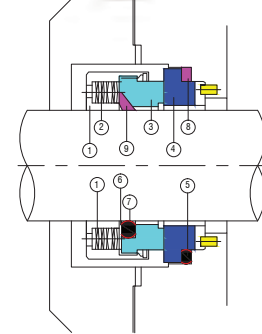
- S.S. 316 • Alloy-20 • Hastelloy-C • Titanium

Applications:

- Food & Pharmaceuticals • Solvent Extractions & Oil Refineries • Chemical Industries

Operating Parameters:

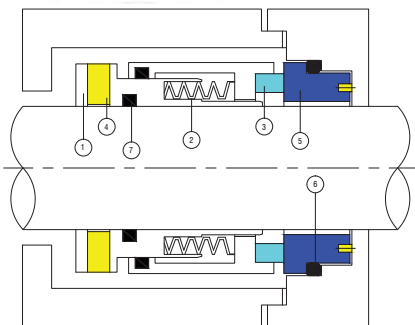
- Sizes** : 12mm to 150mm
Pressure : Upto 10 Bars
Temperature : -20°C to +280°C
Speed : Upto 20m/s



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	STATIONARY FACE
5	STATIONARY 'O' RING
6	THRUST PLATE
7	ROTARY 'O' RING
8	SQ. PACKING
9	WEDGE



BALANCED SEAL



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	SET SCREW
5	STATIONARY FACE
6	STATIONARY 'O' RING
7	ROTARY 'O' RING

MODEL: ND-302

Features:

- Single Seal • Balanced
- Multiple Springs • Inside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Ceramic • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- EPDM • Viton • FEP

Metal Parts:

- S.S. 316 • Hastelloy-C • Alloy-20 • Titanium

Applications:

- Food & Pharmaceutical • Solvent Extractions & Oil Refineries • Chemical Industries • Sugar Industries • Pulp & Paper Industries

Operating Parameters:

- Sizes** : 25mm to 90mm
Pressure : Upto 20 Bars
Temperature : -20°C to +200°C
Speed : Upto 15m/s

REVERSE BALANCE SEAL

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MODEL: ND-303/R

Features:

- Single Seal
- Reverse Balanced
- Multiple Springs
- Outside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- EPDM • Viton • FEP

Metal Parts:

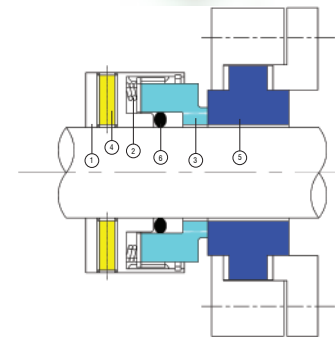
- S.S. 316 • Alloy-20 • Hastelloy-C • Titanium

Applications:

- Food & Pharmaceutical Industries • Solvent Extractions & Oil Refineries • Chemical Industries • Sugar Industries
- Pulp & Paper Industries

Operating Parameters:

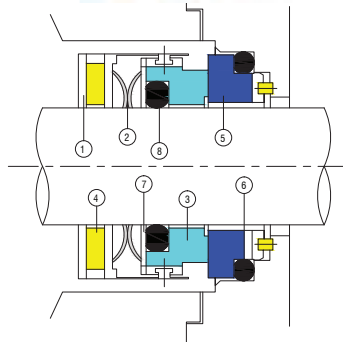
Sizes	: 25mm to 150mm
Pressure	: Upto 10 Bars
Temperature	: -20°C to +150°C
Speed	: Upto 20m/s



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	SET SCREW
5	STATIONARY FACE
6	ROTARY 'O' RING



WAVE SPRING SEAL



PART NO	DESCRIPTION
1	RETAINER
2	SPRING
3	ROTARY FACE
4	SET SCREW
5	STATIONARY FACE
6	STATIONARY 'O' RING
7	THRUST PLATE
8	ROTARY 'O' RING

MODEL: ND-304/W

Features:

- Single Seal
- Unbalanced
- Inside Mounted
- Single Helical Spring
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Stellite • Tungsten Carbide
- Silicon Carbide

Secondary Seals:

- EPDM • Viton • FEP

Metal Parts:

- S.S. 316 • Alloy-20 • Hastelloy-C

Applications:

- Water • Oil • Sugar • General Chemicals etc.

Operating Parameters:

Sizes	: 25mm to 90mm
Pressure	: Upto 10 Bars
Temperature	: -20°C to +150°C
Speed	: Upto 20m/s

PTFE BELLOW SEAL

MODEL: ND-TB

Features:

- Single Seal
- Multiple Springs
- Bellow Type
- Outside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- LS-401 : GFT/Ceramic, CFT/Ceramic
- LS-402 : GFT/Ceramic, SIC/Ceramic, SIC/SIC, Carbon/Ceramic

Secondary Seals:

- PTFE • GFT

Metal Parts:

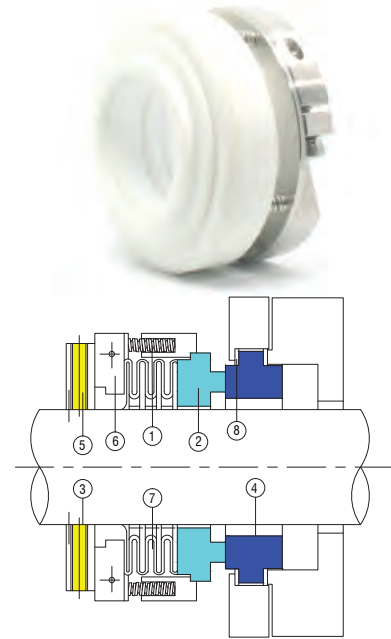
- S.S.316 • Alloy-20 • Hastelloy-C • Titanium • Nickel

Applications:

- Extremely Corrosive Media

Operating Parameters:

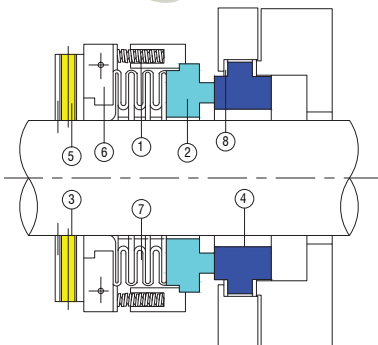
Sizes	: 25mm to 90mm
Pressure	: Upto 5 Bars
Temperature	: -20°C to +150°C
Speed	: Upto 15m/s



PART NO	DESCRIPTION
1	SPRING
2	ROTARY FACE
3	SET SCREW
4	STATIONARY FACE
5	DRIVE COLLAR
6	CLAMP COLLAR
7	BELLOW
8	STAT. PACKING



TEFLON BELLOW SEAL



PART NO	DESCRIPTION
1	SPRING
2	ROTARY FACE
3	SET SCREW
4	STATIONARY FACE
5	DRIVE COLLAR
6	CLAMP COLLAR
7	BELLOW
8	STAT. PACKING

MODEL: ND-TBR

Features:

- Single Seal
- Multiple Springs
- Bellow Type
- Outside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- LS-401 : GFT/Ceramic, CFT/Ceramic
- LS-402 : GFT/Ceramic, SIC/Ceramic, SIC/SIC, Carbon/Ceramic

Secondary Seals:

- PTFE • GFT

Metal Parts:

- S.S.316 • Alloy-20 • Hastelloy-C • Titanium • Nickel

Applications:

- Extremely Corrosive Media

Operating Parameters:

Sizes	: 25mm to 90mm
Pressure	: Upto 5 Bars
Temperature	: -20°C to +150°C
Speed	: Upto 15m/s

MODEL: ND-250

Features:

- Semi Cartridge Single Seal
- Stationery Single Spring Design
- Balanced
- Inside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Tungsten Carbide • Silicon Carbide

Secondary Seals:

- Viton • Graphoil • GFT • Kalrez

Metal Parts:

- S.S. 316 • Hastelloy-C • Alloy-20 • Titanium

Applications:

- Pharmaceuticals • Oil/Solvent Extraction Plants
- Chemical Industries • Pulp & Paper • Mines
- Shipping Industries etc.

Operating Parameters:

- Sizes** : 25mm to 90mm
- Pressure** : Upto 25 Bars
- Temperature** : Upto 280°C
- Speed** : Upto 15m/s



CARTRIDGE SEAL

MODEL: ND-260

Features:

- Cartridge Multi Spring Heavy Duty Balance Seal
- Inside Mounted
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon • Tungsten Carbide • Silicon Carbide

Secondary Seals:

- Viton • Graphoil • GFT • Kalrez

Metal Parts:

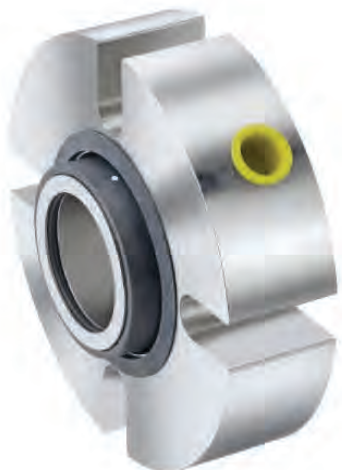
- S.S. 316 • Hastelloy-C • Alloy-20 • Titanium

Applications:

- Pharmaceuticals • Oil/Solvent Extraction Plants
- Chemical Industries • Pulp & Paper • Mines
- Shipping Industries etc.

Operating Parameters:

- Sizes** : 22mm to 200mm
- Pressure** : Upto 25 Bars
- Temperature** : Upto 280°C
- Speed** : Upto 15m/s



AGITATOR DRY RUNNING SEAL

MODEL: ND-900/DS

Features:

- Single Seal
- Multiple Spring Design
- Reverse Balanced
- Outside Mounted
- Dry Running
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon v/s Silicon Carbide

Secondary Seals:

- Viton • GFT

Metal Parts:

- S.S.316 • Alloy-20 • Hastelloy-C • Titanium

Applications:

- Food & Pharmaceutical Industries

Operating Parameters:

Sizes	: 25mm to 200mm
Pressure	: Vacuum upto 5 bars
Temperature	: Upto 150°C
Speed	: Upto 300rpm



REACTOR-AGITATOR SEAL

MODEL: ND-950/RS

Features:

- Single Seal / Double Seal
- Unbalanced / Balanced
- Independent on Direction of Rotation

Standard M.O.C.:

Seal Faces:

- Carbon, SiC, GTung. Ceramic

Secondary Seals:

- Elastomers • PTFE

Metal Parts:

- S.S. 316 • Hastelloy-C • Alloy-20

Applications:

- General Chemicals • Petrochemicals
- Light Hydrocarbons

Operating Parameters:

Sizes	: 25mm to 200mm
Pressure	: Upto 10 bars mx.
Temperature	: Upto 150°C
Speed	: Upto 300rpm
Shaft run-out	: Upto 5mm



MODEL: ND-1000/HP

Features:

- High Pressure and High Temperature Seal
- Multi Coil Spring
- Double Mechanical Seal
- Independent on Direction of Rotation
- Balanced

Standard M.O.C.:

Seal Faces:

- Carbon v/s Silicon Carbide

Secondary Seals:

- Viton • GFT • TTV

Metal Parts:

- S.S.316 • Alloy-20 • Hastalloy-C • Titanium

Applications:

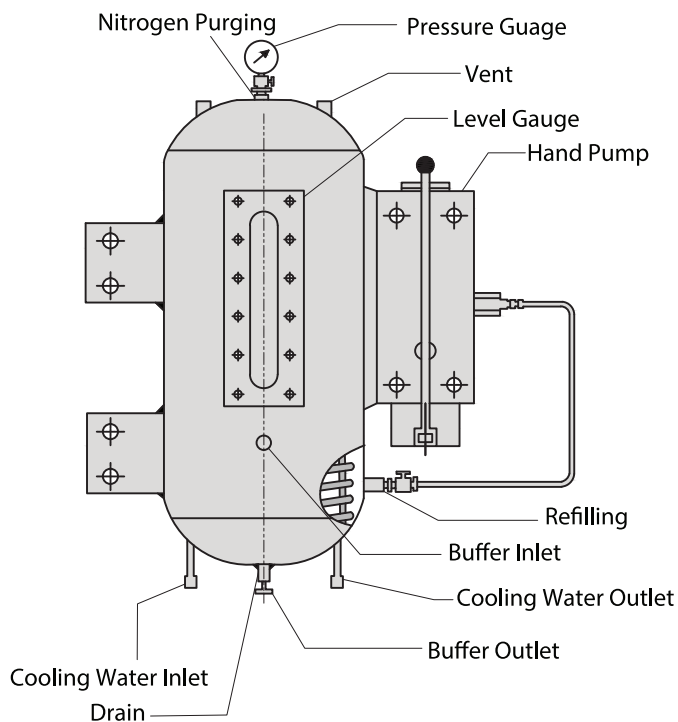
- Food & Pharmaceutical Industries

Operating Parameters:

- Sizes** : 25mm to 180mm
- Pressure** : Upto 50 Kg/Cm²
- Temperature** : Upto 300°C
- Speed** : Upto 300rpm



THERMOSYPHON



For a double seal arrangement Thermosyphon system, it is possible to supply barrier fluid. The pressure of barrier fluid is higher than the pressure of the fluid being sealed. Thus, seal face remains in contact with each other and the sealing area temperature is controlled. Thermosyphons system is as per API 682.

get in touch



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