

Company Profile 2019



Agenda



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Foreword





H.J. Rabl

CHETRA® Products are meant to be for the high end market and shall ensure the best possible safety and a long live time for our customers.

To reach that goal, motivated employees which are pleased to fulfil the customer request to the point are upmost important.

In addition a Quality Management System according to DIN EN ISO 9001 is installed to ensure a constant improvement of our workflow and in the end of our products.

History



1979	Foundation CHETRA GmbH of DiplIng. (FH) Hans J. Rabl in Munich – Germany
	Products: Mechanical Seals, Gland Packings / other static Seals and Technical Maintenance Products
1983	Launch of the Joint Venture CHETRA-Budapest Kft in Budapest (Hungary)
1984	Specializing in High End Seals, customer oriented Sealing solutions incl. API 682 (610) Seals
90's	Development of new Markets:
	Sterile Seals → Pharmaceutical and Food Industry
	Split Seals → Power Plants, incl. combined Heat Power Plants
	Mech. Seals for specific → Process technic (Agitators, Mixers, Kneaders)
	Specific applications
2004	Founding of CHETRA Sealing Technology Pte. Ltd (CST) in Singapore
2012	Founding of CHETRA Mech. Seals India Pvt. Ltd in Mumbai (India)
	CHETRA Headquarter moves into a new building, still in Munich
2015	Joint Venture Mascot Dynamics Pvt. Ltd. und CHETRA Mech. Seals India Pvt. Ltd in Mumbai (India)
	Founding of CHETRA Italia Srl. in Concorezzo (Monza)
2018	Opening of the first Service Center outside the Headquarter in Essen / Germany

Products, Applications, Industries

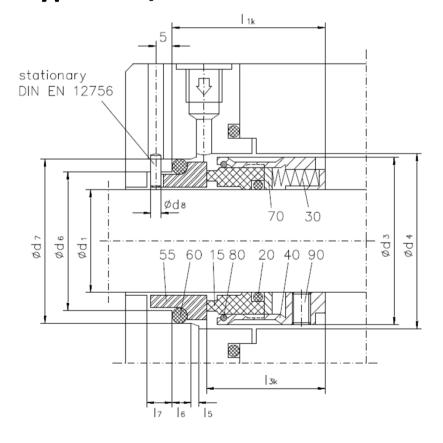


Products Installed in **Main Industrial Areas Mechanical Seals** Oil & Gas Pumps **Chemical Plants Supply Systems** Agitators, Mixers, Gland Packings, static **Kneaders** Refineries **Petrochemical Plants** Seals Compressors Filter dryers **Technical Maintenance** Pharma Industry ...and many more **Products Food Industry** ...and many more





Type 111 / 118



Description

- Mech. Seal acc. to DIN EN 12756 (DIN 24960)
- Unbalanced, Single acting, independent of rotation
- Multiple or wave spring

• Seal Sizes: Ø10...100mm

• Pmax: 12 bar*

Pressure Static: 25 bar*

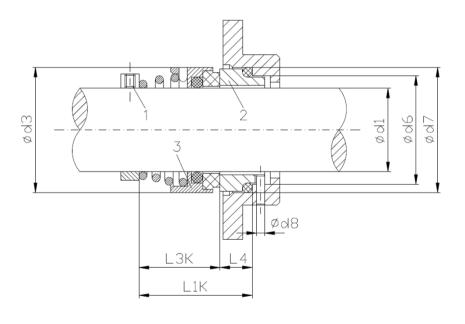
• Temperature: -80 ... +315°C*

• Vmax: 25 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 114



Description

- Mech. Seal Acc. To DIN EN 12756 (DIN 24960)
- Unbalanced, Single Acting, Dependent Of Rotation
- Conical Spring

• Seal Sizes: Ø16 ... 65 mm

• Pmax: 10 bar*

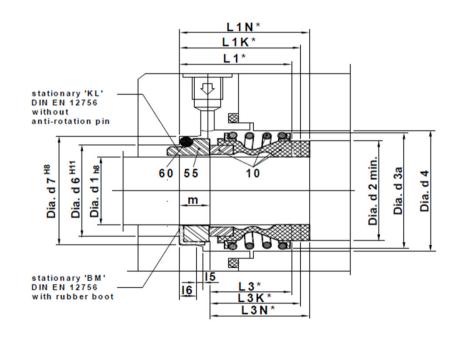
• Temperature: -30 ... +185°C*

• Vmax: 10 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 431



Description

- Mech. Seal Acc. To DIN EN 12756 (DIN 24960)
- Unbalanced, Single Acting, Independent Of Rotation
- Single Spring

• Seal Sizes: Ø10...100mm

• Pmax: 12 bar*

Temperature: -50 ... +100/200°C*

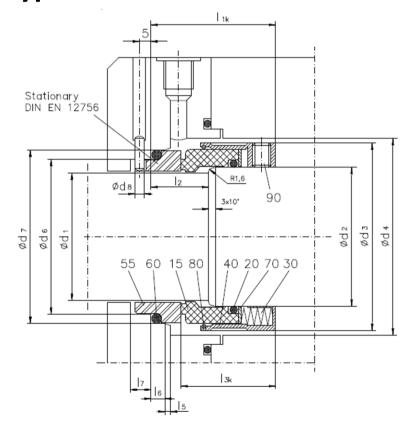
Depending on Rubber Material

• Vmax: 10 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 151



Description

- Mech. Seal Acc. To DIN EN 12756 (DIN 24960)
- Balanced, Single Acting, Independent Of Rotation
- Multiple Springs

• Seal Sizes: Ø10...100mm

• Pmax: 50 bar*

Pressure Static: 100 bar*

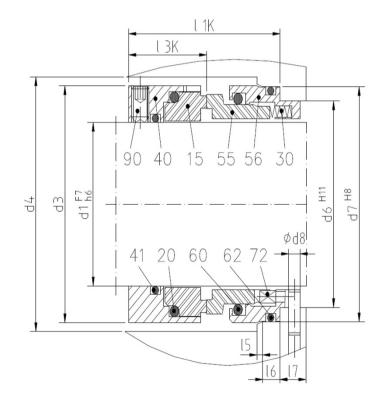
• Temperature: -50 ... +220°C*

• Vmax: 25 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 208 and 210



Description

- Mech. Seal Acc. To DIN EN 12756 (DIN 24960)
- Balanced, Single Acting, Independent Of Rotation, Stationary Design
- Multiple Springs (Outside Of Media)

• Seal Sizes: Ø10...100mm

• Pmax: 50 bar*

Pressure Static: 80 bar*

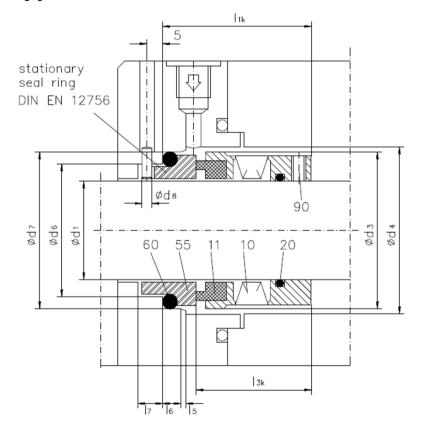
• Temperature: -80 ... +315°C*

• Vmax: 35 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 700



Description

- Mech. Seal Acc. To DIN EN 12756 (DIN 24960)
- Metal Bellow (rotating)
- Balanced, Single Acting, Independent Of Rotation

• Seal Sizes: Ø16...100mm

• Pmax (outside): 25 bar*

Pmax (inside): 10 bar

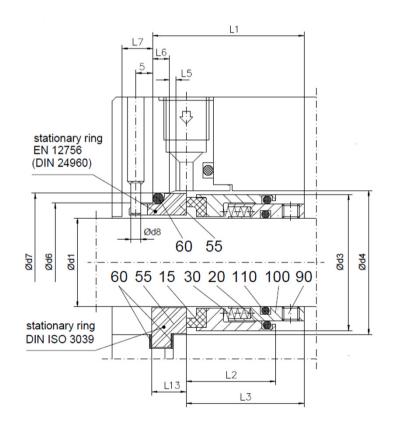
• Temperature: -80 ... +220°C*

• Vmax: 25 m/s*

^{*}its not allowed to use all max. parameters at the same time!
Furthermore all max. parameters depend on the selected Materials.



Type 900



Description

- Mechanical Seal Universal Applications
- Single Acting
- Balanced
- Independent Of Rotation
- Multiple Springs, Outside Of Product

• Seal Sizes: Ø16...110mm

• Pmax: 28 bar*

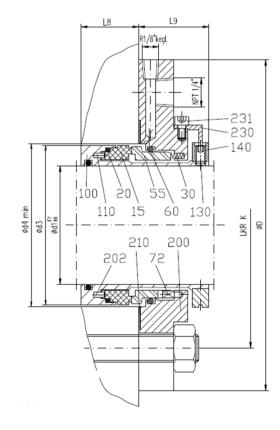
• Temperature: -25 ... +200°C*

• Vmax: 15 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 209D



Description

- Single Cartridge Mechanical Seal
- Balanced
- Independent Of Rotation
- Multiple Springs

Seal Sizes: Ø 25...100mm

• Pmax: 0,5 bis 25 bar*

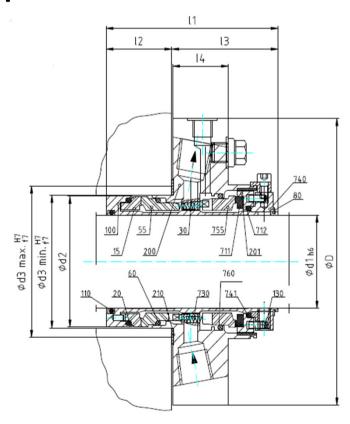
• Temperature: -25 ... +205°C* (m. FKM)

• Vmax: 25 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.



Type 809D



Description

- Double Cartridge Mechanical Seal
- Balanced
- Independent Of Rotation
- Multiple Springs

Seal Sizes: Ø 25...100mm

• Pmax: 0,5 bis 25 bar*

• Temperature: -25 ... +220°C*

• Vmax: 18 m/s*

^{*}its not allowed to use all max. parameters at the same time! Furthermore all max. parameters depend on the selected Materials.





Double-tandem Safety Seal, Metalbellows;

Seal For High Temperatures Up To 400°C

Typical Applications:

Thermooil-heattransfer

Seal Operates <u>Without</u> Auxilliary Pump Cooling!

More Than 500 Seals In Operations





CHETRA® Mechanical Seal Style 201

Api682

Single Cartridge Seal, Stationary Design – Highpressure Seal: Up To 150 Bar (201AHD)

Typical Applications:
Pipeline Pumps For Crude
Oil, Diesel, Gasoline Etc.

More Than 1.000 Seals Operating





Api682

Double Acting Cartridge Seal, Stationary Design, Dual Unpressurized / Pressurized Seal, Double Balanced Line

Typical Applications:

High-end Refinery, Petrochemical

CHETRA® Mechanical Seal Style 807AS





CHETRA® Mechanical Seal Style 521

Typical Applications:

Mixers/Agitators;
Pharmaceutical/Food

EHEDG-Certified Version: 541 S/L (CIP/SIP/GMP-Compliant)



CHETRA® Mechanical Seal Style 541



Double Seal For Top Or Bottom-drive Mixers

Shaft Size: 6" (152,4mm)

Seal Especially Suitable For Solid Matter Media.

Typical Applications:

Butadiene (Polymeric Solution With High Solid Content);



CHETRA® Mechanical Seal Style 881D



Robust Double Mechanical Cartridge Seal,
(Double-balanced);
Seal According To API 682

Typical Applications: Main Quench-oil Pumps

(Ethylene Plants);

Hydrogenation Processes: Nitrile/Fatty Acids

Catalyzers; Petrochemical Industry





CHETRA® Mechanical Seal Style 299
Fully Split Mechanical Seal
Sizes 50 To 600 Mm
Vacuum And Up To 25bar

Typical Applications:

Pumps In Inaccessible Locations

Large Diameters (High Expenditure Of Assembly/Disassembly)

Tubular Casing Pumps, Water Turbines (Kaplan/Francis) Etc.

Incl. Nucleatr Applications In Cooling Water Pumps (Nuclear Approvals:

KTA1401, Qsp4a, Tüv-cert. In Cooperation With Pump OEM

Loop System PLAN 53B





API PLAN 53B + Central Refill Unit

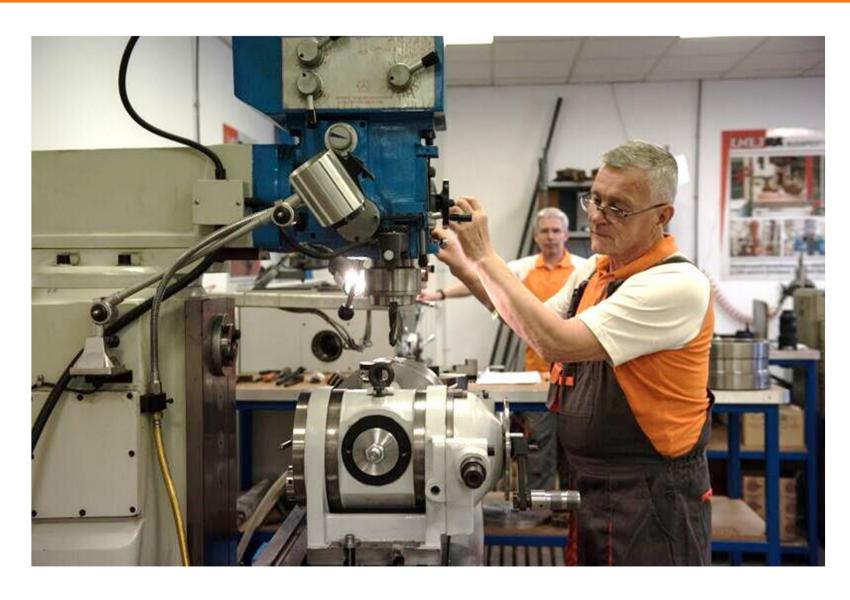






















CHETRA ITALIA Srl

Concorezzo (MB) ITALIA









CHETRA ITALIA SRL Piping Division **Flanges**

Valves

Fittings

Pipes





Mascot Dynamics Pvt. Ltd.

CHETRA Mech. Seals India Pvt. Ltd in Mumbai (India)







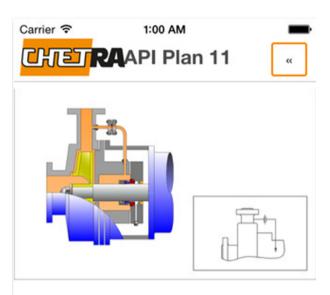


CHETRA API-App









Beschreibungen / Description

Circulation from discharge of pump via orifice to seal chamber. Standard piping plan single mechanical seals

German

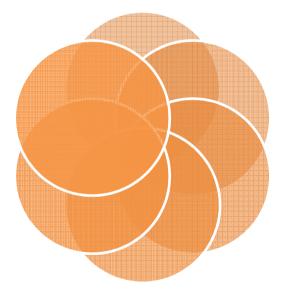
English



ANY QUESTIONS?

आपके ध्यान के लिए धन्यवाद

أشكركم على اهتمامكم



感谢您的关 注

THANK YOU FOR YOUR ATTENTION!

با تشکر از توجه شما