



# MECHANICAL SEALS LATTYsealis



TS / TRESSSES / JOINTS / GARNITURES MECANQUES / RACCORDS TOURNANTS / TRESSSES / JOINTS /  
PACKUNGEN / FLACHDICHTUNGEN / GLEITRINGDICHTUNGEN / DREHDURCHFÜHRUNGEN /  
UNIONS / PACKINGS / JOINTINGS / MECHANICAL SEALS / ROTARY UNIONS /  
ATIVAS / EMPAQUELADORAS / JUNTAS / CIERRES MECANICOS / JUNTAS /  
RNITURES MECANQUES / RACCORDS TOURNANTS / TRESSSES / JOINTS /  
HTUNGEN / GLEITRINGDICHTUNGEN / DREHDURCHFÜHRUNG / PACKUNGEN

*Designer of industrial sealing solutions*

**GROUPE  
LATTY®**





## 95 years of experience in sealing solutions

A reference in the industrial sealing sector, **GROUPE LATTY®** owes its leadership to its willingness to invest in Research & Development of specific products for your equipment. **GROUPE LATTY®** design and manufacture products that comply with the most demanding industrial requirements.

### GROUPE LATTY® is present in the following sectors...

- PETROCHEMICALS
- ENERGY
- CHEMICALS
- PHARMACEUTICALS
- CRYOGENICS
- FOOD PROCESSING
- NUCLEAR ENERGY

### and offers :

- Complete solutions suitable for each type of pumps
- Complete ranges of industry standard or custom specific products
- Research and testing laboratory
- Achieving type approval of your equipment
- Training adapted to your needs
- A French product, guarantee of quality

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### FORMATION



#### A well-trained employee is more skilful and efficient!

Training modules are more specifically dedicated to the selection of sealing solutions for industrial equipments. Oriented towards the implementation and good mounting practices, guarantee of security for your teams and the reliability of your equipment.

Each year many multilingual training, either in our plant or at customer centers are organized on:

- Valves
- Rotary units
- Bolted assemblies

**We are approved training organization.**

### LABORATORY R&D



#### Solutions tested on your equipment

**GROUPE LATTY®** invests an average of 5% of its annual turnover in Research and Development for new products and processes. The company has a test laboratory at its factory enabling it to test its products in optimum use conditions, including its clients' own equipment.

Research is essentially based on the resolution of clients' problems, which may be:

- to reduce friction loads,
- to use simple, efficient equipment,
- to reduce maintenance time,
- to have innovative products.

For several years, **GROUPE LATTY®** has invested in its own test laboratories, installed on over 500m<sup>2</sup>, with more than 15 test cells, equipped with precision measurement equipment:

- pressure: from vacuum to 650 bars
- temperature: from -200°C to 650°C with the possibility to carry out thermal shocks
- speed: from 0 to 6000 rpm
- several helium mass spectrometers for leak measurement

**GROUPE LATTY®** is a member of the Fluid Sealing Association (FSA) and the European Sealing Association (ESA)

### APPROVALS

Our different ranges of mechanicals seals comply with the following certifications, directives and standards:





# MECHANICAL SEALS

## LATTYsealis

**The simple, robust solution aimed at difficult applications.**

**LATTYsealis mechanical seals** are balanced single-effect seals with quench option. This mechanical seal is specially designed **to ensure optimum sealing even with difficult products** such as alumina, phosphate, abrasive, adhesive, crystallising or corrosive products.

The feature of **LATTYsealis** mechanical seals is the membrane which is made up of a steel core covered with elastomer. This covering provides chemical and mechanical abrasion protection.

### ADVANTAGES

- Simple, robust solution
- No flush or external lubrication required
- Easy to assemble
- Surface covering (protection against abrasion) on the parts in contact with the product to be sealed
- Independent of the direction of rotation
- Existing cartridge and quench versions ready for assembly
- No surface blocking due to adhesion of semi-dynamic O-ring

### TYPES OF INDUSTRIES

- Mines, quarries
- Paper mills
- Sugar factories
- Cosmetic
- Water treatment
- Paint

### EQUIPMENT

- Centrifugal pumps
- Kneaders
- Mixers
- Agitators

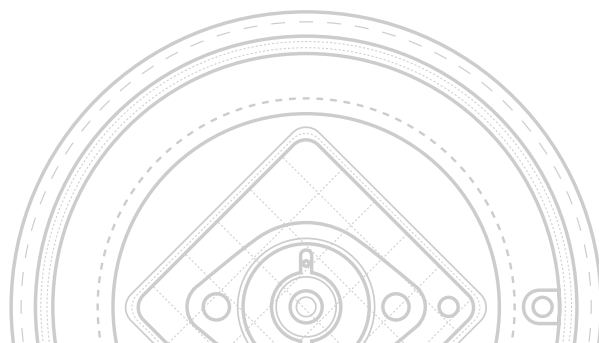
### OPERATING PARAMETERS (not associated)

Available diameters: from 20 to 180 mm

- Pressure : < 20 bars (2 MPa)
- Temperatures : from -30 to +200 °C (from -22 to +392 °F)
- Speed : < 20 m/s

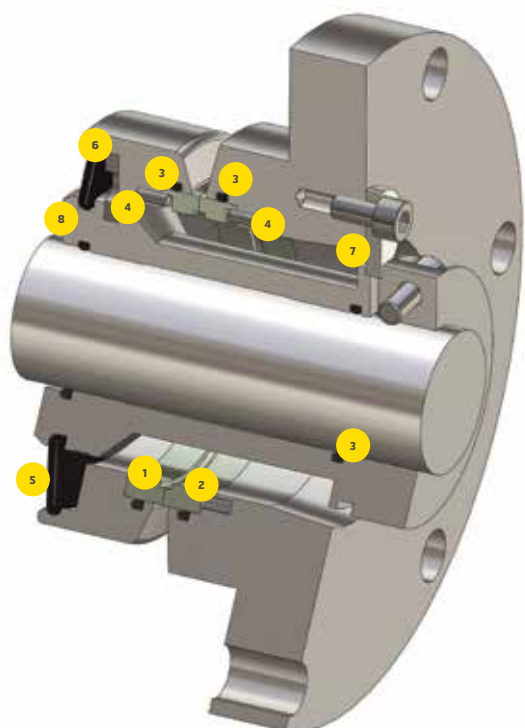
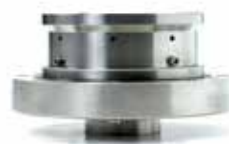
### MATERIALS

- Fixed part : Tungsten carbide, nickel binder (U2), possible option : Silicon carbide (U6)
- Rotary face : Tungsten carbide, nickel binder (U2), possible option : Silicon carbide (U6)
- Secondary sealant : HNBR/ FKM / EPDM / FFKM
- Metallurgy of parts : 304 (1.4301) or 316 (1.4401) Support in 316 L (1.4404) with option of chromium carbide covering to preserve against abrasion or erosion, including of the sleeve.

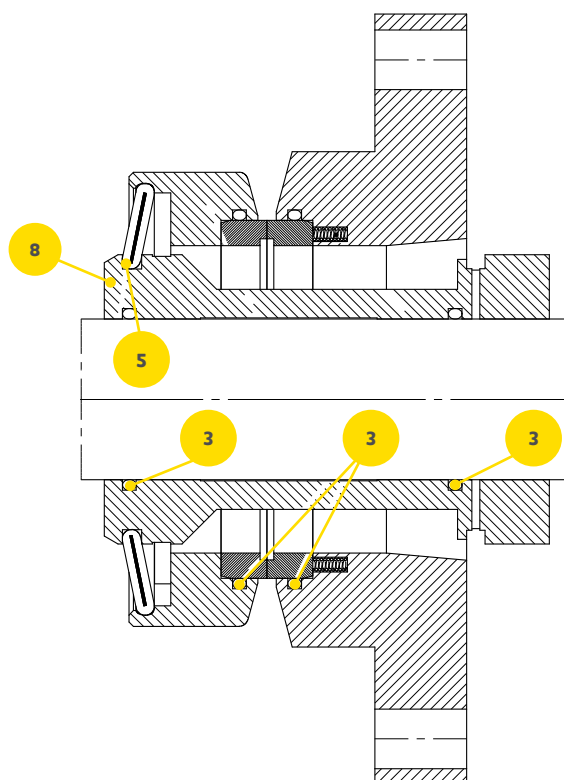
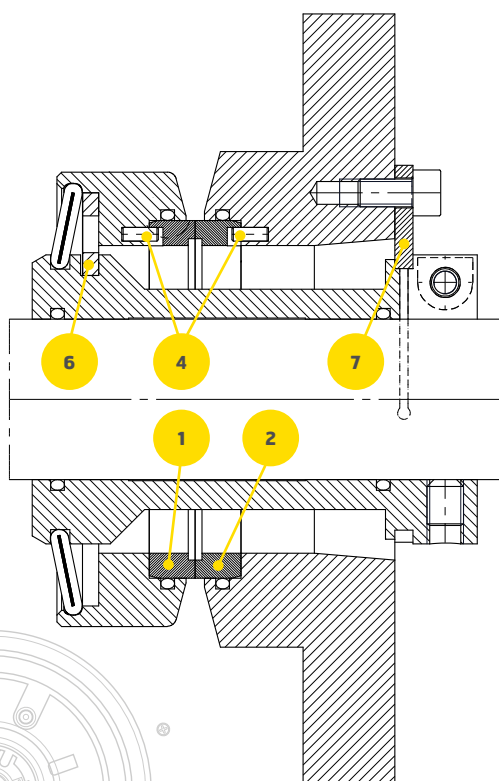




## DETAILED DESCRIPTION - LATTYsealis



- |                        |                   |                  |                |
|------------------------|-------------------|------------------|----------------|
| 1 Rotary face          | 2 Stationary face | 3 O-rings        | 4 Pins         |
| 5 Lock washer membrane | 6 Washer          | 7 Setting clamps | 8 Shaft sleeve |



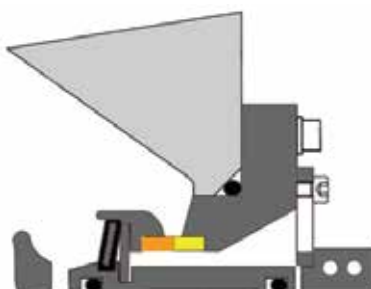


## SCREWED VERSION



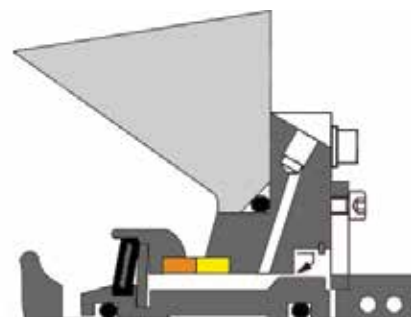
The sleeve is screwed to the end of the equipment shaft, enabling precise adjustment of the spring force. The contact pressure between the friction surfaces is achieved by this adjustment.

## TIGHTENED VERSION



Factory pre-adjusted cartridge assembly, ready to install on the equipment. Due to the lack of drive screws, this tightened version mounted on a smooth shaft will not damage your equipment.

## QUENCH VERSION



Cleans and evacuates any atmosphere side deposits by circulation of another pressure-free fluid coming from an external source.



**Do not throw away your mechanical seals,  
save money by repairing them!**

**Thanks to our specialist centres for reconditioning mechanical seals.**

**GROUPE LATTY®** has a network of service, repair and reconditioning centres for all of your mechanical seals, cartridge boxes, etc. in France and through its export subsidiaries.

Our service centres are specifically equipped to respond rapidly to your expectations to:

- Advise you on how to make your seals more reliable
- Appraise your equipment
- Adapt your equipment to the latest technological and environmental developments
- Provide free, detailed, personalised quotes for the various reconditioning operations
- Prolong the life of your equipment through retrofitting
- Carry out training with our teaching instrument benches, on client's site or at our premises.



LATTY® Services Centers





**LATTY INTERNATIONAL S.A.**  
57 bis, rue de Versailles  
91400 ORSAY - FRANCE  
Tel. +33 (0)1 69 86 11 12  
sales-marketing@latty.com

**LATTY ARGENTINA S.A. \***  
Nuestra Sra. de la Merced 5334  
(1678) CASEROS PCIA. DE BS. AS.  
ARGENTINA  
Tel. +54 (11) 4734 8481  
ventas@latty.com.ar

**LATTY BELGIUM S.A./N.V.**  
Chaussée de Namur 92 bte 07  
1300 WAVRE - BELGIUM  
Tel. +32 (0)10 24 62 08  
info@latty.be

**LATTY DICHTUNGSTECHNIK A.G. \***  
Henzmannstrasse 39  
4800 ZOFINGEN - SWITZERLAND  
Tel. +41 (0)62 752 20 84  
latty@Bluewin.ch

**LATTY IBERICA S.L. ESTANQUEIDAD**  
Pedro IV, 29-35, 4º 6ª  
08018 BARCELONA - SPAIN  
Tel. +34 (93) 356 99 90  
latty@latty.es

**LATTY INTERNATIONAL Ltd \***  
Westfield Road - RETFORD  
Notts, DN22 7BT - ENGLAND  
Tel. +44 (0)1 777 708836  
sales@latty.co.uk

**LATTY MAROC TECHNISEALS S.A.R.L. \***  
51, rue Hadj Ahmed Balafrej -  
B.P. 3167  
20290 CASABLANCA - MOROCCO  
Tel. +212 (0)5 22 24 80 90  
lattymaroc@menara.ma

**LATTY 2RS GmbH \***  
Im Auel 22  
D-53783 - EITORF  
GERMANY  
Tel. +49 (0)2243 / 84658-0  
latty2rs@latty.de

**LATTY SOUTH AFRICA Ltd \***  
108 Billingham Rd, Founders View South  
Modderfontein, Edenvale, 1610  
SOUTH AFRICA  
Tel. +27 (0)11 452 9755  
support@latty.co.za

**LATTY Seal Services**  
Service center for mechanical seals repair  
and repackaging

**LATTY MECASEAL**  
2, impasse du Crachet  
Zone Artisanale  
59193 ERQUINGHEM - LYS  
FRANCE  
Tel. +33 (0)3 20 77 12 89  
lattyseal.service@latty.com

**LATTY MECANETANCHE**  
174, rue des Saules  
Z.I. Le Chapelier  
38110 SAINT-JEAN DE SOUDAIN  
FRANCE  
Tel. +33 (0)4 74 97 01 09  
lattyseal.service@latty.com



**Mechanical Seals**  
**LATTYsealis**

**\*Subsidiaries with workshop for mechanical seals repair and repackaging.**

**PLANT**  
1, rue Xavier Latty - F-28160 BROU, FRANCE  
Tel. +33 (0)2 37 44 77 77. Fax. +33 (0)2 37 44 77 99  
customerservice@latty.com

**www.latty.com**

