



HEAVY INDUSTRY SEALING TECHNOLOGY



THE TRADITION OF HIGHEST QUALITY

DICHTA designs, produces and distributes shaft seals and other sealing products with highest quality standards using advanced manufacturing techniques and approved quality systems.

Building on 30 years experience, the DICHTA GROUP has developed to a true world class supplier, serving clients on all continents through offices in Switzerland and Italy, with modern production facilities in Italy and the Far-East.

DICHTA manufactures products in accordance to the ISO 9001:2008 system ensuring to supply continuous high quality with full batch traceability, encoded in a barcode system. In addition, the newly obtained ISO 14001:2004 certification ensures our attention to the latest rules in terms of respect to the environment.

Through its in-house design team, the company is capable to produce bespoke solutions with realistic lead times at competitive condition.

A worldwide distributor network backed by highly qualified personnel, ensures that our customers receive a fast and reliable service to solve even their most demanding requirements.

Moreover, the recently new built Headquarter is hosting a large modern warehouse with a wide range of items which availability is published online and updated every 24 hours.





HEAVY INDUSTRY

This is the sector of industry transforming and processing natural resources, such as steel, minerals, cement and paper into primary products.

These sectors have also allowed the expansion and the development of many countries, and therefore Dichta has a worldwide distribution network.

Safety and reliability are the main features of the sealing technology used in hydraulic devices and rotary systems.

IRON AND STEEL INDUSTRY:

- Hot and cold rolling mills
- Continuous casting steel mills
- Plants and presses for steel forging
- Plants and presses for extruding metals
- Oil-dynamic interlocking devices
- Hydraulic actuators
- Moving rollers
- Thermal treatment plants

CEMENT MILLS:

- Hydraulic plants for extraction and crushing of raw materials
- Hydraulic plants and rotary systems used for processing and thermic treatment of clinker
- Specific plants and rotary systems such as crushers, mills, tubular kilns, etc.....
- Hydraulic interlocking plants

PAPER MILLS:

- Plants and rotary systems for pulp mechanical processing
- Hydraulic plants and rotary systems for continuous pressing
- Hydraulic plants and rotary systems for calendering and drying process

HYDRAULIC DEVICES IN GENERAL:

- Rotary hydraulic cylinders
- Hydraulic plunger cylinders
- Telescopic cylinders
- Actuators
- Hydraulic caps
- Hydraulic cylinders for moulding presses
- Hydraulic cylinders for extrusion presses
- Hydraulic cylinders for forging presses

ROTARY SYSTEMS IN GENERAL:









- Lamination rollers
- Speed reducers
- Devices for the protection of bearings
- Devices for the protection of bushes or guide strips
- Supporting devices for grinding cylinders and rollers
- Supporting devices for rotary machines



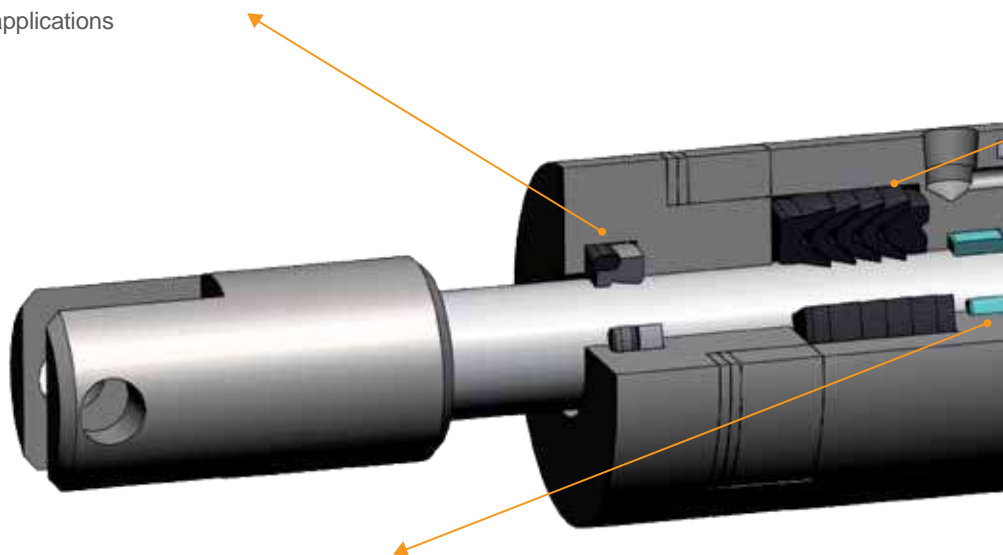
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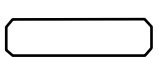




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HYDRAULIC CYLINDER




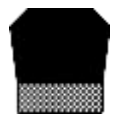










	WIPERS			
STD				
	DP6	DAS	DP9	CPPT1
HD				
	CPPT2	WM	CPWTFA	CPWTFB

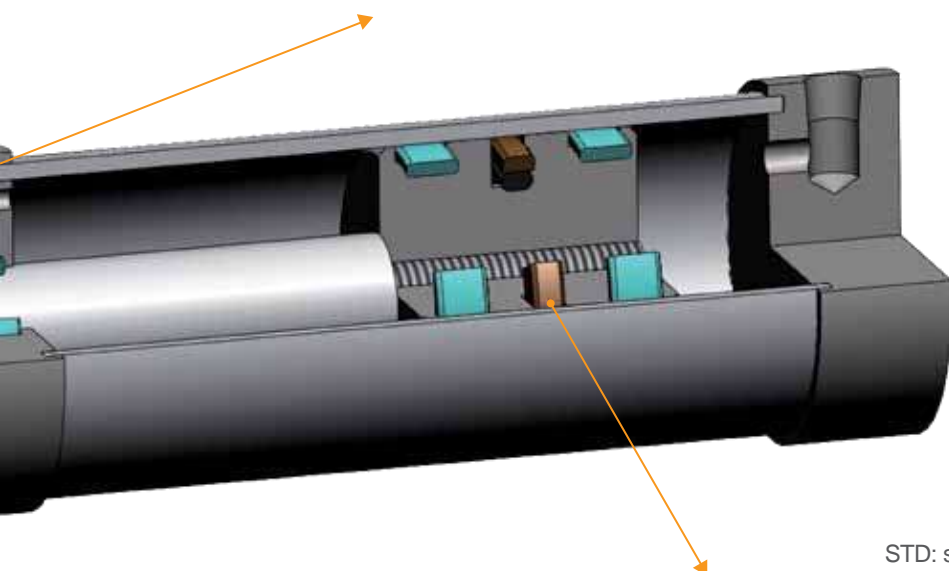
STD: standard applications - HD: heavy duty applications








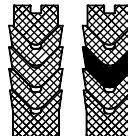









	GUIDE STRIPS		
STD			
	FGI6 – FGE6	FGI0 – FGE0	FGI4 – FGE4
HD			
	FGI5 - FGE5	FGI1 – FGE1	FGI7 – FGE7

HYDRAULIC CYLINDER










	ROD SEALS						
STD							
	IGR/A	IGR/B	TEOL 1	TEOL 1/B	TEOL 2	TG	TO
HD							
	IGR/A/P	IGR/B/P	IGR/AW	IGR/BW	TG 40	W	BL PACKING







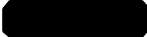
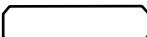
STD: standard applications - HD: heavy duty applications

	PISTON SEALS				
STD					
	EGR/A	EGR/B	G26	DGB	DSM
					
	TG-TO	TG3	JWT	TEOL 2	TEOL 8
HD					
	EGR/A/P	EGR/B/P	EGR/AW	EGR/BW	W

WIPERS










Item code	Profile	Dim. range [mm]	Materials	S [m/s]	T [°C]	Applications
DP6		8 ÷ 900	NBR FPM PTFE PTFE + glass PU	2 2 5 5 0,5	-30 ÷ 120 -10 ÷ 200 -200 ÷ 260 -200 ÷ 260 -30 ÷ 105	<ul style="list-style-type: none"> Hydraulic cylinders Presses Mobile hydraulics Tooling machines
DAS		8 ÷ 320	NBR PU FPM Metal part: Carbon steel	2 0,5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Earth moving machines Presses Mobile hydraulics Tooling machines
DP9		250 ÷ 1800	NBR FPM	1 1	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Hydraulic cylinders Injection moulding presses Forging presses Extruding presses Heavy duty applications
CPPT1		25 ÷ 1200	PTFE + bronze PTFE + glass + MoS ₂ O-ring: NBR FPM	5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Hydraulic cylinders Injection moulding presses Forging presses Extruding presses Heavy duty applications
CPPT2		200 ÷ 1200	PTFE + bronze O-ring: NBR FPM	5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Hydraulic cylinders Injection moulding presses Forging presses Extruding presses Heavy duty applications
WM		25 ÷ 400	Metal case: carbon steel First lip: brass Second lip: FPM	1	-10 ÷ 120	<ul style="list-style-type: none"> Hydraulic cylinders Injection moulding presses Forging presses Extruding presses Heavy duty applications
CPWTFA		10 ÷ 500	PTFE + bronze PTFE + glass + MoS ₂ O-ring: NBR FPM	5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Steel mill plants Injection moulding presses Forging presses Extruding presses Hydraulic cylinders Tooling machines Earth moving machines
CPWTFB		10 ÷ 1200	PTFE + bronze PTFE + glass + MoS ₂ O-ring: NBR FPM	5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Steel mill plants Injection moulding presses Forging presses Extruding presses Hydraulic cylinders Tooling machines Earth moving machines
LINEAR WIPERS		Supplied in strips	NBR Metal		-30 ÷ 120	<ul style="list-style-type: none"> Tooling machines

GUIDE STRIPS







Item code	Profile	Dim. range [mm]	Materials	Metal contact	Applications
FGI5 FGE5		Tapes up to 700 mm	Phenolic resin + cotton	<ul style="list-style-type: none"> • Steel • Steel, hardchromed • Casted iron • Stainless stell 	<ul style="list-style-type: none"> • Mobile hydraulics • Standard cylinders • Presses
FGI1 FGE1		Tapes up to 700 mm	PTFE + bronze	<ul style="list-style-type: none"> • Steel • Steel, hardchromed • Casted iron 	<ul style="list-style-type: none"> • Mobile hydraulics • Standard cylinders • Tooling machines • Injection moulding presses
FGI7 FGE7		Max 1500 mm	C380	<ul style="list-style-type: none"> • Steel • Steel, hardchromed • Casted iron • Stainless stell 	<ul style="list-style-type: none"> • Mobile hydraulics • Standard cylinders • Water hydraulics • Ship engineering • Presses
FGI4 FGE4		Tapes up to 700 mm	PTFE + carbon	<ul style="list-style-type: none"> • Mild steel • Stainless stell • Aluminium, Bronze 	<ul style="list-style-type: none"> • Mobile hydraulics • Standard cylinders • Tooling machines • Injection moulding presses
FGI6 FGE6		15 ÷ 300 mm	POM + glass	<ul style="list-style-type: none"> • Steel • Steel, hardchromed • Casted iron 	<ul style="list-style-type: none"> • Mobile hydraulics • Standard cylinders
FGI0 FGE0		15 ÷ 1200 mm	PTFE	<ul style="list-style-type: none"> • Steel • Steel, hardchromed • Casted iron 	<ul style="list-style-type: none"> • Mobile hydraulics • Standard cylinders











ROD SEALS

Item code	Profile	Materials		P [bar]	S [m/s]	T [°C]	Applications
IGR/A		Seal ring	PTFE + bronze PTFE + carbon PTFE + graphite PTFE + glass PTFE + glass MoS ₂	400 400 250 250 400	5		<ul style="list-style-type: none"> • Steel mills • Shipbuilding • Civil engineering • Injection moulding machines • Presses • Earth moving machines • Valves for hydraulic and pneumatic circuits
IGR/B			NBR 70 FPM 70				
IGR/A/P		Seal ring	PTFE + bronze PTFE + glass MoS ₂	600	5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> • Cylinders for special applications • Heavy industry
IGR/B/P		O-ring	NBR 70 FPM 70				
		Back-up ring	High performance thermoplastic material				
IGR/AW		Seal ring	PTFE + glass MoS ₂ PTFE + carbon	300 400	5	-30 ÷ 120	<ul style="list-style-type: none"> • Injection moulding machines • Steel plants • Marine hydraulic systems • Steel mills • Moulding presses • Manipulator
IGR/BW		Energizing ring	NBR 80				
TEOL/1		Seal ring	NBR + fabric FPM + fabric	200	0,5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> • Injection moulding machines • Steel plants • Marine hydraulic systems • Steel mills • Moulding presses • Manipulators
		Thrust ring	NBR 70 FPM 70				
		Back-up ring	PA6 Nylon PTFE				


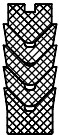


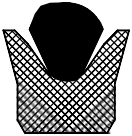
ROD SEALS

Item code	Profile	Materials		P [BAR]	S [m/s]	T [°C]	Applications
TEOL/2		Seal ring Energizing ring	NBR + fabric FPM + fabric NBR 70 FPM 70	200	0,5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none">· Hydraulic cylinders· Presses· Mobile hydraulics· Tooling machines
TO - TG	 TO endless	NBR + fabric FPM + fabric HNBR + fabric		400	0,5	-30 ÷ 120 -10 ÷ 200 -30 ÷ 150	<ul style="list-style-type: none">· Hydraulic cylinders· Injection moulding presses· Forging presses· Extruding presses
	 TG endless or split	Intermediate rings in NBR 70 Intermediate rings in FPM 70 Intermediate rings in HNBR 70					
W		NBR + fabric FPM + fabric		600	0,5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none">· Hydraulic cylinders· Injection moulding presses· Forging presses· Extruding presses· Heavy duty applications
TG 40		NBR + fabric FPM + fabric		300	0,5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none">· Hydraulic cylinders· Presses· Mobile hydraulics· Tooling machines
BL PACKING		NBR + fabric		600	0,5	-30 ÷ 120	<ul style="list-style-type: none">· Hydraulic cylinders· Injection moulding presses· Forging presses· Extruding presses· Heavy duty applications



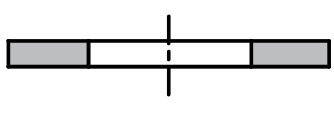
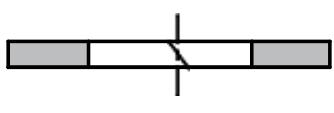
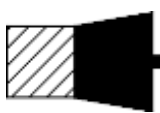

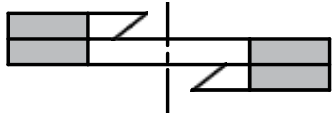
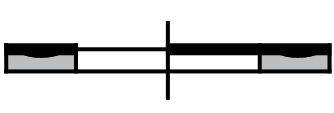
PISTON SEALS








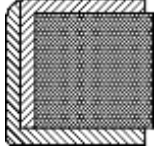

Item code	Profile	Materials		P [bar]	S [m/s]	T [°C]	Applications
EGR/A		Seal ring	PTFE + bronze PTFE + carbon PTFE + graphite PTFE + glass PTFE + glass MoS ₂	400 400 250 250 400	5		<ul style="list-style-type: none"> Steel mills plants Injection moulding presses forging presses Extruding presses Hydraulic cylinders Tooling machines Earth moving machines Valves for hydraulic and pneumatic circuits
EGR/B			NBR 70 FPM 70				
EGR/A/P		Seal ring	PTFE + bronze PTFE + glass MoS ₂	600	5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> Cylinders for special applications Heavy industry
EGR/B/P		O-ring Back-up ring	NBR 70 FPM 70 High performance thermoplastic material				
EGR/AW		Seal ring	PTFE + glass MoS ₂ PTFE + carbon	300 400	5	-30 ÷ 120	<ul style="list-style-type: none"> Hydraulic cylinders for special applications Heavy industry
EGR/BW		Energizing ring	NBR 80				
G26		Seal ring Back-up ring	NBR + fabric/NBR POM	300	0,5	-30 ÷ 120	<ul style="list-style-type: none"> Hydraulic cylinders for special applications Heavy industry
DSM		Seal ring Supporting ring Back-up ring	NBR NBR + fabric POM	700	0,5	-30 ÷ 120	<ul style="list-style-type: none"> Hydraulic cylinders Injection moulding presses Forging presses Extruding presses Heavy duty applications

PISTON SEALS









Item code	Profile	Materials		P [bar]	S [m/s]	T [°C]	Applications
DGB		Seal ring Supporting ring Back-up ring	NBR NBR + fabric POM	350	0,5	-30 ÷ 120	<ul style="list-style-type: none"> · Oil dynamic plants · Plunger cylinders
TO - TG	 TO endless	NBR + fabric FPM + fabric Intermediate rings in NBR 70 Intermediate rings in FPM 70		400	0,5	-30 ÷ 120 -10 ÷ 200	<ul style="list-style-type: none"> · Hydraulic cylinders · Injection moulding presses · Forging presses · Extruding presses
	 TG endless or split						
W		NBR + fabric		600	0,5	-30 ÷ 120	<ul style="list-style-type: none"> · Hydraulic cylinders · Injection moulding presses · Forging presses · Extruding presses · Heavy duty applications
TG3		NBR + fabric FPM + fabric HNBR + fabric		400	0,5	-30 ÷ 120 -10 ÷ 200 -30 ÷ 150	<ul style="list-style-type: none"> · Hydraulic cylinders · Injection moulding presses · Forging presses · Extruding presses
JWT		U-ring Head ring	NBR + fabric Hard material nylon type	340		-30 ÷ 120	<ul style="list-style-type: none"> · Hydraulic cylinders · Injection moulding presses · Forging presses · Extruding presses · Hydraulic valves
TEOL/2		Seal ring (back) Energizing ring	FPM + fabric NBR	250	0,5	-10 ÷ 120	<ul style="list-style-type: none"> · Hydraulic cylinders · Injection moulding presses · Forging presses · Extruding presses · Heavy duty applications
TEOL/8		NBR + fabric Hard NBR + fabric		400	0,5	-30 ÷ 120	<ul style="list-style-type: none"> · Hydraulic cylinders · Injection moulding presses · Forging presses · Extruding presses · Heavy duty applications

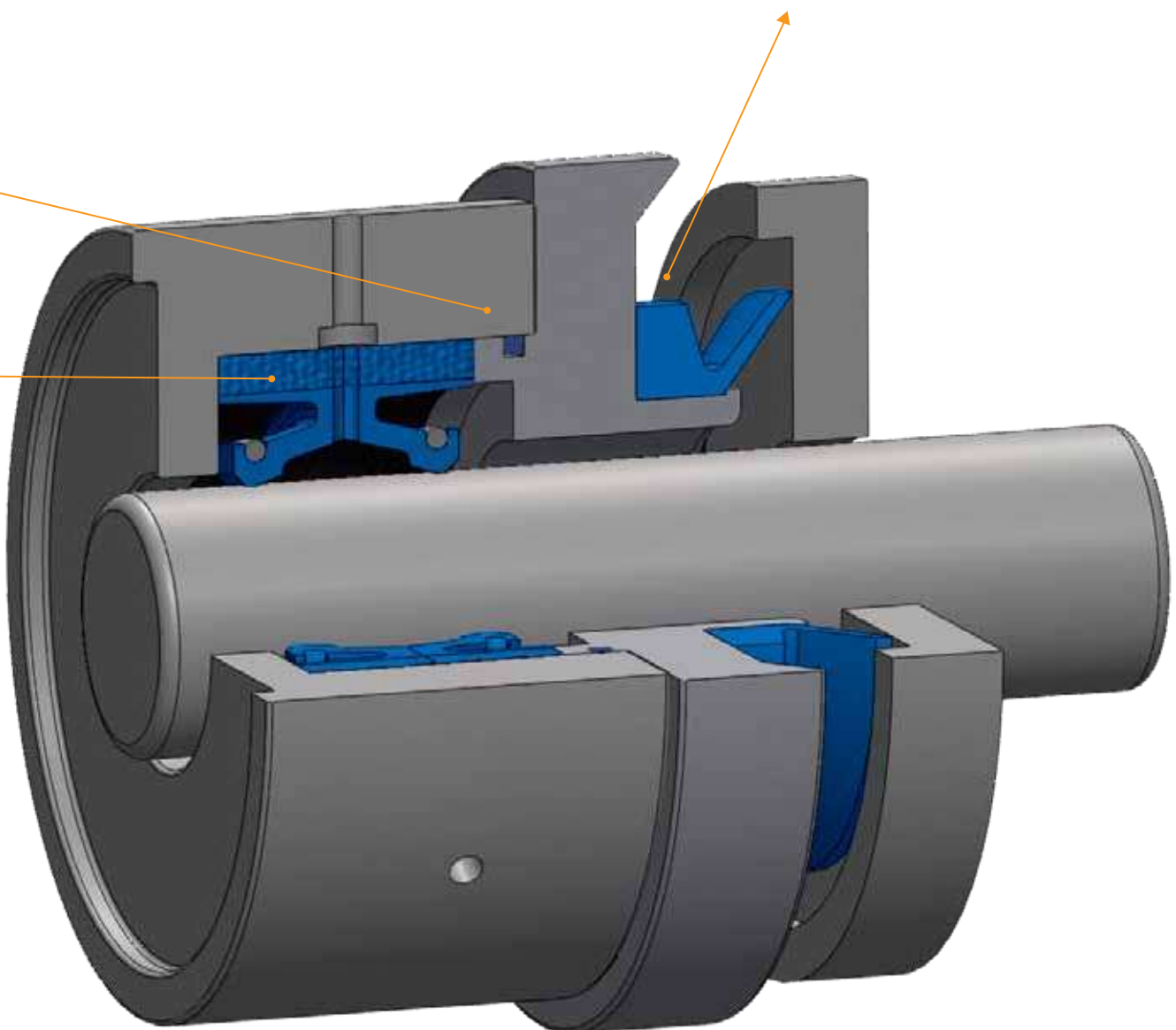
ROTARY MOVEMENTS

STATIC SEALS			
			
O-RINGS	X-RINGS	BKS - ENDLESS	BKC - SPLIT
			
BS	DIN7603	BK - SPIRAL	PK

ROTARY SHAFT SEALS		
		
D5	D6	D7
		
A	B	C
		
RGR/E - RGR/I	B2/TR	C64D



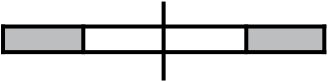
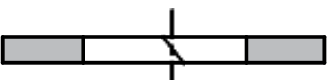
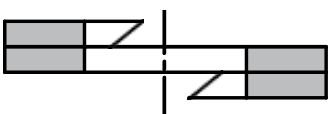

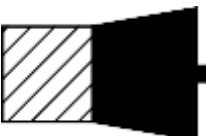

ROTARY MOVEMENTS

FRONTSEALS®			
			
VA	VL	VAX	VS
			
VRME	VE	VRM	TF




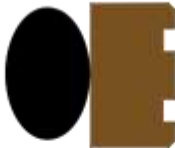







COLORS FOR DRAWING ONLY









STATIC SEALS

Item code	Profile	Materials	P [bar]	S [m/s]	T [°C]	Applications
O-RINGS		NBR EPDM SIL HNBR FPM FFKM	200	0,5	-30 ÷ 120 -40 ÷ 150 -50 ÷ 230 -30 ÷ 160 -20 ÷ 230 -15 ÷ 315	· Static or dynamic applications
X -RINGS		NBR FPM	400	0,5	-30 ÷ 120 -10 ÷ 200	· Static or dynamic applications
BACK-UP RINGS	 BKS - endless	PTFE	2500	0,5	-50 ÷ 200	· Injection moulding machines · Tooling machines · Forging presses · Extruding presses · Excavators · Agricultural machines · Valves for hydraulic circuits
	 BKC - split	PTFE + glass MoS ₂			-50 ÷ 200	
	 BK - spiral	PTFE + glass			-50 ÷ 200	
	 PK	PTFE PTFE + carbon Special thermoplastic material NBR 90 Shore A			-30 ÷ 120	
BS BONDED SEALS		NBR Carbon steel	1000		-30 ÷ 120	· Flanges · Plates · Engines · Valves · Cylinders
DIN 7603		Copper Aluminium CAF asbestos free				· Screw connection in engine blocks and cylinder heads, in all hydraulic plants

RADIAL SEALS FOR ROTARY SHAFTS

Item code	Profile	Materials		P [bar]	S [m/s]	T [°C]	Applications
D5		NBR + fabric FPM + fabric HNBR + fabric		0,5	20	Max 130 Max 220 Max 150	· Iron and steel plants · Shipbuilding industry
		NBR + fabric FPM + fabric HNBR + fabric		0,5	20	Max 130 Max 220 Max 150	· Wind power applications · Paper industry · Hydropower industry
		NBR + fabric FPM + fabric HNBR + fabric		0,5	20	Max 130 Max 220 Max 150	· Mining industry · Cement mills
R GR/E R GR/I		Seal ring	PTFE + glass + MoS ₂ PTFE + carbon PTFE + bronze	0,5	20		· Rotary distributors · Pivoting motors · Mobile hydraulics · Tooling machines
		O-ring	NBR FPM			-30 ÷ 120 -10 ÷ 200	
B2/TR		Packing	Graphite fibre PTFE fibre + graphite Virgin PTFE fibre	0,5	50	Max 500 Max 280 Max 280	· Rotary applications in high temperature
		Outside layer	Carbon steel AISI 304/316				
A		NBR + steel FPM + steel HNBR + steel NEO + steel SIL + steel ACM + steel EPDM + steel		0,5	20	-30 ÷ 100 -10 ÷ 200 -30 ÷ 140 -40 ÷ 180 -50 ÷ 200 -10 ÷ 150 -45 ÷ 150	· General rotary applications
B							
C							
C64D		NBR + steel FPM + steel SIL + steel		0,5	25 35 35	-20 ÷ 120 -10 ÷ 200 -60 ÷ 120	· Steel plants · Heavy industry

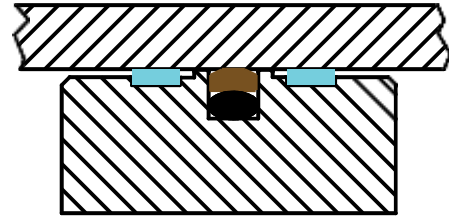
FRONTSEALS®

Item code	Profile	Materials	P [bar]	T [°C]	Applications
VA		NBR FPM HNBR NEO SIL EPDM	-	-30 ÷ 100 -30 ÷ 200 -30 ÷ 140 -40 ÷ 180 -50 ÷ 200 -45 ÷ 150	· On any rotary application to prevent dirt, dust, water or any other external contact media from penetrating
VS					
VL					
VRM					
VRME					
VAX					
VE					
TF		NBR + steel SIL + steel		-30 ÷ 100 -50 ÷ 200	· Hydraulic systems

HYDRAULIC CYLINDER APPLICATIONS



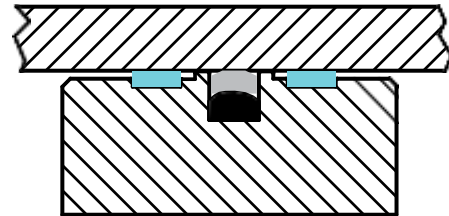
HOT LAMINATING STAND



Piston seal consisting of:
guide strip type FGE7
gasket set type EGR /A with back-up ring in PTFE + bronze
and O-ring for applications on double-acting
cylinders with Max $p=400\text{bar}$, $S=5\text{m/s}$



TELESCOPIC CYLINDER



Piston seal consisting of:
guide strip type FGE7 – gasket set type EGR/AW
with back-up ring in PTFE + glass + MoS_2 and energizing
ring for applications on double-acting cylinders
with Max $p=300\text{bar}$, $S=5\text{m/s}$



HYDRAULIC CAP



Rod seal consisting of:
guide strip type FG I7 primary seal with gasket set type IGR/B
with back-up ring in PTFE + bronze and O-ring
wiper type CPPT 2 in PTFE + bronze and O-ring
for applications in conditions of Max $p=400\text{bar}$, $S=5\text{m/s}$



HYDRAULIC CYLINDER

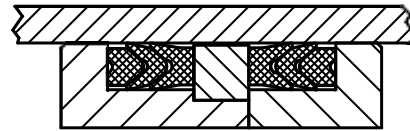


Rod seal consisting of :
guide strip type FG I7 primary seal with gasket set type IGR/BW
with back-up ring in PTFE + glass + MoS_2 and energizing ring.
Wiper type CPPT 1 in PTFE + glass + MoS_2 and O-ring for applications
on double-acting cylinders with Max $p=300\text{bar}$, $S=5\text{m/s}$

HYDRAULIC CYLINDER APPLICATIONS



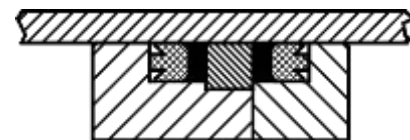
PRESS FOR ALUMINIUM EXTRUSION



Piston seal consisting of:
Vee-packing set – TG3 in cotton fabric - assembled
back-to-back for applications on double-acting cylinders
with Max $p=400\text{bar}$, $S=0.5\text{m/s}$.



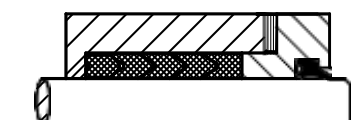
FORGING PRESS



Piston seal consisting of:
Gasket type TEOL8 in cotton fabric assembled
back-to-back for applications on double-acting cylinders
with Max $p=400\text{bar}$, $S=0.5\text{m/s}$.



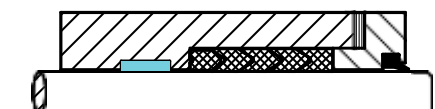
HYDRAULIC PRESS



Rod seal consisting of:
Vee-packing set in cotton fabric, wiper type DP9
for applications with Max $p=600\text{bar}$, $S=0.5\text{m/s}$.



OIL DYNAMIC PRESS

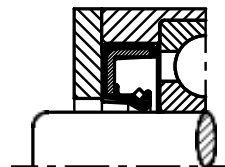


Rod seal consisting of:
guide strip type FGI7, vee-packing set TG5 in cotton fabric,
wiper type DP6 for applications with Max $p=400\text{bar}$, $S=0.5\text{m/s}$.

ROTARY MOVEMENT APPLICATIONS



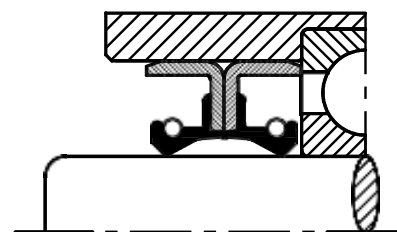
ROTARY SYSTEMS FOR PAPER MILLS



Sealing systems on rotary shaft consisting of:
seal type A for applications
with Max $p=0.5\text{bar}$, $S=20\text{m/s}$



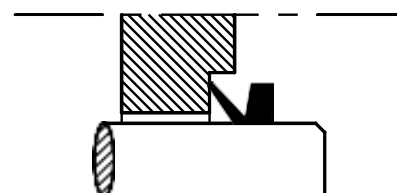
STEEL MILLS



Sealing system on rotary shaft consisting of:
two seals type B assembled back-to-back
for applications with Max $P=0.5\text{bar}$, $S=20\text{m/s}$



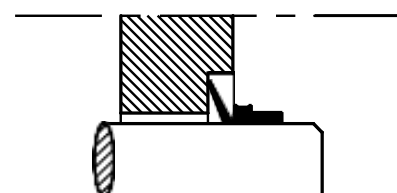
SPEED REDUCERS



V-ring type VA
for applications with Max $S=18\text{m/s}$



HOT ROLLING MILL

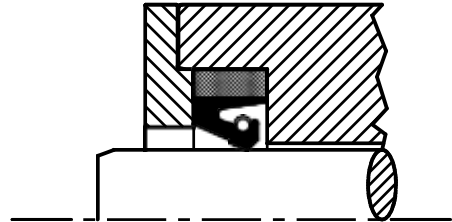


V-ring type VRM
for applications with Max $S=18\text{m/s}$

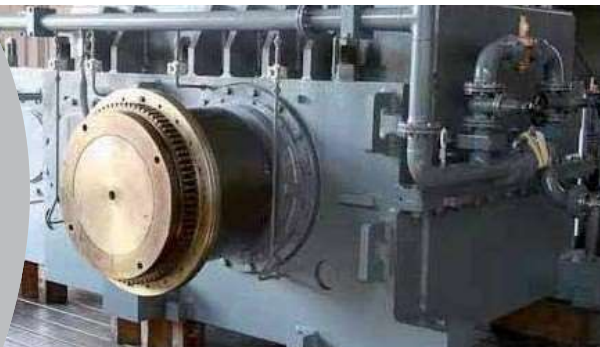
ROTARY MOVEMENT APPLICATIONS



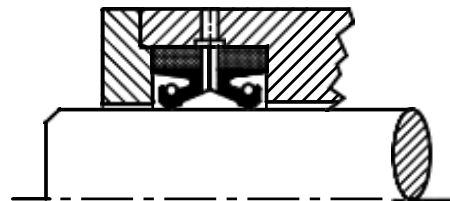
LAMINATING SYSTEMS



Sealing system on rotary shaft consisting of:
seal type D5 for applications
with Max $p=0.5\text{bar}$, $S=20\text{m/s}$



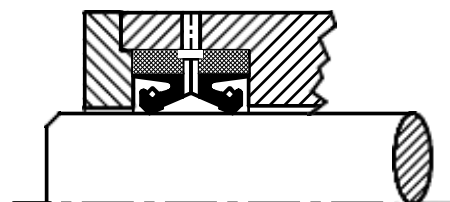
COLD ROLLING MILLS



Sealing system on rotary shaft consisting of:
seal type D6 assembled back-to-back for applications
with Max $p=0.5\text{bar}$, $S=20\text{m/s}$



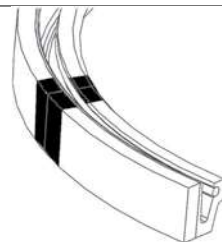
HYDRAULIC VALVES



Sealing system on rotary shaft consisting of:
seal type D7 assembled back-to-back for applications
with Max $p=0.5\text{bar}$, $S=20\text{m/s}$



ROTARY CLINKER BAKING SYSTEM



Rotary shaft seal in split form

OTHER APPLICATIONS

WIND ENERGY



MARINE INDUSTRY



EARTH MOVING EQUIPMENT



CEMENT PLANTS



OTHER APPLICATIONS

MINING



DRILLING



PAPER INDUSTRY



MECHANICAL





KEY SUCCESS FACTORS

- » ISO 9001:2008 and ISO 14001:2004 certification for manufacturing and sales of technical products.
- » Italian, German, French, English and Spanish speaking team.
- » Urgent shipments leave our premises on same day delivery or within 24 hours.
- » Big range of articles available from stock, even unusual sizes.
- » Professional technical assistance & support.
- » Long term employees with deep know-how of products and markets.
- » Active after sales service & marketing team.
- » RFQ normally processed within 24/48 hours.
- » Swiss reliability.
- » Full batch traceability.
- » Central European location.

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