systemseals

MILL DUTY ROTARY SPLASH GUARD

421 *series*

Features:

Robust seal lip

Premium wear resistance

Low friction

Extremely water resistant

Recommended for mill-duty rotary applications

Easy to install

MATERIAL

The 421 Series Rotary Seal features high-grade NBR. Also available in HNBR for improved abrasion resistance and FPM compounds for higher temperatures.

Material	Code
Nitrile NBR (shown in photo)	MN01
Hydrogenated HNBR	MN03
Fluoroelastomer FPM	MF01

OPERATING PARAMETERS

	MN01	
Temperature	°C	°F
hydraulic oil	-30...+100	-22...+212
water oil emulsions (HFA)	+5...+60	+41...+140
water-glycol fluids (HFC)	-30...+60	-22....+140
polyol esters (HFD)	-30...+80	-22....+176
water	+5...+100	+41...+212
speed	20 m/s (65 ft/sec)	
pressure	0.03 MPa (4.35 psi)	

Note: *for other materials or fluids please contact our engineering department.*

DESCRIPTION

The 421 Series Rotary Seal is a robust rotary face seal that is designed to protect the internal bearing and primary seals from water splash and heavy concentrations of debris. This is commonly used on work rolls and roll neck bearings in steel and aluminum mills. The design of the seal lip is much more robust than traditional rotary face seals providing maximum performance in harsh conditions.

PRODUCT BENEFITS

- Lip force is optimized for maximum exclusion
- Works in a wide range of temperatures
- Excellent fluid compatibility
- Exceptional abrasion resistance
- Available in diameters up to 2100 mm

APPLICATIONS

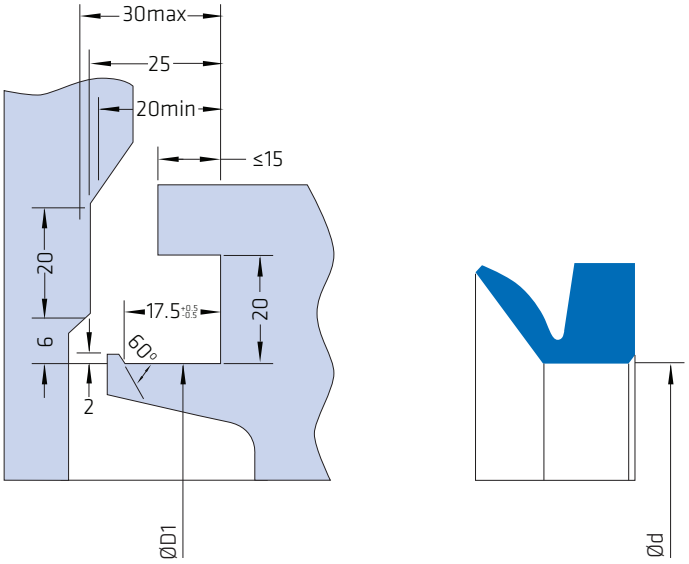
The 421 Series Rotary Seal is commonly used in mill duty applications for maximum exclusion resistance where water splash and heavy concentrations of debris are present.

Typical applications include:

- Steel and Aluminum Processing
- Pulp and Paper
- Pumps and Gear Boxes
- Marine
- Wind Energy
- Bearing Manufacturers
- Oil and Gas

Above: *Installation Drawing*

DESIGN GUIDELINES



MODEL DESCRIPTION

Series	Ød1	Ød
S-200	200 -205	192
S-205	205 -210	196
S-210	210 -215	200
S-215	215 -219	204
S-220	219 -224	207
S-225	224 -228	211
S-230	228 -232	215
S-235	232 -236	219
S-240	236 -240	223
S-250	240 -250	227
S-260	250 -260	236
S-270	260 -270	245
S-280	270 -281	255
S-290	281 -292	265
S-300	292 -303	275
S-310	303 -313	285
S-320	313 -325	295
S-330	325 -335	305
S-340	335 -345	315

Series	Ød1	Ød
S-350	345 -355	322
S-360	355 -372	328
S-380	372 -390	344
S-400	390 -415	360
S-425	415 -443	385
S-450	443 -480	410
S-500	480 -530	450
S-550	530 -580	495
S-600	580 -630	540
S-650	630 -665	600
S-700	665 -705	630
S-725	705 -745	670
S-750	745 -785	705
S-800	785 -830	745
S-850	830 -875	785
S-900	875 -920	825
S-950	920 -965	865
S-1000	965 -1015	910
S-1050	1015 -1065	955

Series	Ød1	Ød
S-1100	1065 -1115	1000
S-1150	1115 -1165	1045
S-1200	1165 -1215	1090
S-1250	1215 -1270	1135
S-1300	1270 -1320	1180
S-1350	1320-1370	1225
S-1400	1370 -1420	1270
S-1450	1420 -1470	1315
S-1500	1470 -1520	1360
S-1550	1520 -1570	1405
S-1600	1570 -1620	1450
S-1650	1620 -1670	1495
S-1700	1670 -1720	1540
S-1750	1720 -1770	1585
S-1800	1770 -1820	1630
S-1850	1820 -1870	1675
S-1900	1870 -1920	1720
S-1950	1920 -1970	1765
S-2000	1970 -2020	1810

SURFACE FINISH

Surface roughness	Ra	Rt	RMS
Sliding surface	≤0.3 µm	≤3 µm	6-12 RMS
Surface of groove I.D.	≤1.8 µm	≤10 µm	64 RMS
Sides of groove	≤3 µm	≤16 µm	125 RMS