



COMPOSITE BEARING

MATERIAL AND COMPONENTS



APPLICATIONS for the hydro industry

- > Wicket gate/ Guide vane bearings
- > Wicket gate/ Guide vane linkage bearings
- > Wicket gate/ Guide vane thrust washers
- > Turbine main shaft guide bearings
- > Trash rake bearings and wear pads
- > Control Linkage bearings
- > Butterfly valve shaft bearings
- > Eccentric pin bearings
- > Pump bearings
- > Spillway gate trunnion bearings
- > Spillway gate thrust washers

- > Lock gate bearings
- > Kaplan runner blade bearings
- > Kaplan hub seals
- > Fish screen bearings and wear pads
- > Valve bearings
- > Operating ring vertical and horizontal wear pads
- > Servo cylinder wear bands
- > Control gate bearings
- > Servo motor bearings
- > Servo motor seals



PROPERTY	UNITS	P103	P302	P314	P302/PTFE	HT-P302
Compressive Strength	MPa PSI	325 47100	350 50700	372 54000	300 43500	390 56500
Shear Strength	MPa PSI	95 13700	105 15200	105 15200	95 13700	110 15900
Modulus of Elasticity	MPa PSI	2000 290000	1600 232000	1600 232000	1600 232000	2200 319000
Hardness	Rockwell «R»	120	100	120	118	125
Density	10 ³ kg/m ³ lb/in ³	1.25 0.045	1.35 0.048	1.35 0.048	1.35 0.048	1.40 0.050
Water Absorption	%	< 0.09	< 0.09	< 0.09	< 0.09	< 0.09
Coefficient of Thermal Expansion	10 ⁻⁶ /C° 10 ⁻⁶ /F°	65 36	50 28	50 28	50 28	35 19
Chemical Resistance	(•)	Good	Good	Good	Good	Good
Colour	(•)	Blue	Tan	Red-Pink	Tan+Black	Light Brown
Maximum Temperature	C° F°	130 270	150 302	150 302	150 302	250 482
Minimum Temperature	C° F°	< - 200 < - 330	< - 200 < - 330	< - 200 < - 330	< - 200 < - 330	< - 200 < - 330
Advice Maximum working Temperature	C° F°	80 176	100 212	100 212	100 212	180 356
Typical Friction Value	(•)	0.05 - 0.10	0.04 - 0.08	0.05 - 0.09	0.03 - 0.07	0.06 - 0.10
General Water Resistance	(•)	Very Good	Excellent	Excellent	Excellent	Very Good
Resistance against Abrasive Wear	(•)	Good	Very Good	Excellent	Very Good	Excellent





We are proud to represent the SlideRite™ product line

These bearing materials are using the latest generation of synthetic fibers, resins and additives, to provide you with a high quality, durable product.

Produced with the latest technology to achieve the best combination of :

- > Hardness
- > Abasion resistance
- > Low coefficient of friction
- > Self lubrication

OUR TECHNICAL CAPABILITIES :

- > Tolerances of 0.05mm can be achieved
- > Wall thickness up to 250mm dia.
- > 760mm length of tube
- > Plates 760mmx1220mm
- > Machining up to 1400mm in diameter

ADVANTAGES :

- > Self-Lubricated – Coef. Friction 0.03-0.11
- > High Load Capacity
- > Elastic (e-modulus ~1% of steel)
- > Excellent capability to impacts and edge loading
- > Long wear life
- > Can be easily machined to any shape
- > Dimensions stability
- > Low water absorption
- > Minimal thermal expansion
- > Environment friendly
- > Abrasives resistance
- > Temperature resistance – Max 250C
- > Eliminates complex and expensive lubrication systems



P103



P302



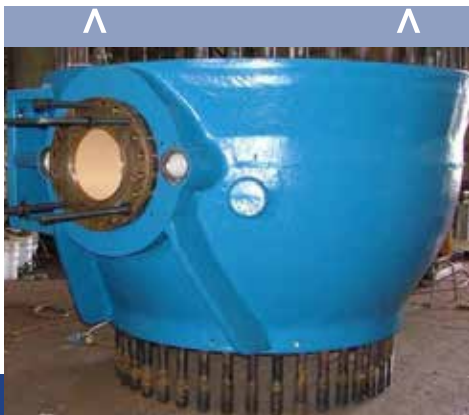
P314



P302/PTFE



HT-P302





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**FEMATICS
CANADA INC.**

We specialize in the design, testing, manufacture and supply of an extensive range of mechanical sealing solutions for the power generation industry. Our products can be found in power stations all over the world.

Originally founded in 1961 under the banner of Huhn Seal and subsequently as Tyton Seal in 1972, we are now known as Fematics Canada Inc. one of the leading turbine seal manufacturers in the world.

Engineering and manufacturing of turbine seals and replacement parts is handled exclusively at Fematics plant in St. Laurent Quebec, Canada. This ensures the consistent renowned expertise and service provided for over 50 years. We have produced seals for all types of turbines worldwide with shaft sizes ranging from 4 inches to 90 inches. We also manufacture replacement parts for existing seals and provide retrofit units to replace existing seals and/or outdated stuffing boxes.

If you require assistance with your seal problem the experienced staff of engineers at Fematics Canada will be happy to answer any of your questions.