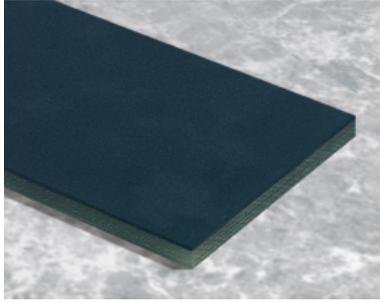
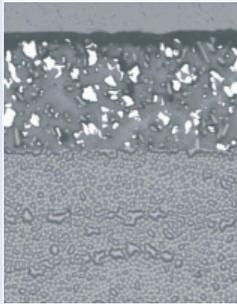


HPF™ Bearing Material	Characteristics	Applications
 	<ul style="list-style-type: none"> Specifically developed for hydropower applications High load capacity Excellent shock and edge loading capacity Low friction, superior wear rate and bearing life Excellent corrosion resistance Dimensional stability – low water absorption, no swelling Environmentally friendly 	<p>Industrial</p> <p>Servo-motor bearings, operating ring sliding segments, linkage bearings, wicket gate bearings, guide vane bearings, intake gate sliding segments, intake gate roller bearings, spillway gate bearings, trash rate bearings, fish screen bearings, trunnion bearings, blade bearings, injector bearings, deflector bearings, ball and butterfly trunnion bearings, etc.</p>

Composition & Structure	Operating Conditions	Availability										
<p>Composite Material</p> <p>Sliding Layer</p> <p>Proprietary filled PTFE tape liner</p> <p>Backing Material</p> <p>Continuous woven glass fibre cloth laminate impregnated and cured with epoxy resin</p>	<table border="1"> <tr> <td>dry</td> <td>very good</td> </tr> <tr> <td>oiled</td> <td>very good</td> </tr> <tr> <td>greased</td> <td>poor</td> </tr> <tr> <td>water</td> <td>very good</td> </tr> <tr> <td>process fluid</td> <td>good</td> </tr> </table>	dry	very good	oiled	very good	greased	poor	water	very good	process fluid	good	<p>Ex stock</p> <ul style="list-style-type: none"> N/A <p>To order</p> <ul style="list-style-type: none"> Cylindrical bearings diameters up to 500 mm (20 inches); plates in standard thicknesses of 6, 8 and 10 mm (0,24 - 0,3 and 0,39 inch)
dry	very good											
oiled	very good											
greased	poor											
water	very good											
process fluid	good											

Microsection	Bearing Properties	Unit	Value
 <p>Sliding layer</p> <p>Backing</p>	Dry		
	Maximum sliding speed v	m/s	2.5
	Maximum pv factor	MPa x m/s	1.23
	Coefficient of friction f	–	0.02-0.12
	Grease lubrication		
	Maximum sliding speed v	m/s	-
	Maximum pv factor	MPa x m/s	-
	Coefficient of friction f	–	0.02-0.08
	General		
	Maximum temperature T _{max}	°C	+140
	Minimum temperature T _{min}	°C	-195
	Maximum load p static	MPa	140
	Maximum load p dynamic	MPa	140
	Shaft surface finish R _a *	µm	0.15-0.40
Shaft hardness - normal	HB	>350	
Shaft hardness - for longer service life	HB	>480	

* Alternative shaft hardnesses and shaft surface finish is possible, depending on the application. Please contact your local GGB representative.