

X.FIBER

The high-resistance composite material



X.FIBER® (1) (2) is a designed composite product, which is truly innovative in the field of laminated shims. This composite material comes in the form of woven fiber sheets, which can be manufactured in several different ways - these fibers can be of the following materials: glass, carbon, aramid, ceramic fibers or a combination of two or more of these different fibers. The sheets are held together by a heat-hardened resin, the resulting material delivers both very high technical performance and excellent peelability. Thus composed, X.FIBER® offers very high levels of technical performance and excellent peelability.

Advantages:

LIGHTNESS

It is an appropriate response to a requirement for lighter materials (to achieve greater autonomy or payload). X.FIBER® is, with INTERCOMPOSITE® (3) and DUOPEEL® (4), one of the lightest of all our peel-off materials (up to eight times lighter in weight than steels or brass!).

Material	Specific weight	Weight-saving		
		X.FIBER-Glass	X.FIBER-Carbon	
X.FIBER-Carbon	1,05			
X.FIBER-Glass	1,35		1,29 X	
Stainless steel	8,2	6,07 X	7,81 X	
Brass	8,5	6,30 X	8,10 X	

STRENGTH

Being both lighter and stronger, X.FIBER® can be used to great advantage as a replacement for carbon and stainless steels.

RESISTANCE

X.FIBER® mechanical properties remain unaffected by the rise in temperature. Thus this product can be exposed without damage to heat exceeding 1,472°F (800°C). Note that the limit of 572°F (300°C) for the binder is not restrictive: beyond this limit it will be destroyed but the shim is still of the highest quality. It is comparable with laminated metals.

⁽¹⁾ X.FIBER® — Trademark registered,

⁽²⁾ Europe: Patent No. EP 1 444 094 B1, Canada: Patent No. CA 2 464 337 C, USA: Patent No.US 8 518 839 B2.

⁽³⁾ INTERCOMPOSITE®, (4) DUOPEEL® -Trademarks registered, see patent numbers on the sheet devoted to each of these products.

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ANTI-FRETTING

X.FIBER® is a total barrier against the galvanic coupling caused by surface contact of different metallic alloys. No further surface treatment is required.

RAPIDITY

The sheets can be peeled by hand, without the need for tools of any kind.

INGENUITY AND ECONOMY

Once they have been peeled, the sheets remain flat and free of deformation. They remain fully re-useable.

Dimensions of X.FIBER® products:

Standard	Specific weight	Thickness of laminations (mm / inch)					
		Standard					
		0,05 / .002	0,075 / .003	0,1 / .004	0,11 / .0043		
		7	8	9	10		
X.FIBER-Glass							
LS16	1,35	Χ					
	1,37		X				
	1,39			Χ			
X.FIBER-Carbon							
LS15	1,05				X		

^{*}LS14 has been superseded



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