a S k
motorsport ltd

JABROC® DENSIFIED WOOD LAMINATE

TECHNICAL DATA SHEET

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Material

Jabroc is a non-impregnated, densified wood laminate developed especially for a wide range of industrial applications including the Motor Sport industry. Selected beech veneers are kiln dried to a given moisture content, cut, coated with a film of synthetic phenolic resin and assembled into packs. The packs are compressed using extreme pressure and temperature, causing them to be bonded to form laminated boards. The grade specially produced for the Motor Sport industry is constructed to the highest density possible using thin veneers producing a dense, stable, high strength board with excellent wear resistance.

Applications

Jabroc is used as alternative to natural timber and metals. On the one hand it offers high stability, increased strength, stiffness and improved life when replacing hardwood, and on the other hand, reduced weight, shorter machining times, is non-sparking and non-conductive when replacing metals. Jabroc has half the strength of steel at only one fifth of the weight.
Jabroc is used in the Aerospace, Nuclear and General Engineering sectors and extensively in Motor Sport for such parts as underbody skid boards, splitter skids and wing end plate inserts. It is an established product and is in use world wide on open wheeled race cars and sports cars such as FIA GT1, F3, F2, FORMULA RENAULT, SUPER LEAGUE, LMP1/2, RADICAL and others.

Sheet Sizes

Sheets size 2000 x 1000 mm from 4 mm upwards available from stock.
Other sizes are available made to order including 2500 x 1250 mm, 3000 x 1000 mm, 4000 x 400 mm

Machining

Jabroc may be sawn, planed, turned, drilled and tapped and we offer a full machining service on 3 and 5 axis CNC's. Advice on machining is available on request.

Properties

The table overleaf gives details of the main properties of the material. All values given are typical.

Properties for Jabroc Grade B240			
Property	Test Method	Unit	
Density	DIN 53 240	g/cm^3	1.35 – 1.40
Flexural Strength	DIN 53 452	N/mm^2	174
Impact Resistance (Perpendicular)	DIN 53 453	KJ/m^2	40
Impact Resistance (Parallel)	DIN 53 453	KJ/m^2	37
Tensile Strength	DIN 53 455	N/mm^2	144
Compressive Strength (Perpendicular)	DIN 53 454	N/mm^2	250
Ball-Thrust Hardness	DIN 53 456	N/mm^2	180
Modulus of Elasticity in Flexure	DIN 53 452	N/mm^2	15,000
Water Absorption	DIN 53 495	%	4
Coefficient of Linear Expansion	-	$\frac{mm \times 10^{-6}}{mm^oC}$	8
Laminations Per Centimetre	-	-	20
Coefficient of Friction	-	-	*0.16

* Indication only, value will vary depending on mating surface, measurement taken against steel.