Vicell B

巴沙木，是世界上最轻、生长最快的木材之一，一年内能达到 5 到六米。它很轻，干燥的木材每立方米重约 60-280 公斤。

巴沙木具有非常特殊的细胞结构，重量轻，强度高，经过密度筛选、干燥、杀菌、拼接、切片、表面处理等专业技术的加工，是天然夹层结构材料的理想选择。适用于制作玻纤结构，具有减轻重量、增强强度的优点。它最广泛地应用于风力发电机组叶片，全球约 70%的巴沙木用于制造风力机叶片。

Balsa, also named Balsa wood, scientifically named Ochroma lagopus or Ochroma pyramidale, belonging to Bombacaceae tree, is one of the lightest and fastest growing wood in the world, being able to reach five or six meters within a year. It is very light, and its dried wood weighs about 60-280 KG per cubic meter.

Balsa wood has very special cell structure, light weight and high strength, and its cross section slice is the ideal option of natural sandwich structure material after being processed with some professional technologies, including density screening, drying, sterilization, splicing, slicing and surface treatment. It is applicable for making fiberglass with the advantages of reducing weight and enhancing strength. It is most widely used in wind turbine blade, and about 70% of balsa wood globally is applied in making wind turbine blade.

产品特性 Product properties

突出的强度和刚度与重量之比 Outstanding strength and stiffness to weight ratios	精选一流木材 First-class, select grade lumber
生态环保 Ecological product	良好的疲劳性和抗冲击性 Excellent fatigue and impact resistance
满足大多数 FST（火焰、烟雾、毒性）要求 Fulfills most FST (flame, smoke, toxicity) requirements	良好的隔音、保温效果 Good sound and thermal insulation
应用于风力发电机组风轮叶片及机舱罩、船舶、轨道交通、体育器械、建材等领域 It is used in the wind turbine blade and engine room cover, ship, rail transit, sports equipment, building materials and other fields	

项目 Item	测试标准 Test standard	单位 Unit	B100	B130	B150
标称密度 Apparent nominal density	ISO 845	Kg/m^3	100	130	150
密度范围 Range density	ISO 845	MPa	85-110	110~135	135~176
含水率 Moisture content	GB/T1931	%	≤12	≤12	≤12
压缩强度 Z Compression strength Z	ISO 844	MPa	5	7.8	10.0
压缩模量 Z Compression modulus Z	ISO 844	MPa	1600	2200	3000
拉伸强度 Z Tensile strength Z	ASTM C297	MPa	8	9	10
拉伸模量 Z Tensile modulus Z	ASTM C297	MPa	1800	2350	3000
剪切强度 XZ、YZ Shear strength XZ、YZ	ISO 1922	MPa	1.8	2.1	2.60
剪切模量 XZ、YZ Shear modulus XZ、YZ	ISO 1922	MPa	140	160	180

标准板材 Standard sheet	Length（mm）	1220	tolerance	±2mm
	Width（mm）	610	tolerance	±2mm
包装 Package	包装采用标准的防护措施进行包装，包装箱密封严密，适合整体吊装。良好的防潮、防冲击、非法装卸保护措施，确保货物安全运送到用户现场。 The packaging is packaged with standard protective measures, and the packaging box is tightly sealed and suitable for overall hoisting.Good protection measures against moisture, shock and illegal loading and unloading to ensure the safe delivery of goods to the user site.			
储存 Storage	将材料包装在纸板或塑料板中，防止水分、灰尘、阳光直射和碰撞。贮存温度应低于 50℃，相对湿度应为 30%-80%，并应密封良好，控制巴尔萨的含水量以满足要求。同时，沥青木板不得有挤压、变形、开裂等缺陷，存放车间需要设置相应的防火设施。Pack the material in cardboard or plastic sheeting to keep it out of moisture, dust, direct sunlight and bumps.The storage temperature should be lower than 50℃, the relative humidity should be 30%-80%, and it should be well sealed to control the moisture content of Balsa to meet the requirements.At the same time, Balsa wood panels shall not be squeezed, deformed, cracked and other defects; corresponding fire prevention facilities are required in the storage workshop.			

注：1 所提供的数据给出了标称密度的测试近似值。由于密度的变化，有些测试值可能低于上面表格所示。

The data provided gives approximate values for the nominal density. Due to density variations these values can be lower than indicated above.

2 拉伸性能测试不带玻纤蒙皮

Tensile performance test without fiberglass skin

方向定义　Direction definition

巴沙木块状体中纤维平行方向为厚度方向，对块状体的厚度方向（*H'*）进行切割，即可得到所需厚度的板材。板材宽 *B*=610mm 方向为 X，长度 *L*=1220mm 方向为 Y，厚度 *H* 方向为 Z，方向 X 与方向 Y 共同组成厚度 Z 的垂直面。

The parallel direction of the fiber in the block is the thickness direction. By cutting the block in the thickness direction (H '), the desired thickness plate can be obtained. The plate width B=610mm direction X, the length L=1220mm direction Y, the thickness H direction Z, the direction X and direction Y together formed the vertical surface of thickness Z.