



Spauldite® ARK-2 是芳纶加强的酚醛层压材料。这种材料极其强韧并有优异的耐高温和耐磨性能。同时，它的热膨胀系数非常低，常用于对这项性能要求很高的工况。

## 主要特色

- 尺寸稳定
- 很好的耐磨性
- 高强度
- 高耐热性

## 应用

ARK-2 是做为石棉基高压层压复合材料的优异的替代产品而被研发出来的。它被应用于高温转子叶片以及其他要求高耐磨性能与非磨蚀性能の場合。

## 材料特性

材料性能	测试方法	预处理	厚度 英寸	平均值		工业要求	
				英制	公制	英制	公制
<b>机械性能</b>							
粘结强度	D-229	A D-48/50	.500 .500	TBD	TBD	NR	NR
压缩强度 正向	D-229	A	.196	55.0 ksi	379.2 MPa	≥40.0 ksi	≥275.8 MPa
弯曲强度 正向	D-229	A 纵向 横向	.196 .196	32.2 ksi 31.5 ksi	(MPa) 222.0 217.2	≥22.8 ksi ≥23.6 ksi	MPa ≥157.2 ≥162.7
弯曲杨氏模量	D-229	A 纵向 横向	.196 .196	1.37 msi 1.37 msi	(MPa) 9450 9450	≥1.23 msi ≥1.23 msi	MPa ≥8481 ≥8481
弯曲强度	D-229	E-96/200:T-200 Lengthwise	.304	19.7 ksi	(MPa) 135.8	NR	NR
弯曲杨氏模量	D-229	E-96/200:T-200 Lengthwise	.304	1.03 msi	(MPa) 7100	NR	NR
弯曲强度	D-229	E-240/200:T-200 Lengthwise	.304	14.5 ksi	(MPa) 100.0	NR	NR
弯曲杨氏模量	D-229	E-240/200:T-200 Lengthwise	.304	.79 msi	(MPa) 5447	NR	NR
弯曲强度	D-229	E-480/200:T-200 Lengthwise	.304	9.96 ksi	(MPa) 68.7	NR	NR
弯曲杨氏模量	D-229	E-480/200:T-200 Lengthwise	.304	.57 msi	(MPa) 3930	NR	NR

"To the best of our knowledge the information contained herein is accurate; however, Spaulding Composites Company, Inc. does not accept any liability regarding the accuracy or completeness of such information. Further, such information is based on standard base material and thus may change if the product ordered by purchaser requires further processing of base material by us and/or the purchaser. Purchaser has the sole responsibility in determining the suitability of any material described herein for the use contemplated and the processing of such material by purchaser."


**Spaulding**  
COMPOSITES INC

工程数据页

材料牌号: SPAULDITE® ARK-2 复合层压板

Reprint of:

0981

Issued:

1206

冲击强度 侧向 缺口	D-229	A 纵向 横向	.196 .196	13.4 ft-lbs/in 13.8 ft-lbs/in	.714 J/mm .735 J/mm	≥12.0 ft-lbs/in ≥12.0 ft-lbs/in	≥.640 J/mm ≥.640 J/mm
拉伸强度	D-229	A 纵向 横向	.196 .196	25.1 ksi 23.1 ksi	MPa 173.6 159.3	≥18.8 ksi ≥17.3 ksi	MPa ≥129.6 ≥119.3
<b>物理性能</b>							
密度	D-792	A	.196	.048 lbs/in <sup>3</sup>	1.33 g/cm <sup>3</sup>	≥.046 lbs/in <sup>3</sup>	≥1.26g/cm <sup>3</sup>
硬度	D-229	A	.196	M-108	M-108	NR	NR
热膨胀系数	D-696	A 纵向 横向	.196 .196	5.3 X 10 <sup>-6</sup> In/in/°C 4.2 X 10 <sup>-6</sup> In/in/°C	5.3 X 10 <sup>-6</sup> In/in/°C 4.2 X 10 <sup>-6</sup> In/in/°C	≤7 X 10 <sup>-6</sup> In/in/°C ≤6 X 10 <sup>-6</sup> In/in/°C	≤7 X 10 <sup>-6</sup> In/in/°C ≤6 X 10 <sup>-6</sup> In/in/°C
吸水性	D-229	D1-24/23	.196	3.7%	3.7%	≤4.5%	≤4.5%

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