



PITCH BASED CARBON FIBER
GRANOC YARN YSH-A Series
 High Compressive Strength
 (for Aerospace Application)

		YSH-50A	YSH-60A	YSH-70A
Tensile Strength	ksi	560	560	530
	kgf/mm ²	390	390	370
	MPa	3830	3830	3630
Tensile Modulus	msi	75	92	105
	10 ³ kgf/mm ²	53	64.5	73.5
	GPa	520	630	720
Ultimate Elongation	%	0.7	0.6	0.5
Density	g/cm ³	2.10	2.12	2.15
Filament Diameter	μm	7	7	7
Filaments per Yarn		1000/3000/6000	1000/3000/6000	1000/3000/6000
Yield	g/km	75/250/520	75/250/520	75/250/520
CTE	10 ⁻⁶ /K	-1.4	-1.4	-1.5
Thermal Conductivity	W/m · K	120	180	250
Electrical Resistivity	10 ⁻⁴ Ω · cm	7	6	5

- Notes :
- (1) Above figures are typical values at room temperature, not guaranteed values.
 - (2) The tensile strength and tensile modulus are measured with the impregnated strand test.
 - (3) These data may be revised if necessary.



Laminate properties / YSH series

			YSH-50A	YSH-60A	YSH-70A
0 deg Tensile	Strength	MPa	2150	2150	1960
	Modulus	GPa	310	380	430
	Elongation	%	0.6	0.5	0.4
0 deg Compressive	Strength	MPa	530	490	460
	Modulus	GPa	260	350	410
90 deg Tensile	Strength	MPa	43	37	37
	Modulus	GPa	6.8	6.5	6.2
Short beam shear	Strength	MPa	85	70	68

- These properties are based on 250F cure Epoxy resin prepreg for a fiber volume(V_f) of 60%

Notes: (1) Above figures are typical values at room temperature, not guaranteed values.

(2) These data may be revised if necessary.

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