



F0

HIGH MODULUS

A New Solution for High End
Composites:
Having A Modulus Exceeding That of
S-Glass Fiber

中国巨石股份有限公司

CHINA JUSHI CO., LTD

China Jushi Co.Ltd specializes in the production of glass fiber. The company has attained the leadership position in the global glass fiber industry in terms of Capacity, Technology, R&D, Quality and Marketing.

Jushi people adhere to our core values of "Behavior, Innovation, Responsibility, Learning, Enthusiasm" to build the company into an international corporation with the largest scale, leading technology, excellent team, lean management, powerful execution, outstanding operating results and high quality growth. China Jushi strives to lead the modernization of China's glass fiber industry and maintain the leadership position in the global glass fiber industry through endless pursuit of innovation and excellence.

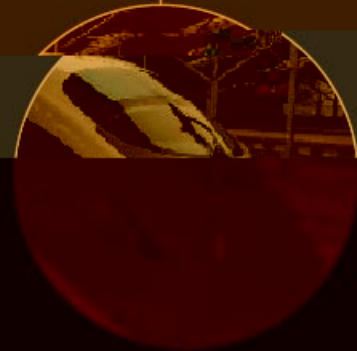
COMPANY PROFILE



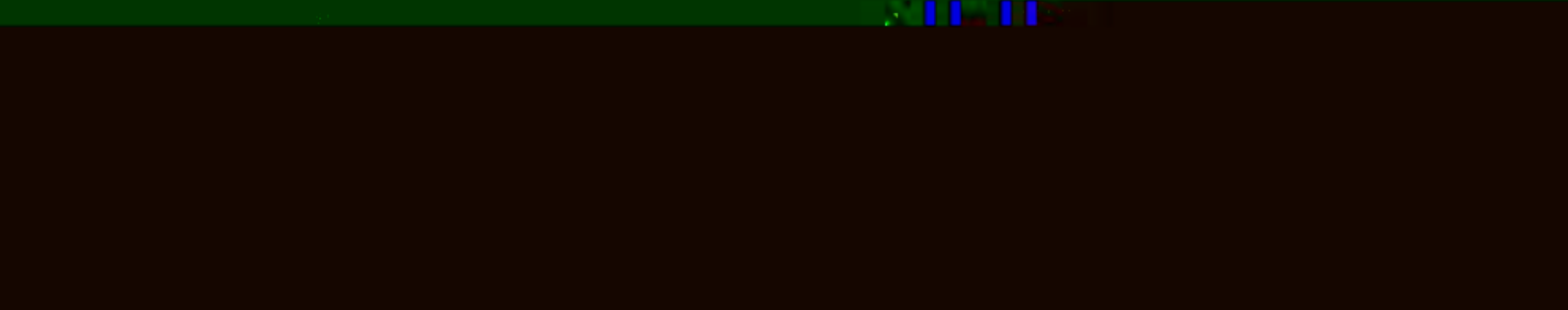
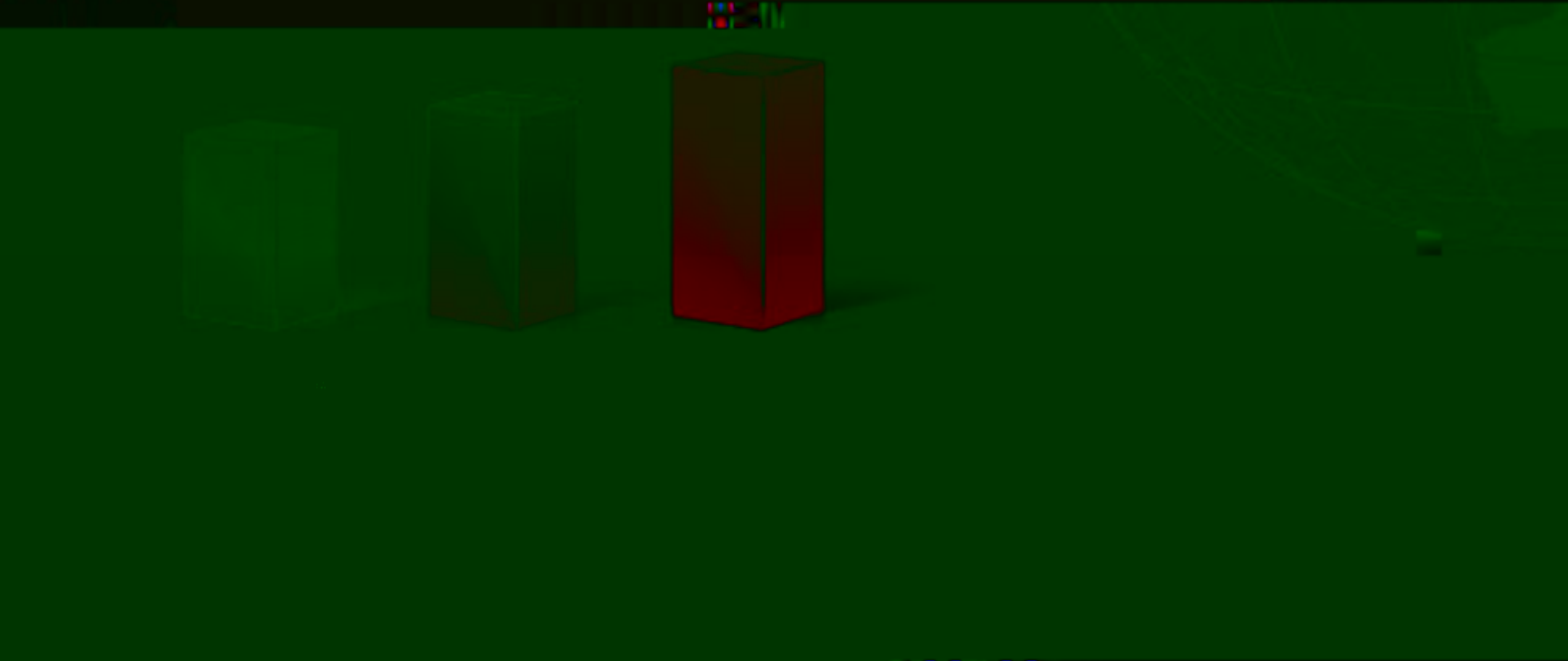
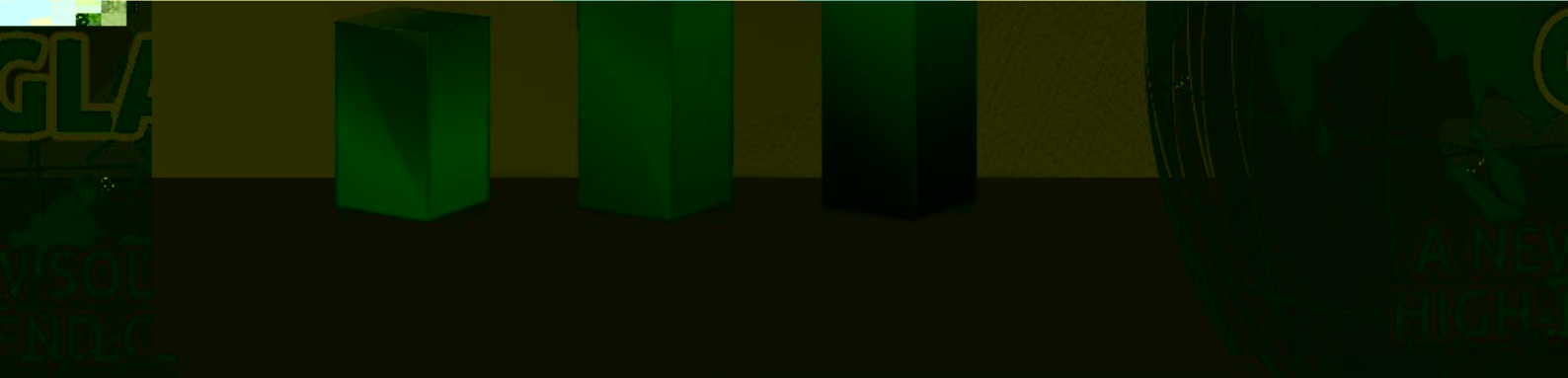
GOALS

CREATION OF A NEW SOLUTION FOR HIGH-END COMPOSITES

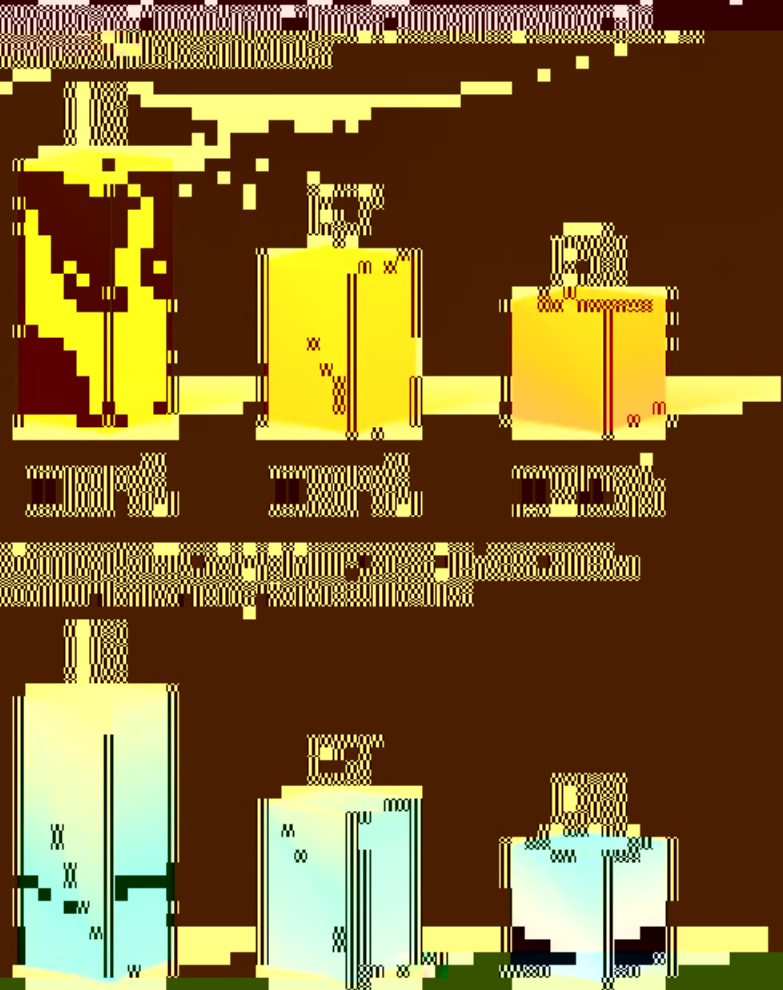
China Jushi has developed E8 High Modulus Glass Fiber in 2016, achieving a revolutionary breakthrough in the glass fiber industry. E8 glass fiber offers higher modulus and better fatigue resistance than E7 high performance glass fiber and S-glass fiber, and now can be manufactured with tank furnaces in a stable and efficient way. E8 has much better cost performance than S-glass fiber, making it more competitive than the latter. E8 is designed mainly for use in the wind blades and will create tremendous value for the wind energy market. It will be able to further promote the production and application of larger size wind blades. E8 will enable the wind blades of the same design to have higher modulus, less deformation under the same wind load and reduced blade weight. In the meantime, wind blade manufacturers can make longer blades with better fatigue resistance and higher adaptability in wind zone, which will reduce the unit cost of power generation and prolong the service life of wind blades.



Compared with E6 and E7 glass, E8 offers the following unique benefits:



E8 glass fiber is made from a unique glass composition which improves the corrosion resistance in a variety of circumstances. Compared with E6 and E7 glass fiber, E8 shows significant improvement in chemical corrosion resistance in neutral, acidic or alkaline solutions with especially superior corrosion resistance in acidic environments. E8 is therefore particularly suitable for applications which have special requirements on environmental resistance.



Environment	E6	E7	E8
Acidic	Corrosion (X)	Corrosion (X)	No Corrosion (O)
Neutral	Corrosion (X)	No Corrosion (O)	No Corrosion (O)
Alkaline	Corrosion (X)	No Corrosion (O)	No Corrosion (O)

EXCELLENT MECHANICAL PROPERTIES

E8 is a high-performance glass fiber with higher modulus and higher strength. E8 glass fiber will offer more superior mechanical properties, dimensional stability and fatigue resistance, and can meet higher design requirements of composite materials to be used more demanding environments. E8 glass fiber can be widely used in the fields of large wind blades, military equipment, high pressure vessels and aerospace.

Test Sample	Property	Standard	E6	E7	E8
1200 gm ² UD fabric, impregnated roving, Epoxy resin	Tensile strength (MPa)	ASTM D2343	2500-2700	2800-3000	3100-3500
	Tensile modulus (GPa)	ASTM D2343	81-83	89-91	95-98
1250 gm ² UD fabric, (tested in 0° direction), Infusion process, Epoxy resin	Tensile strength (MPa)	ISO 527-5	/	1321.7	1332.3
	Tensile modulus (GPa)	ISO 527-5	/	48.5	51.6
	Fiber volume content (%)	ISO 1172	/	53.6	53.8
	Compressive strength (MPa)	ISO 14126	/	972.8	1043.9
	Compressive modulus (GPa)	ISO 14126	/	49.1	52.1
	Fiber volume content (%)	ISO 1172	/	54.4	54.2





CERTIFICATIONS

CHINA JUSHI ALWAYS ADHERES TO ITS FUNDAMENTAL MANAGEMENT PRINCIPLES:

- o Apply science and technology for development.
- o Build the brand name to expand market share.
- o Emphasize management to improve efficiency.
- o Employ talented people to enable future growth.

China Jushi owns proprietary, world-class core technologies for large E-glass fiber furnaces, C-glass fiber furnaces and high-performance glass fiber.

TECHNICAL COLLABORATION AND SUPPORT





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