



E8

HIGH
MODULUS
Glass Fiber

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



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

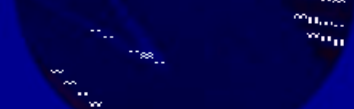
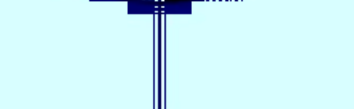
CREATION OF A NEW SOLUTION FOR HIGH-END COMPOSITES

China Jushi has developed E8 High Modulus Glass Fiber in 2016, achieving a revolutionary

breakthrough in the high modulus glass fiber field. E8 High Modulus Glass Fiber has a tensile strength of 4,800 MPa, which is 1.5 times that of ordinary high modulus glass fiber, and its modulus is 130 GPa, which is 1.2 times that of ordinary high modulus glass fiber.

E8 High Modulus Glass Fiber is a high performance glass fiber with high modulus, high strength, and high fatigue resistance. It is suitable for use in the wind blades and will create tremendous value for the wind energy market.

It will be able to further promote the innovation and application of large-size wind blades. E8 High Modulus Glass Fiber can enable the wind blades of the same design to have higher modulus, less deformation under the same wind load and reduced blade weight. At the same time, wind blade manufacturers can make larger 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.

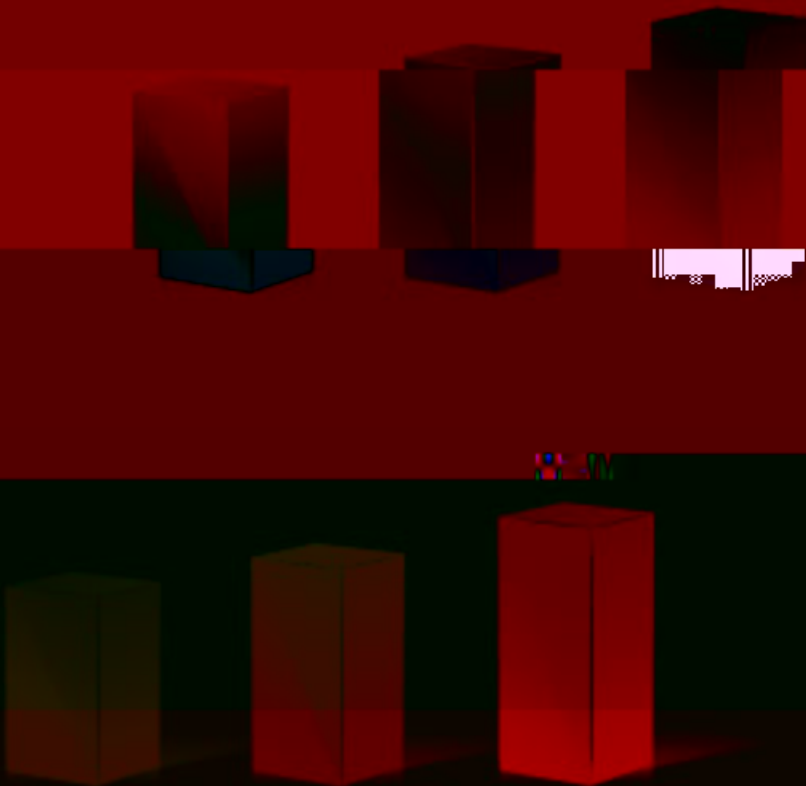


Compared with E6 and E7 glass, E8 offers the following unique benefits:

- Higher modulus, 17% higher than E6 glass, 7% higher than E7 glass;
- Higher softening point, 32℃ higher than E6 glass, 9℃ higher than E7 glass;
- The use of boron-free and iron-free materials enables clean production.

E8 is therefore more suitable for wind energy, high pressure and high temperature applications. In addition, E8 retains the excellent electrical properties of E6 glass fiber.

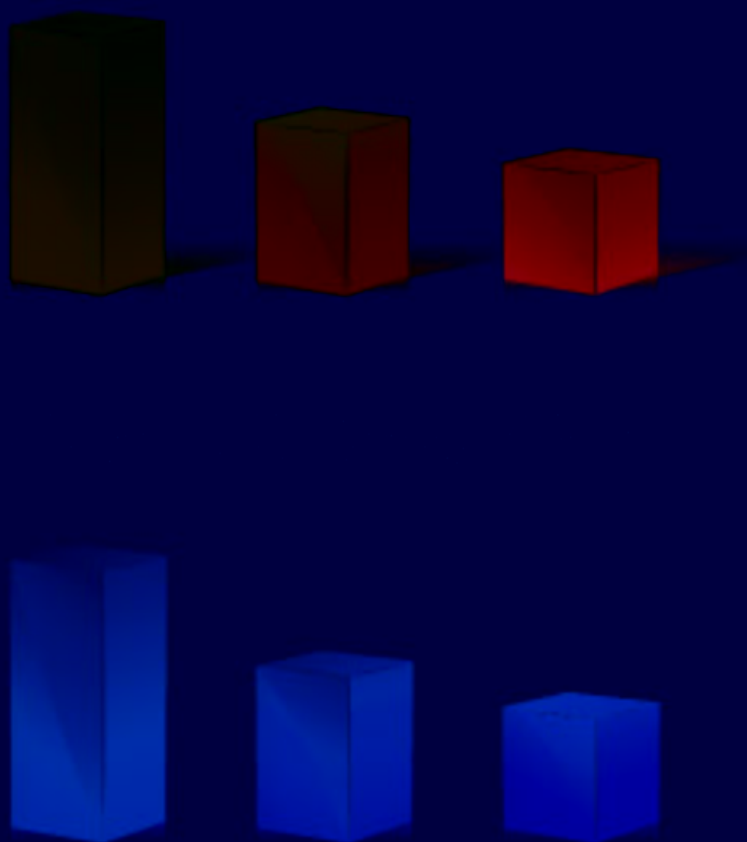
ELASTIC MODULUS COMPARISON





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 environment.

ATIONARY
ASS
UTION FOR
OMPOSITES



Weight loss in acidic solution	Soaking in 0.025M H ₂ SO ₄ solution at 23°C for 24 hours	%	0.08	0.07	0.06
	Soaking in 0.025M Na ₂ CO ₃ at 23°C for 24 hours	%	0.24	0.14	0.12
Weight loss in alkaline solution	Soaking in 0.5M NaOH solution at 23°C for 24 hours	%	0.43	0.22	0.20
	Boiling in water at 100°C for 24 hours	%	0.39	0.23	0.20

Note: The above tested products have a uniform filament diameter.

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 performance sports equipment, aerospace.

Test Sample	Property	Standard	E6	E7	E8
Tensile property of impregnated roving. Epoxy resin.	Tensile strength (MPa)	ASTM D2343	2500-2700	2800-3000	3100-3500
	Tensile modulus (GPa)	ASTM D2343	85-93	89-91	95-98
1250 gsm ² UD fabric. (tested in 0° direction). Invasion process. Epoxy resin.	Tensile strength (MPa)	ISO 527-4	/	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	/	45.1	52.1
	Fiber volume content (%)	ISO 1172	/	54.8	54.3



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 and
- o Employ talented people to fulfill the mission.

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

It has achieved management system certifications to ISO9001, ISO14001, OHSAS18001, ISO10012 and ISO17025. Its testing center has been certified by both China National Accreditation Board for Laboratories (CNAS) and Germanischer Lloyd (GL). The fiberglass rovings and chopped strand mats under the JUSHI brand have been listed as "China Top Brand" products and the trademark "JUSHI" has been recognized as "China Famous Trademark". The principal products of Jushi Group have been approved by DET NORSKE VERITAS (DNV), Lloyd's Register (LR), China Classification Society (CCS), Germanischer Lloyd (GL) and Attestation De Conformité Sanitaire (ACS).



TECHNICAL COLLABORATION AND SUPPORT

China Jushi possesses world class core technologies and advanced testing and analysis capabilities for glass, organic chemistry, fiberglass and composites. Jushi has established a global network of marketing and technical service professional to help customers solve problems in materials development and





中国巨石股份有限公司 CHINA JUSHI CO., LTD

Longgang Economic Development Zone, Zhenjiang 214500, China

International Sales: Tel: +86 573 88186312 Fax: +86 573 89161032

Domestic Sales: Tel: +86 573 88181016 Fax: +86 573 88186310

Customer Service: Tel: +86 573 88186325 Fax: +86 573 89186248

www.jushi.com E-mail: info@jushi.com