



www.junhuaPEEK.com



China PEEK



Super polymer -- PEEK (polyether ether ketone), PI (polyimide) and other high-performance plastic resin, profiles and products professional manufacturers

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PEEK are widely applied in high-end fields because of their outstanding comprehensive properties.



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Company Profile



Junhua chinaPEEK was established in 2007. Based on the experience of PEEK R&D and production in the past 18 years, it has become a whole industrial chain company focused on PEEK resin raw material polymerization, PEEK rod, tube sheet extrusion and finished parts' R&D, production and sales. It has production and sales subsidiaries in many cities in China, and its products are sold to domestic and also foreign markets such as Europe, America and Southeast Asia.

Core Business

Junhua chinaPEEK specializes in the application, development and production of high performance special engineering plastic(PEEK) resin and profile. We have formed a complete industrial chain with PEEK raw material resin polymerization, modified granulation, injection molding and machining of finished parts, and continuous extrusion of materials such as rod, tube and sheets.

Objective

Through working with research institute,material supplier and clients, we want to promote super engineering plastic more widely used in industries like textile dyeing printing machinery, automotive, semiconductor, Solar,FPD, analysis & measuring instrument, food processing, beverage filling and packaging, medical,etc.

Principle

Honesty

Pragmatic

Cooperation

Innovation

Win-Win



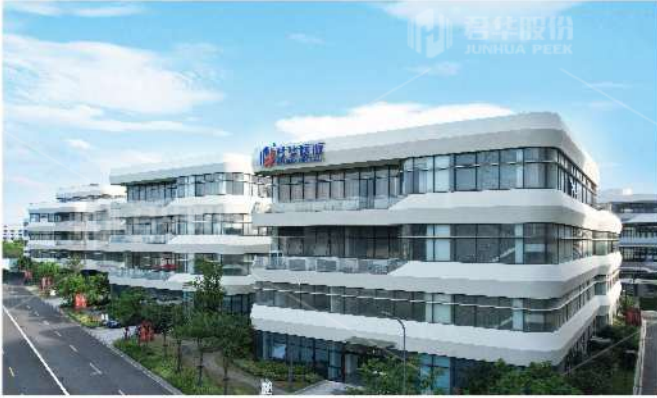
High-tech Enterprise Certificate



Engineering Technology Research Center



National Specialized and New "Little Giant" Enterprise



Changzhou Junhua Medical Technology Co., Ltd.

Changzhou Junhua Medical Co., Ltd. is a wholly-owned subsidiary of Jiangsu Junhua. It has set up a special team to cooperate with customers in the medical industry to develop, produce and sale medical polymer and products such as medical PEEK, PPSU, carbon fiber reinforced PEEK composite. The company has established ISO13485 quality management system, and the materials have been certified by third-party authorities such as FDA, REACH, ROHS and ISO10993. It is equipped with clean workshops and complete processing and inspection facilities.

Changzhou Junhang High Performance Composite Material Co., Ltd.

Changzhou Junhang High Performance Composite Material Co., Ltd. focusing on the development, production and sales of thermoplastic composite prepregs and sheets like continuous carbon fiber CF, glass fiber GF and other reinforced PEEK, PEKK, PPS, PEI, etc. The products mainly include thermoplastic composite prepregs, sheets and finished parts, which are widely used in aerospace, medical equipment and nuclear power and other high-end fields.



Shandong Junhao High Performance Polymer Co., Ltd.

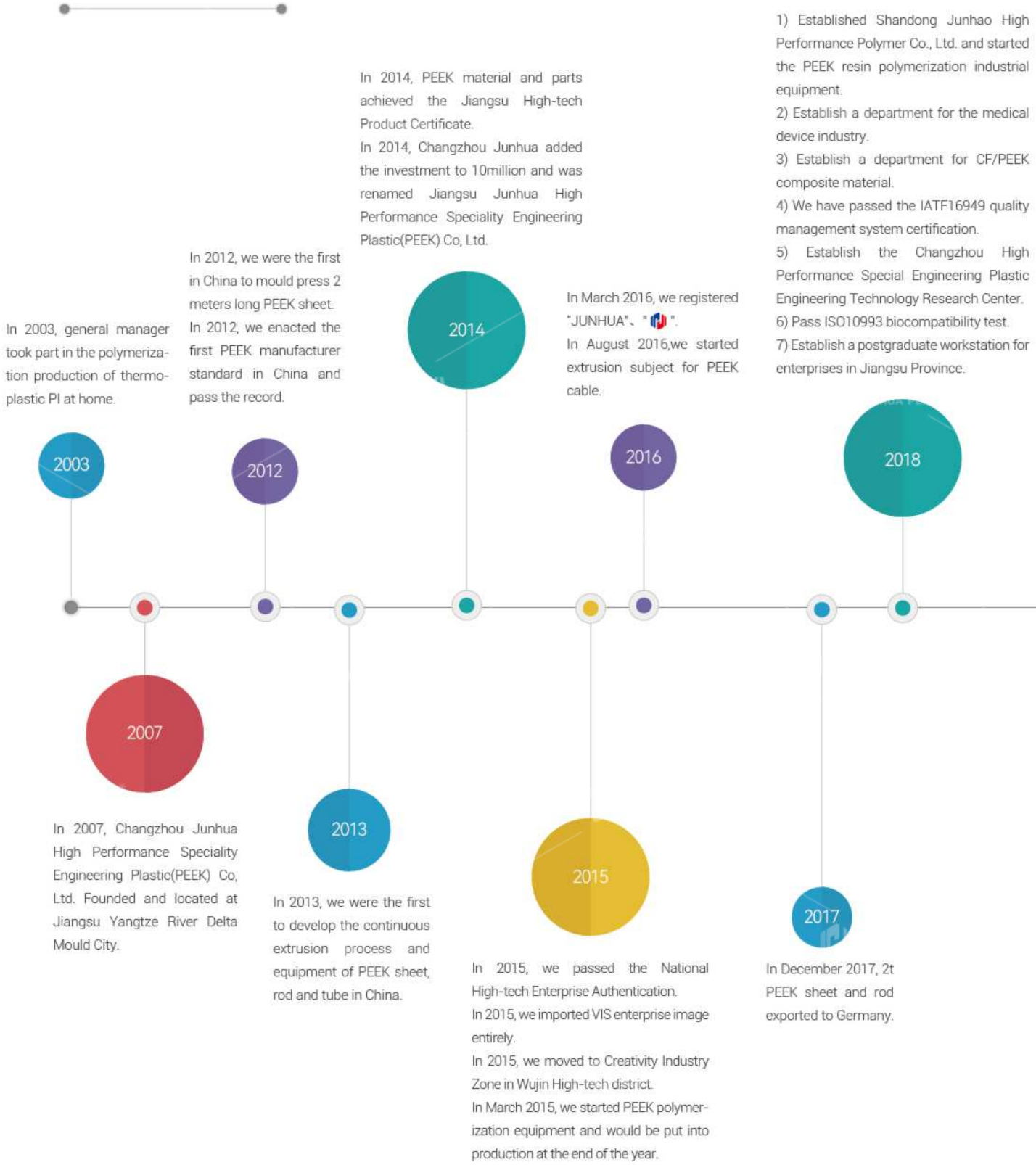
Shandong Junhao High Performance Polymer Co., Ltd. adopts the patented technology of Jilin University, focusing on the development, production and sales of PEEK (polyether ether ketone), PEK (polyether ketone) and other high performance polymers. The company has built two sets of devices with an annual capacity of 2,500 tons of PEEK resin modified particles, 600 tons of PI resin and 100 tons of medical PEEK in Jining New Materials Industrial Park, a professional chemical park in Shandong Province, providing strong raw material support for PEEK profile extrusion, composite materials and research and development and production of medical PEEK.

Changzhou Junwei Semiconductor Technology Co., Ltd.

Founded in 2025 in Changzhou, the company specializes in core semiconductor equipment components, including vacuum chambers, precision parts, and sensor assemblies. It offers precision machining, surface treatment, and customized solutions. With micro/nano machining and high-cleanliness coating technologies, the company serves equipment makers, wafer fabs, and packaging firms. Driven by the need for domestic substitution, it focuses on high-end component localization and is emerging as a key player in the semiconductor supply chain.



Development History



- 1) The company's medical grade poly ether ether ketone (PEEK) material production key technology and PEEK medical catheter R&D and industrial projects (Changzhou Key R&D Program in 2020—Industrial Technology Support Program) received government funding support.
- 2) PEEK5600CF30 and CF/PEEK composite materials have passed the ISO10993 biocompatibility test, conforming to the biological evaluation.
- 3) Jiangsu Junhua PEEK composite material contributed to the successful launch of the Long March 5B rocket.

- 1) Changzhou Junhua Medical entered Gongyanhui and opened a new factory.
- 2) Won the titles of national specialized and new "Little Giant" Enterprise, "Jiangsu Provincial Enterprise Technology Center", "Jiangsu Industrial Design Center" and so on.

- 1) Junhua Shares Changzhou smart new factory began to lay the foundation.
- 2) Junhua Shares won the second prize of Jiangsu Science and Technology Award.

- 1) Established a wholly-owned subsidiary, Changzhou Junhua Medical Technology Co., Ltd.
- 2) Established Changzhou Junhang High Performance Composite Materials Co., Ltd.
- 3) Increase the office and production area of 2000 square meters, and build a clean workshop of 280 square meters.
- 4) Imported 1250mm wide PEEK sheet extrusion production line.
- 5) The company was selected into the list of Gazelle enterprises in the Southern Jiangsu National Independent Innovation Demonstration Zone.
- 6) Two newly developed products, implanted PEEK material and continuous carbon fiber reinforced PEEK composite material, were recognized as "Changzhou Manufacturing Innovative Products".

- 1) AKSOPEEK® new-generation medical implant-grade material brand trademark was officially released.
- 2) Participated in the formulation of national standards for polyetheretherketone (PEEK) resins.
- 3) The first round of financing was 60 million yuan, and the IPO was launched.

- 1) Continuous CF/PEEK thermoplastic composites and medical-grade AKSOPEEK® have passed the new product verification by Industry And Information Technology Department of Jiangsu.
- 2) Completed equity incentives and corporate shareholding reform.
- 3) Initiate the standardization of internal control system for IPO.
- 4) Initiate the design and construction of a new smart factory.

- 1) Junhua Corporation's new intelligent factory in Changzhou commenced operation.
- 2) Junhua Corporation initiated A-share IPO tutoring and guidance.
- 3) Approved for inclusion in Jiangsu Provincial Frontier Technology R&D Program.
- 4) Established a wholly-owned subsidiary, Changzhou Junwei Semiconductor Technology Co., Ltd.

Advantages

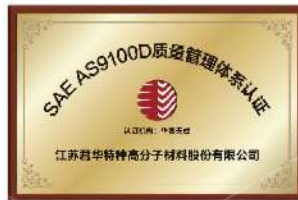


The core technical advantage, the greatest value



Strict Quality System Certification

The company has passed ISO9001, IATF16949 certification, ISO13485 certification, AS9100D aerospace quality system certification, FDA food grade certification, RoHS testing and other third-party certifications.



Perfect Hardware Facilities



Office



Product Display Room



R & D Lab

Investing the Huge Amounts to Import the PEEK Extrusion Production Line From Europe



PEEK Sheet Extrusion Production Line



PEEK Square Sheet Extrusion Production Line



PEEK Thick-Wall Tube Extrusion Production Line



PEEK Rod Extrusion Production Line



PEEK Plate Extrusion Production Line



PEEK Cable Production Line



PEEK Tube Extrusion Production Line



PEEK Wire Production Line

Authorized Certificate

The company led the development of 5 national standards, 2 industry standards, 2 group standards; It has 81 authorized invention patents and 63 utility model patents.

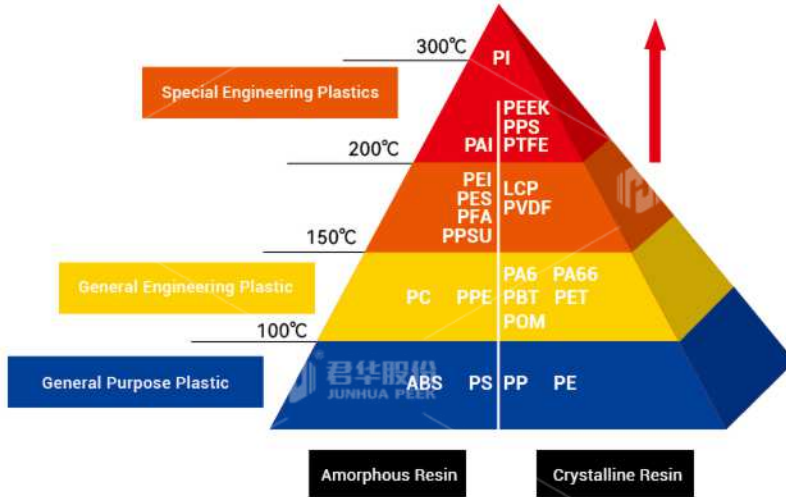


Continuous Technology Innovation, Amounts of Patent

No.	Name	Patent Number	Apply Time	Issuing Time	Type
1	A High-Contrast Polyetheretherketone Material Meeting Aviation Standard Requirements and Method for Preparing the Same	ZL202411108483.7	2024.8.13	2025.2.11	Invention
2	A Heat-Insulating, Low-Dielectric-Constant Polyaryletherketone-Based Composite Material and Method for Preparing the Same	ZL202410402689.4	2024.4.3	2025.2.11	Invention
3	A Conductive, Electromagnetic Shielding Polyaryletherketone-Based Composite Material and Method for Preparing the Same	ZL202410647649.6	2024.5.23	2025.3.21	Invention
4	A PEEK Material Manufacturing Process with Antibacterial Function	ZL202411127274.7	2024.8.16	2025.3.25	Invention
5	Modified Biochar/Carbon Fiber/PEEK Composite Material and Method for Preparing the Same	ZL202410698984.9	2024.5.31	2025.4.18	Invention
6	An Emulsifier, a Polyetheretherketone Aqueous Emulsion Sizing Agent, and a Carbon Fiber Prepreg	ZL202411333540.1	2024.9.24	2025.5.27	Invention
7	A Wear-Resistant Modified Polyaryletherketone Composite Material and Method for Preparing the Same	ZL202410782505.1	2024.6.18	2025.6.17	Invention
8	A Polyetheretherketone-Based Composite Material Resistant to High and Low Temperature Friction	ZL202411333170.1	2024.9.24	2025.6.17	Invention
9	A PEEK Double-Layer Co-Extruded Composite Film and Method for Preparing the Same	ZL202410874835.3	2024.7.2	2025.6.17	Invention
10	A Carbon Fiber Felt Reinforced Composite Material and Method for Preparing the Same	ZL202410815686.3	2024.6.24	2025.6.17	Invention
11	A Photocatalytic High-Antibacterial Polyaryletherketone Composite Material and Method for Preparing the Same	ZL202411861846.4	2024.12.17	2025.7.18	Invention
12	A Wave-Absorbing Polyaryletherketone Composite Material and Method for Preparing the Same	ZL202410637783.8	2024.5.22	2025.7.18	Invention
13	Method for Preparing a Photodegradation-Resistant Inorganic Fiber/Polyaryletherketone Composite Material	ZL202410651761.7	2024.5.24	2025.7.18	Invention
14	A Low-Dielectric Lightweight High-Temperature-Resistant Polyaryletherketone Composite Material and Method for Preparing the Same	ZL202411567518.3	2024.11.05	2025.8.19	Invention

PEEK and Property

Plastic Classification



PEEK shows excellent overall performance due to its large amount of benzene ring structure in its molecule

PEEK (polyetheretherketone) resin is a high performance specialty thermoplastic material and is one of the most important varieties of commercial polyaryletherketone resins. At present, polyetheretherketone is widely used in petroleum, food processing, automotive and aerospace fields due to its excellent electrical and mechanical properties, high temperature resistance and corrosion resistance.

PEEK Advantages

 FDA Approved	 Self Lubrication	 Wearing Resistance	 Corrosion Resistance
 Low Noise	 Impact Resistance	 High Temperature Resistance	 Hydrolysis Resistance
 High Strength	 High Purity	 Light Weight	 Good Biocompatibility

Biocompatibility Test

Experimental Standards	Experiment Titles	Experiment Results
ISO 10993-4:2017	Hemocompatibility	PASS
ISO 10993-5:2009	Cytotoxicity Testing	PASS
ISO 10993-10:2010	Skin Sensitization Test	PASS
ISO 10993-10:2010	Intradermal Reactivity Test	PASS
ISO 10993-11:2017	Acute Systemic Toxicity Test	PASS
ISO 10993-11:2017	Pyrogen Test	PASS

PEEK Main Material Grade and Typical Properties

Mechanical Behavior

Item	Test Standard or Instrument	Unit	PEEK5600G	PEEK5600GF30	PEEK5600CF30	PEEK5600LF30	PEEK5600FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20%PTFE
Tensile Strength (23°C)	ISO 527	MPa	95	175	250	145	70
Tensile Modulus (23°C)	ISO 527	GPa	3.8	11	23	12.5	/
Elongation at Break (23°C)	ISO 527	%	35	2.0	1.5	2.2	/
Bending Strength (23°C)	ISO 178	MPa	155	235	350	220	118
Bending Modulus (23°C)	ISO 178	GPa	3.5	10	21	11	/
Charpy Impact Strength (No Gap)	ISO 179/1U	kJ/m²	No break	55	45	32	No break
IZOD Impact Strength (Gap)	ISO 180/A	kJ/m²	4	6	6.5	4	6

Thermal Performance

Item	Test Standard or Instrument	Unit	PEEK5600G	PEEK5600GF30	PEEK5600CF30	PEEK5600LF30	PEEK5600FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20%PTFE
Melting Point	ISO11357	°C	343	343	343	343	343
Glass Transition Temperature	ISO11357	°C	152	143	143	143	143
Distortion Temperature	ISO 75A-f	1.8MPa, °C	260	315	315	293	150
Coefficient of Thermal Expansion	ASTM D696	ppm K-1	45	22	15	22	70
Thermal Conductivity	ISO /CD22007-4	W / (m·K)	0.29	0.32	0.95	0.86	/

Electrical Performance

Item	Test Standard or Instrument	Unit	PEEK5600G	PEEK5600GF30	PEEK5600CF30	PEEK5600LF30	PEEK5600FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20%PTFE
Dielectric Strength (2mm)	IEC 60243-1	kV/mm	20	19	/	/	19
Dielectric Constant	IEC 62631	-	3.0	3.3	/	/	2.7
Surface Resistivity	GB/T31838.3	Ω	10 ¹⁵	10 ¹⁴	/	/	10 ¹⁶
Volume Resistivity	IEC 62631	Ω·cm	10 ¹⁶	10 ¹⁶	10 ⁹	10 ⁶	/

Other Performance

Item	Test Standard or Instrument	Unit	PEEK5600G	PEEK5600GF30	PEEK5600CF30	PEEK5600LF30	PEEK5600FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20%PTFE
Colour	-	-	Natural	Natural	Black	Black	Natural
Melt Flow Rate (400°C, 2.16kg)	ISO 1133	g/10min	6-10	2-5	1-3	2-5	/
Density	ISO 1183	g/cm³	1.30±0.02	1.50±0.02	1.40±0.02	1.44±0.02	1.41±0.02
Water Absorption (23°C, 24Hrs)	ISO 62-1	%	0.07	0.05	0.04	0.05	0.15
Mould Shrinking Percentage	Parallel to the flow direction Perpendicular to the direction of flow	%	1.2	0.4	0.1	0.3	1.3
		%	1.5	0.8	0.5	0.6	1.8
Rockwell Hardness	GB/T 3398.2	HRR	118	119	121	108	113
Flammability Rating	UL 94	/	V-0	V-0	V-0	V-0	/
Friction Coefficient	ASTM D3702	100N-120rpm	0.30-0.38	0.38-0.46	0.15-0.25	0.18-0.30	0.1-0.2

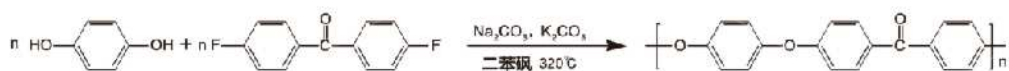
* This parameter represents a value, not a guaranteed value. If you need to call me division technology department for more detailed technical indicators!

Brand Number	PEEK5600G	PEEK5600CF30	PEEK5600GF30	PEEK5600LF30
PEEK Resin				
PEEK Sheet Rod/Tube				
PEEK Product				



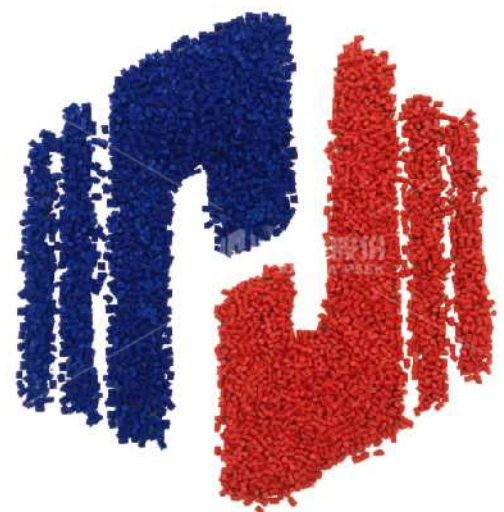
PEEK Resin

Our PEEK material adopts the patented technology of Jilin University. In the aprotic polar solvent, diphenyl sulfone is used as solvent, and 4,4'-difluorobenzophenone and hydroquinone are used as monomers. In the presence of an alkali metal carbonate, it is formed by polycondensation at a high temperature. During the polymerization, the purpose of controlling the molecular weight of PEEK is achieved by controlling the viscosity of the polymerization. In order to meet the various needs of customers, we will modify PEEK, adding carbon fiber, glass fiber and other reinforcing materials to improve the mechanical properties of PEEK; adding PTFE, molybdenum disulfide, etc. to improve the self-lubricating ability of PEEK, and then improve wear resistance; add titanium dioxide, zirconium dioxide, etc. to improve mechanical rigidity and ensure electrical performance. In addition, in order to meet customer needs, we can provide white, black, yellow, green and other color PEEK particles.






PEEK has outstanding properties like high and low temperature resistance, flame retardant, radiation resistance and mechanical properties, which makes it can be used as ultra high temperature conductor in aerospace industry. In the petroleum industry, it can be used as the submerged pump motor winding wire and connecting line. In the atomic power plant, the winding coil which can be used as the nuclear island driving mechanism is used under irradiation conditions for a long time.





PEEK Rod

Extruded PEEK rod (natural or modified) from dia 3mm to dia 300mm, length from 1000mm to 3000mm, All the diameters we keep ready stock. Special diameter according to order is also available.

	Material	Diameter(mm)	Length(mm)	Color
	PEEK5600G	3~300	1000, 3000	Natural
	PEEK5600CF30	5~180	1000, 3000	Black
	PEEK5600LF30	5~180	1000, 3000	Black
	PEEK5600GF30	5~260	1000, 3000	Natural
	ESD PEEK	5~260	1000, 3000	Black

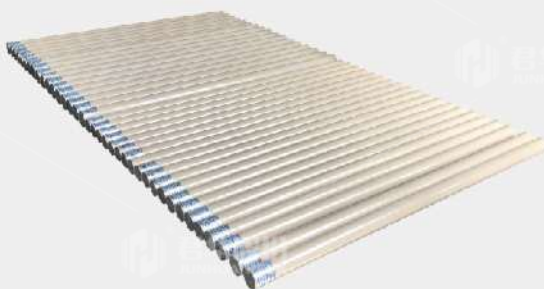


PEEK Rod Specification Table

	Rod Diameter (mm)	Dimensional Tolerance (mm)	Roundness Tolerance (mm)	Weight Per Meter (kg/m)			
				PEEK5600G	PEEK5600CF30	PEEK5600GF30	PEEK5600LF30
1	3	+0.1/+0.6	0.1	0.01	0.01	0.01	0.01
2	4	+0.1/+0.6	0.1	0.02	0.02	0.02	0.02
3	5	+0.1/+0.6	0.1	0.03	0.04	0.04	0.04
4	6	+0.1/+0.6	0.1	0.05	0.05	0.06	0.06
5	8	+0.1/+0.8	0.2	0.06	0.07	0.08	0.08
6	10	+0.1/+0.8	0.2	0.12	0.13	0.14	0.13
7	12	+0.2/+1.2	0.3	0.16	0.17	0.19	0.18
8	13	+0.2/+1.2	0.3	0.18	0.21	0.23	0.22
9	15	+0.2/+1.2	0.3	0.25	0.27	0.29	0.28
10	16	+0.2/+1.2	0.3	0.28	0.28	0.31	0.29
11	18	+0.2/+1.2	0.3	0.36	0.38	0.42	0.39
12	20	+0.2/+1.2	0.3	0.45	0.45	0.53	0.51
13	22	+0.3/+1.5	0.3	0.54	0.56	0.61	0.58
14	25	+0.3/+1.5	0.3	0.67	0.65	0.76	0.72
15	26	+0.3/+1.5	0.3	0.73	0.78	0.86	0.81
16	28	+0.3/+1.5	0.3	0.85	0.92	1.03	0.95
17	30	+0.3/+1.5	0.3	1.00	0.97	1.18	1.02
18	32	+0.3/+1.5	0.3	1.10	1.12	1.29	1.22
19	33	+0.3/+1.5	0.3	1.19	1.28	1.39	1.31
20	35	+0.3/+2.0	0.3	1.35	1.34	1.42	1.35
21	38	+0.3/+2.0	0.3	1.52	1.66	1.81	1.71
22	40	+0.3/+2.0	0.3	1.79	1.90	2.06	1.94
23	42	+0.3/+2.0	0.3	1.91	2.05	2.22	2.11
24	45	+0.3/+2.0	0.3	2.21	2.32	2.56	2.39
25	50	+0.3/+2.0	0.3	2.71	2.81	3.13	3.14
26	53	+0.3/+2.0	0.3	2.95	3.15	3.45	3.26
27	55	+0.3/+2.0	0.3	3.34	3.64	3.85	3.62
28	60	+0.3/+2.5	0.3	3.95	4.16	4.60	4.21
29	65	+0.3/+2.5	0.3	4.61	4.89	5.32	5.03
30	70	+0.6/+2.5	0.35	5.59	5.97	6.45	6.10

	Rod Diameter (mm)	Dimensional Tolerance (mm)	Roundness Tolerance (mm)	Weight Per Meter (kg/m)			
				PEEK5600G	PEEK5600CF30	PEEK5600GF30	PEEK5600LF30
31	72	+0.6/+2.5	0.35	5.44	5.86	6.27	6.07
32	75	+0.6/+2.5	0.35	6.12	6.49	7.06	6.68
33	78	+0.6/+2.5	0.35	6.37	6.86	7.35	7.1
34	80	+0.6/+3	0.35	7.13	7.61	8.22	7.78
35	85	+0.6/+3	0.35	8.03	8.52	9.26	8.77
36	90	+0.6/+3	0.35	8.87	9.41	10.23	9.68
37	93	+0.6/+3	0.35	9.02	9.71	10.4	10.1
38	95	+0.6/+3	0.35	9.43	10.13	11.08	10.42
39	100	+0.6/+3	0.35	10.83	11.50	12.49	11.82
40	105	+0.6/+3	0.35	11.47	12.35	13.23	12.79
41	110	+0.6/+3	0.35	13.22	14.03	15.25	14.44
42	115	+0.6/+3	0.35	13.53	14.78	16.06	15.22
43	120	+0.6/+3.5	0.35	15.44	16.42	17.62	16.67
44	125	+0.6/+3.5	0.4	16.30	17.21	18.73	17.74
45	130	+0.6/+3.5	0.4	18.10	19.21	20.88	19.70
46	140	+0.6/+3.5	0.4	21.30	22.61	24.57	23.26
47	150	+1.1/+5.0	0.4	24.10	25.58	27.80	26.36
48	160	+1.1/+5.0	0.5	27.15	28.80	31.32	29.65
49	165	+1.1/+5.0	0.5	29.35	31.15	33.89	32.05
50	170	+1.1/+5.0	0.5	30.22	32.49	35.04	33.43
51	180	+1.1/+5.0	0.5	33.99	35.93	38.94	36.88
52	190	+1.1/+5.0	0.5	37.86	/	/	/
53	200	+1.1/+5.0	1.00	43.54	/	/	/
54	210	+1.1/+5.0	1.00	46.08	/	/	/
55	220	+1.3/+6.0	1.00	50.79	/	/	/
56	230	+1.3/+6.0	1.00	55.56	/	/	/
57	250	+1.5/+6.5	1.00	65.51	/	/	/
58	260	+1.5/+6.5	1.00	71.12	/	/	/
59	300	+2.0/+15.0	2.0	100.17	/	/	/

Note: The actual weight is subject to weighing.



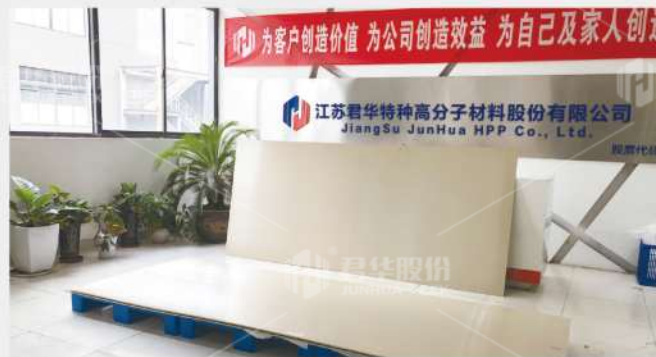
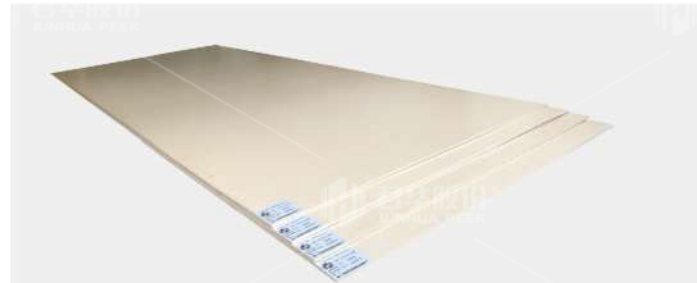


PEEK Sheet/Plate

Junhua introduced PEEK profile extrusion production line, extrusion 1250mm wide size PEEK sheet, Junhua extrusion sheet width from 600mm wide breakthrough to 1250mm, will meet the valve and other industries large size PEEK parts for ultra-wide PEEK sheet demand, better improve production efficiency, improve PEEK product quality, Ensure delivery time and reduce costs. At the same time, the wide plate has a higher material utilization rate during typesetting and cutting machining. In 2025, the sheet width achieved another breakthrough, with the capability to produce sheets up to 1600 mm in width now in place, and specifications gradually expanding.



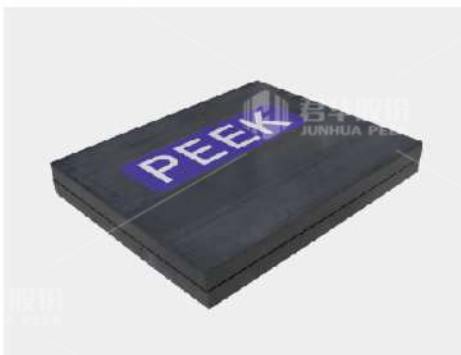
Material	Width(mm)	Thickness(mm)	Length(mm)	Color
PEEK5600G	600~1600	5~100	1000, 3000	Natural, Black, Red, Yellow
PEEK5600CF30	600	6~60	1000, 3000	Black
PEEK5600LF30	600	6~60	1000, 3000	Black
PEEK5600GF30	600	5~60	1000, 3000	Natural, Black
ESD PEEK	600	6~60	1000	Black
CF/PEEK	600, 1000	2~50	1000, 1200	Black



PEEK Sheet Specification Table

	Size(W×T)(mm)	Dimensional Tolerance(mm)		Size(W×T)(mm)	Dimensional Tolerance(mm)		Size(W×T)(mm)	Dimensional Tolerance(mm)		Special Size (W×T)(mm)	Dimensional Tolerance(mm)
1	600 X 5	+0.1/+1.0	21	600 X 60	+0.3/+3.0	41	1250 X 25	+0.3/+1.5	59	185 X 173	+0.3/+5.0
2	600 X 6	+0.1/+1.0	22	600 X 65	+0.3/+3.0	42	1250 X 28	+0.3/+2.0	60	186 X 141	+0.3/+5.0
3	600 X 7	+0.1/+1.0	23	600 X 70	+0.3/+3.5	43	1250 X 30	+0.3/+2.0	61	207 X 78	+0.3/+5.0
4	600 X 8	+0.1/+1.5	24	600 X 75	+0.3/+3.5	44	1250 X 32	+0.3/+2.0	62	365 X 205	+0.3/+5.0
5	600 X 10	+0.1/+1.5	25	600 X 80	+0.3/+4.0	45	1250 X 35	+0.3/+2.0	63	407 X 125	+0.3/+5.0
6	600 X 12	+0.3/+1.5	26	600 X 85	+0.3/+4.0	46	1250 X 40	+0.3/+2.0			
7	600 X 15	+0.3/+1.5	27	600 X 90	+0.3/+4.0	47	1250 X 45	+0.3/+2.0			
8	600 X 16	+0.3/+1.5	28	600 X 95	+0.3/+4.0	48	1250 X 50	+0.3/+2.5			
9	600 X 18	+0.3/+1.5	29	600 X 100	+0.3/+5.0	49	1250 X 55	+0.3/+2.5			
10	600 X 20	+0.3/+1.5	30	1250 X 5	+0.1/+1.0	50	1250 X 60	+0.3/+3.0			
11	600 X 22	+0.3/+1.5	31	1250 X 6	+0.1/+1.0	51	1250 X 65	+0.3/+3.0			
12	600 X 25	+0.3/+1.5	32	1250 X 7	+0.1/+1.0	52	1250 X 70	+0.3/+3.5			
13	600 X 28	+0.3/+2.0	33	1250 X 8	+0.1/+1.5	53	1250 X 75	+0.3/+3.5			
14	600 X 30	+0.3/+2.0	34	1250 X 10	+0.1/+1.5	54	1250 X 80	+0.3/+4.0			
15	600 X 32	+0.3/+2.0	35	1250 X 12	+0.3/+1.5	55	1250 X 85	+0.3/+4.0			
16	600 X 35	+0.3/+2.0	36	1250 X 15	+0.3/+1.5	56	1250 X 90	+0.3/+4.0			
17	600 X 40	+0.3/+2.0	37	1250 X 16	+0.3/+1.5	57	1250 X 95	+0.3/+4.0			
18	600 X 45	+0.3/+2.0	38	1250 X 18	+0.3/+1.5	58	1250 X 100	+0.3/+5.0			
19	600 X 50	+0.3/+2.5	39	1250 X 20	+0.3/+1.5						
20	600 X 55	+0.3/+2.5	40	1250 X 22	+0.3/+1.5						

Note: The actual weight is subject to weighing. The length of PEEK sheet ranges from 1000mm to 3000mm, which can be customized according to requirements.





PEEK Sheet

PEEK sheet processed by continuous extrusion process has high surface finish and uniform size, and is widely used in electronics, textile printing and aerospace.



PEEK Sheet Specification Table

Serial Number	Size(T×W×L)(mm)	Weight(kg/m)
1	1*600*1000	0.9
2	2*650*1000	1.9
3	3*650*1000	2.8
4	4*650*1000	3.4
5	5*650*1000	4.3

PEEK Film/Sheet

PEEK film/sheet is made of PEEK particles by high temperature melting, casting molding. The films produced by our company are mainly divided into amorphous transparent films and crystalline films.

PEEK Film/Sheet Specification Table

Serial Number	Size(T×W×L)(mm)	Weight(kg/m)
1	(0.1- 0.4)*1360*1000	0.18- 0.72
2	(0.5- 0.8)*680*1000	0.44- 0.72



PEEK Tube

The PEEK tube produced by the continuous extrusion process solves the technical problem that the molding process product is highly restricted and the injection molding process is prone to generate internal shrinkage holes. At the same time, it reduces the waste of material and reduce machining costs. The tube can be processed into ring parts such as seal ring, piston ring, wear sleeve and valve seal, which are widely used in petrochemical, electronic semiconductor and other industries.



PEEK Tube Specification Table

	OD×ID(mm)	OD Tolerance (mm)	ID Tolerance (mm)	Roundness Tolerance(mm)		OD×ID(mm)	OD Tolerance (mm)	ID Tolerance (mm)	Roundness Tolerance(mm)		OD×ID(mm)	OD Tolerance (mm)	ID Tolerance (mm)	Roundness Tolerance(mm)
1	23 X 12	0/+1.2	-1.2/0	0.5	59	120 X 99	0/+2.5	-2.5/0	1.0	117	239 X 210	0/+4.0	-4.0/0	2.0
2	24 X 19	0/+1.2	-1.2/0	0.5	60	122 X 84	0/+2.5	-2.5/0	1.0	118	242 X 219	0/+4.0	-4.0/0	2.0
3	33 X 18	0/+1.5	-1.5/0	0.5	61	122 X 93	0/+2.5	-2.5/0	1.0	119	243 X 161	0/+4.0	-4.0/0	2.0
4	37 X 17	0/+1.5	-1.5/0	0.5	62	126 X 74	0/+3.0	-3.0/0	1.0	120	244 X 197	0/+4.0	-4.0/0	2.0
5	39 X 19	0/+1.5	-1.5/0	0.5	63	126 X 86	0/+3.0	-3.0/0	1.0	121	248 X 195	0/+4.0	-4.0/0	2.0
6	43 X 21	0/+1.5	-1.5/0	0.6	64	126 X 103	0/+3.0	-3.0/0	1.0	122	249 X 119	0/+4.0	-4.0/0	2.0
7	46 X 21	0/+1.5	-1.5/0	0.6	65	129 X 79	0/+3.0	-3.0/0	1.0	123	251 X 177	0/+5.0	-5.0/0	3.0
8	49 X 38	0/+1.5	-1.5/0	0.6	66	129 X 99	0/+3.0	-3.0/0	1.0	124	251 X 186	0/+5.0	-5.0/0	3.0
9	51 X 28	0/+2.0	-2.0/0	0.6	67	134 X 54	0/+3.0	-3.0/0	1.0	125	255 X 190	0/+5.0	-5.0/0	3.0
10	51 X 32	0/+2.0	-2.0/0	0.6	68	134 X 71	0/+3.0	-3.0/0	1.0	126	259 X 220	0/+5.0	-5.0/0	3.0
11	56 X 40	0/+2.0	-2.0/0	0.6	69	134 X 98	0/+3.0	-3.0/0	1.0	127	260 X 214	0/+5.0	-5.0/0	3.0
12	61 X 39	0/+2.5	-2.5/0	0.6	70	134 X 104	0/+3.0	-3.0/0	1.0	128	261 X 220	0/+5.0	-5.0/0	3.0
13	61 X 35	0/+2.5	-2.5/0	0.6	71	134 X 109	0/+3.0	-3.0/0	1.0	129	266 X 233	0/+5.0	-5.0/0	3.0
14	64 X 39	0/+2.5	-2.5/0	0.6	72	134 X 114	0/+3.0	-3.0/0	1.0	130	283 X 201	0/+5.0	-5.0/0	3.0
15	64 X 35	0/+2.5	-2.5/0	0.6	73	135 X 67	0/+3.0	-3.0/0	1.0	131	283 X 226	0/+5.0	-5.0/0	3.0
16	66 X 30	0/+2.5	-2.5/0	0.6	74	142 X 56	0/+3.0	-3.0/0	1.0	132	284 X 237	0/+5.0	-5.0/0	3.0
17	66 X 35	0/+2.5	-2.5/0	0.6	75	142 X 74	0/+3.0	-3.0/0	1.0	133	284 X 244	0/+5.0	-5.0/0	3.0
18	66 X 45	0/+2.5	-2.5/0	0.6	76	142 X 118	0/+3.0	-3.0/0	1.0	134	284 X 248	0/+5.0	-5.0/0	3.0
19	71 X 30	0/+2.5	-2.5/0	0.8	77	144 X 110	0/+3.0	-3.0/0	1.0	135	285 X 264	0/+5.0	-5.0/0	3.0
20	71 X 49	0/+2.5	-2.5/0	0.8	78	153 X 140	0/+3.0	-3.0/0	2.0	136	289 X 260	0/+5.0	-5.0/0	3.0
21	73 X 41	0/+2.5	-2.5/0	0.8	79	155 X 120	0/+3.0	-3.0/0	2.0	137	289 X 267	0/+5.0	-5.0/0	3.0
22	78 X 48	0/+2.5	-2.5/0	0.8	80	155 X 130	0/+3.0	-3.0/0	2.0	138	293 X 260	0/+5.0	-5.0/0	3.0
23	78 X 55	0/+2.5	-2.5/0	0.8	81	160 X 89	0/+3.0	-3.0/0	2.0	139	293 X 266	0/+5.0	-5.0/0	3.0
24	82 X 35	0/+2.5	-2.5/0	0.8	82	160 X 112	0/+3.0	-3.0/0	2.0	140	294 X 247	0/+5.0	-5.0/0	3.0
25	82 X 50	0/+2.5	-2.5/0	0.8	83	160 X 130	0/+3.0	-3.0/0	2.0	141	303 X 235	0/+6.0	-6.0/0	3.0
26	82 X 58	0/+2.5	-2.5/0	0.8	84	160 X 140	0/+3.0	-3.0/0	2.0	142	303 X 239	0/+6.0	-6.0/0	3.0
27	84 X 71	0/+2.5	-2.5/0	0.8	85	164 X 99	0/+3.0	-3.0/0	2.0	143	305 X 262	0/+6.0	-6.0/0	3.0
28	86 X 43	0/+2.5	-2.5/0	0.8	86	164 X 134	0/+3.0	-3.0/0	2.0	144	308 X 262	0/+6.0	-6.0/0	3.0
29	86 X 53	0/+2.5	-2.5/0	0.8	87	171 X 114	0/+3.0	-3.0/0	2.0	145	324 X 262	0/+6.0	-6.0/0	3.0
30	91 X 45	0/+2.5	-2.5/0	0.8	88	171 X 127	0/+3.0	-3.0/0	2.0	146	324 X 277	0/+6.0	-6.0/0	3.0
31	91 X 56	0/+2.5	-2.5/0	0.8	89	171 X 150	0/+3.0	-3.0/0	2.0	147	334 X 287	0/+6.0	-6.0/0	3.0
32	91 X 70	0/+2.5	-2.5/0	0.8	90	172 X 134	0/+3.0	-3.0/0	2.0	148	335 X 240	0/+6.0	-6.0/0	3.0
33	91 X 77	0/+2.5	-2.5/0	0.8	91	180 X 84	0/+3.0	-3.0/0	2.0	149	335 X 294	0/+6.0	-6.0/0	3.0
34	92 X 36	0/+2.5	-2.5/0	0.8	92	184 X 150	0/+3.0	-3.0/0	2.0	150	342 X 239	0/+6.0	-6.0/0	3.0
35	94 X 70	0/+2.5	-2.5/0	0.8	93	187 X 137	0/+3.0	-3.0/0	2.0	151	345 X 315	0/+6.0	-6.0/0	3.0
36	97 X 56	0/+2.5	-2.5/0	0.8	94	189 X 134	0/+3.0	-3.0/0	2.0	152	350 X 332	0/+7.0	-7.0/0	4.0
37	97 X 66	0/+2.5	-2.5/0	0.8	95	189 X 157	0/+3.0	-3.0/0	2.0	153	362 X 248	0/+7.0	-7.0/0	4.0
38	97 X 81	0/+2.5	-2.5/0	0.8	96	192 X 150	0/+3.0	-3.0/0	2.0	154	362 X 270	0/+7.0	-7.0/0	4.0
39	99 X 79	0/+2.5	-2.5/0	0.8	97	194 X 157	0/+3.0	-3.0/0	2.0	155	362 X 288	0/+7.0	-7.0/0	4.0
40	100 X 89	0/+2.5	-2.5/0	0.8	98	203 X 122	0/+4.0	-4.0/0	2.0	156	362 X 312	0/+7.0	-7.0/0	4.0
41	102 X 79	0/+2.5	-2.5/0	0.8	99	205 X 164	0/+4.0	-4.0/0	2.0	157	368 X 322	0/+7.0	-7.0/0	4.0
42	103 X 71	0/+2.5	-2.5/0	0.8	100	205 X 169	0/+4.0	-4.0/0	2.0	158	376 X 343	0/+7.0	-7.0/0	4.0
43	105 X 67	0/+2.5	-2.5/0	0.8	101	205 X 181	0/+4.0	-4.0/0	2.0	159	377 X 277	0/+7.0	-7.0/0	4.0
44	105 X 75	0/+2.5	-2.5/0	0.8	102	207 X 174	0/+4.0	-4.0/0	2.0	160	377 X 294	0/+7.0	-7.0/0	4.0
45	105 X 78	0/+2.5	-2.5/0	0.8	103	209 X 134	0/+4.0	-4.0/0	2.0	161	377 X 313	0/+7.0	-7.0/0	4.0
46	105 X 79	0/+2.5	-2.5/0	0.8	104	214 X 137	0/+4.0	-4.0/0	2.0	162	378 X 333	0/+7.0	-7.0/0	4.0
47	107 X 66	0/+2.5	-2.5/0	1.0	105	214 X 178	0/+4.0	-4.0/0	2.0	163	380 X 240	0/+7.0	-7.0/0	4.0
48	107 X 75	0/+2.5	-2.5/0	1.0	106	216 X 161	0/+4.0	-4.0/0	2.0	164	386 X 343	0/+7.0	-7.0/0	4.0
49	107 X 89	0/+2.5	-2.5/0	1.0	107	222 X 141	0/+4.0	-4.0/0	2.0	165	408 X 352	0/+8.0	-8.0/0	4.0
50	113 X 43	0/+2.5	-2.5/0	1.0	108	224 X 128	0/+4.0	-4.0/0	2.0	166	413 X 354	0/+8.0	-8.0/0	4.0
51	113 X 58	0/+2.5	-2.5/0	1.0	109	224 X 177	0/+4.0	-4.0/0	2.0	167	428 X 357	0/+8.0	-8.0/0	4.0
52	113 X 59	0/+2.5	-2.5/0	1.0	110	224 X 191	0/+4.0	-4.0/0	2.0	168	428 X 392	0/+8.0	-8.0/0	4.0
53	113 X 70	0/+2.5	-2.5/0	1.0	111	224 X 195	0/+4.0	-4.0/0	2.0	169	430 X 372	0/+8.0	-8.0/0	4.0
54	113 X 81	0/+2.5	-2.5/0	1.0	112	228 X 210	0/+4.0	-4.0/0	2.0	170	443 X 387	0/+8.0	-8.0/0	4.0
55	113 X 89	0/+2.5	-2.5/0	1.0	113	237 X 142	0/+4.0	-4.0/0	2.0	171	453 X 392	0/+8.0	-8.0/0	4.0
56	116 X 81	0/+2.5	-2.5/0	1.0	114	237 X 145	0/+4.0	-4.0/0	2.0	172	597 X 447	0/+8.0	-8.0/0	4.0
57	119 X 59	0/+2.5	-2.5/0	1.0	115	237 X 169	0/+4.0	-4.0/0	2.0					
58	119 X 89	0/+2.5	-2.5/0	1.0	116	239 X 190	0/+4.0	-4.0/0	2.0					

PEEK Capillary Tube

PEEK is widely used in analytical instruments, semiconductor and medical industries because of its excellent chemical stability and corrosion resistance, high toughness, high strength PEEK capillary molding through continuous extrusion process, good dimensional stability, high pressure resistance, used in a variety of analytical instruments and equipment flow path.

PEEK Capillary Tube Specification Table

Serial Number	OD×ID (mm)	Serial Number	OD×ID (mm)
1	0.5×0.3~0.4	17	1.9×0.3~1.8
2	0.6×0.3~0.5	18	2.0×0.3~1.9
3	0.7×0.3~0.6	19	2.1×0.3~2.0
4	0.8×0.3~0.7	20	2.2×0.3~2.1
5	1/32"×0.25/0.5	21	2.3×0.3~2.2
6	0.9×0.3~0.8	22	2.4×0.3~2.3
7	1.0×0.3~0.9	23	2.5×0.3~2.4
8	1.1×0.3~1.0	24	2.6×0.3~2.5
9	1.2×0.3~1.1	25	2.7×0.3~2.6
10	1.3×0.3~1.2	26	2.8×0.3~2.7
11	1.4×0.3~1.3	27	2.9×0.3~2.8
12	1.5×0.3~1.4	28	3.0×0.3~2.9
13	1/16"×0.1/0.13/0.25 0.38/0.5/0.75/1.0/1.2	29	1/8"×1/16"/0.5/0.75 1.0/1.2/2.0/2.2
14	1.6×0.3~1.5	30	3.2×0.3~3.0
15	1.7×0.3~1.6	31	4.95×4.15/4.25 4.35/4.55
16	1.8×0.3~1.7		

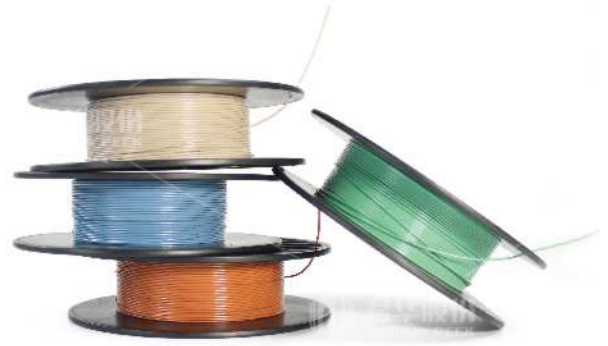
other sizes are available for customized production.

PEEK Filament

PEEK filaments: high toughness, high strength PEEK filaments through continuous extrusion process molding, good dimensional stability, continuous molding thousands of meters without breaking, widely used in 3D printing, PTA and other industries.

PEEK Filament Specification Table

Serial Number	Size/mm	Serial Number	Size/mm
1	Φ0.15	6	Φ1.0
2	Φ0.2	7	Φ1.5
3	Φ0.25	8	Φ1.75
4	Φ0.3	9	Φ2
5	Φ0.5	10	Φ3.0



Serial Number	OD×ID (mm)
32	9.52×8.92
33	9.86×9.26
34	10×8.7
35	12×10/11
36	13×12
37	17.1×16.1
38	22.6×22.1



Color Available:

Natural | Black | Blue | Green | Violet | Red | Orange | Yellow | Pink



PEEK Cable

PEEK has outstanding properties like high and low temperature resistance, flame retardant, radiation resistance and mechanical properties, which makes it can be used as ultra high temperature conductor in aerospace industry. In the petroleum industry, it can be used as the submerged pump motor winding wire and connecting line. In the atomic power plant, the winding coil which can be used as the nuclear island driving mechanism is used under irradiation conditions for a long time; it is also widely used in high-speed traction locomotives.



CF/PEEK Thermoplastic Composite Prepreg, Laminate and Product

As a typical high-performance thermoplastic resin, PEEK is the top of its special engineering plastics. It has outstanding performance and is compounded with continuous carbon fiber to effectively combine the properties of the two materials, and the overall performance is even better. Continuous carbon fiber CF/PEEK thermoplastic composite materials have been widely used in aerospace, medical, automotive and other fields due to their excellent performance. They are also the focus of research in universities, research institutes and enterprises.

Characteristics of Continuous carbon fiber CF/PEEK composite material

X-ray Transparent

Corrosion Resistance

High Temperature Resistance

Low Specific Gravity

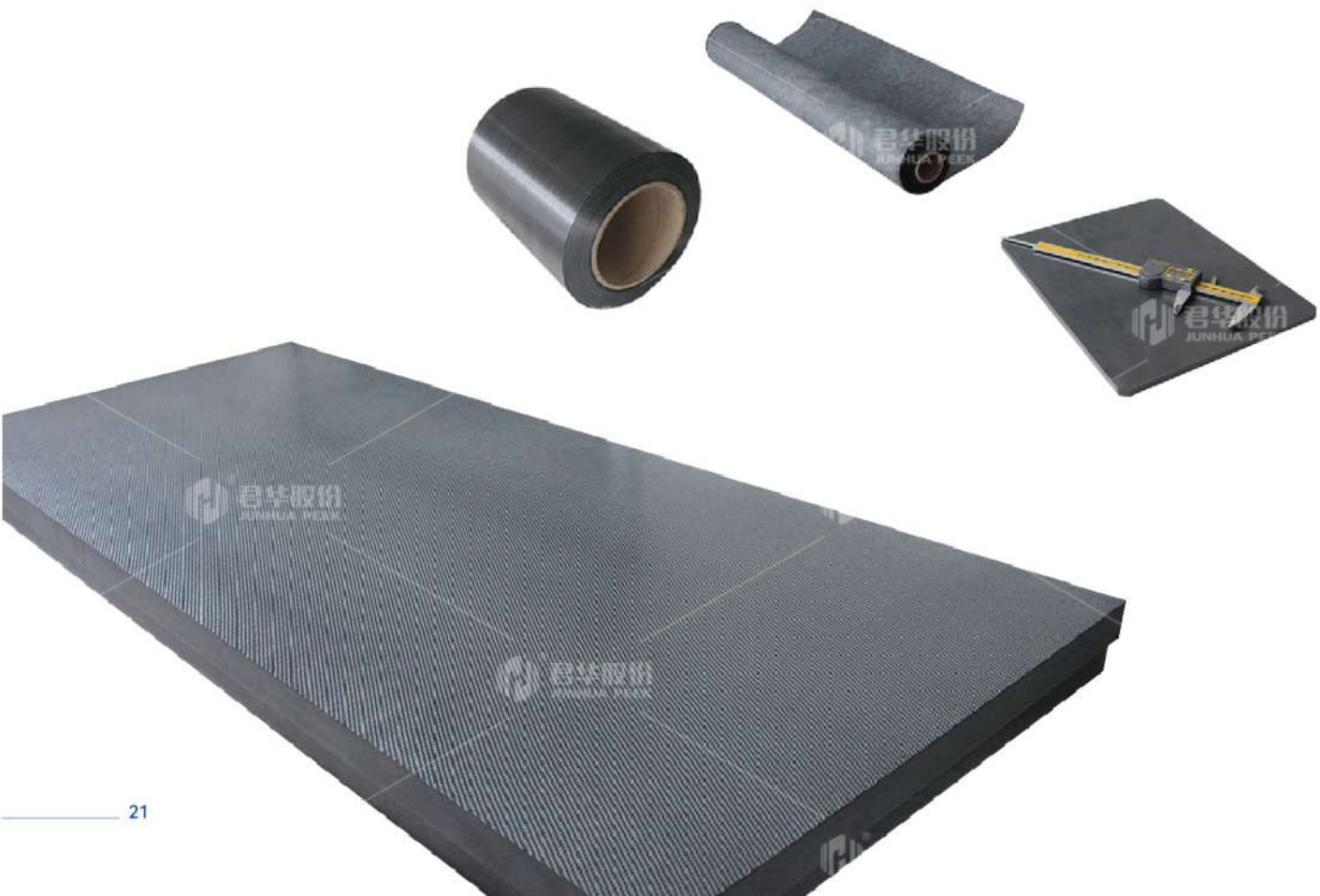
High Fatigue Resistance

Good interlayer Bonding Strength

Dimensional Stability

Impact Resistance and High Strength

Continuous Carbon Fiber CF/PEEK Thermoplastic Composite Prepreg, Laminate



Continuous Carbon Fiber CF/PEEK Performance Table

Item	Unit	UD Tape 0 °	UD Tape 0 °/90 °	Fabric Semi- Preg	Test Standard
Carbon Fiber Mass Content	%	66	66	60	ASTM D3529
Density	g/cm ³	1.58	1.58	1.55	ASTM D792
Hardness	/	105	104	102	ASTM D785
Tensile Strength	MPa	2200	880	700	ASTM D3039
Tensile Modulus	GPa	130	73	70	ASTM D3039
Flexural Strength	MPa	2000	1400	900	ASTM D7264
Flexural Modulus	GPa	116	65	73	ASTM D7264
Compressive strength	MPa	1200	670	630	ASTMD 6641
Compressive Modulus	GPa	120	60	56	ASTMD 6641
Distortion temperature	°C	332	332	332	ASTM D648
Compression strength after impact	MPa	220	225	230	ASTM D7137
Type 1 interbedded fracture toughness	J/m ²	1400	1410	1430	ASTM D5528
Short beam intensity	MPa	110	100	80	ASTM D2344
In- plane Shear Strength- 0.5%	MPa		140	145	ASTM D3518
In- plane Shear Modulus	GPa		4.5	4.5	ASTM D3518

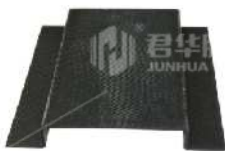
Continuous Carbon Fiber CF/PEEK Compare With Other Materials

Item	Unit	Bidirectional Braided Prepreg Laminate	PEEK5600CF30	Aluminium Alloy-6063
Carbon Fiber Mass Content	%	60	30	0
Density	g/cm ³	1.55	1.4	2.69
Tensile Strength	MPa	700	220	≥205
Flexural Strength	MPa	900	298	≥170

CF/PEEK Sheet Specification Table

Serial Number	Size(mm)	Serial Number	Size(mm)
1	200*155	5	1080*680
2	310*260	6	1350*680
3	330*250	7	1200*1000
4	440*290		

CF/PEEK Products



Aerospace

Body panel, fastening system
Radome, wing tank access cover.



Other industry applications

PEEK star wheel, composite panel for fluorescent analysis instrument industry, bushing (pump), bearing (pump), gasket (pump), loom lever, sealing ring.



Connecting corner pieces

Typical application on aviation aircraft, applied to the lap joint of truss or stringer, good impact resistance, fatigue resistance, wear resistance, high and low temperature resistance.



Medical device industry

External fixation equipment (rods, shafts), tractors, cervical vertebrae, orthopedic tools.



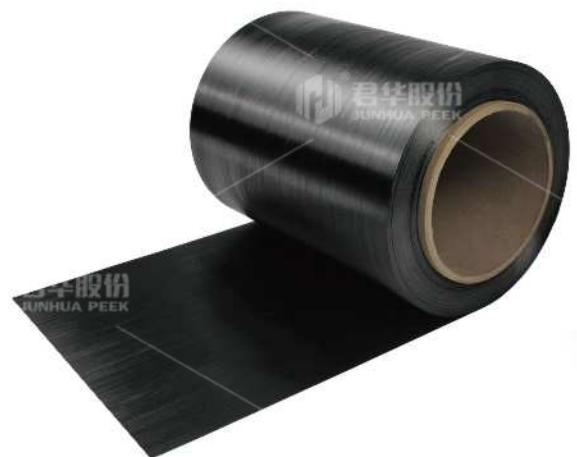
PEEKFRTP® CF-UD

Unidirectional Continuous Carbon Fiber Reinforced Polyetheretherketone Composite

PEEKFRTP®CF-UD is a high-end high-performance thermoplastic composite. It uses T700-grade-12K and T800-grade-12K unidirectional carbon fibers as reinforcement, with semi-crystalline thermoplastic PEEK as the prepreg resin, formed through high-temperature compression molding.

It offers excellent properties including light weight, high strength, high toughness, high damage resistance, fatigue resistance, moisture-heat resistance, corrosion resistance, and good biocompatibility, with a long-term service temperature of 280°C. It is widely used in aerospace, medical devices, petrochemical, automotive industry, and other fields.

Product Forms: Prepreg, laminate, rod, special-shaped bending, insert molding, wound tube, CNC machining, etc.



Technical Data Sheet

Item	Testing method	Unit	Typical Indicator Value	
Resin Properties				
Density	ISO 1183	g/cm ³	1.3	
Glass Transition Temperature (Tg)	ISO 11357.2	°C	143	
Melting Temperature (Tm)	ISO 11357.3	°C	343	
Processing Temperature (Tp)	-	°C	370-400	
Physical Properties				
Fiber Areal Weight	HB7736.3-2004	g/m ²	145	
Prepreg Areal Weight	HB7736.2-2004	g/m ²	220	
Resin Content	HB7736.5-2004	%	34±3	
Single Layer Thickness	-	mm	0.14±0.02	
Density (Laminate)	ASTM D792	g/cm ³	1.58	
Mechanical Properties			T700-12K UD	T800-12K UD
0° Tensile Strength	ASTM D3039	MPa	2200	2700
0° Tensile Modulus	ASTM D3039	GPa	130	160
90° Tensile Strength	ASTM D3039	MPa	82	-
90° Tensile Modulus	ASTM D3039	GPa	9.2	-
0°/90° Tensile Strength	ASTM D3039	MPa	880	-
0°/90° Tensile Modulus	ASTM D3039	GPa	73	-
0° Flexural Strength	ASTM D7264	MPa	1900	2900
0° Flexural Modulus	ASTM D7264	GPa	116	185
90° Flexural Strength	ASTM D7264	MPa	140	-
90° Flexural Modulus	ASTM D7264	GPa	8.1	-
0° Compressive Strength	ASTM D6641	MPa	1200	1250
0° Compressive Modulus	ASTM D6641	GPa	120	160
0° Interlaminar Shear Strength	ASTM D2344	MPa	110	125
±45° In-Plane Shear Strength	ASTM D3518	MPa	148	-
±45° In-Plane Shear Modulus	ASTM D3518	GPa	4.8	-
Open-Hole Tensile Strength	ASTM D5766	MPa	355	-
Open-Hole Compressive Strength	ASTM D6484	MPa	295	-

Application Case – New Energy Motor Rotor Sleeve

In high-speed motors, the rotor endures high centrifugal stress. Metal sleeves, despite their strength, have high density and conductivity, leading to extra losses, thermal issues, and potential safety risks.

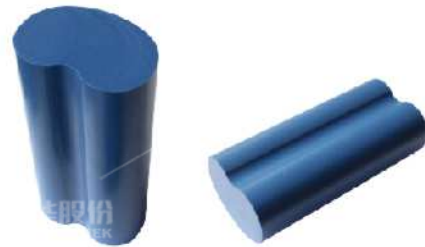
The carbon fiber/PEEK composite combines high specific strength with low density and low conductivity. It enables higher speeds under the same power, supporting motor miniaturization and greater power density. It also reduces eddy current losses and thermal risks, improving efficiency and offering more flexibility in system design.



PPSU Sheet/Rod/Tube/Special Shaped

PPSU is kind of amorphous, high-performance thermoplastic plastic. Compared with PSU and PEI, PPSU has better impact resistance and chemical resistance.

Through high pressure steam sterilizing test, PPSU is proved to have the best hydrolysis resistant better than other amorphous plastic. In fact, PPSU can stand million times of high pressure steam sterilizing, which makes PPSU a very good choice for medical application.



PPSU Key Advantages

- ◆ High temperature resistance
- ◆ High hardness
- ◆ Good chemical compatibility
- ◆ Good impact resistance
- ◆ Good dimension stability
- ◆ Good electricity insulation
- ◆ Good hydrolysis resistance
- ◆ Excellent resistance to high energy radiation (γ Ray and X Ray)
- ◆ Good dielectric properties



PPSU Sheet/Rod Color

Color Color Number	Black	Natural	Light Blue	Dark Blue	Green	Yellow	Grey	Red	White
	BL001	N000	BB09	DB0099	GR350	Y159	GG6126	R8040	W002
									

Color number is for both stock shapes and machined parts

PPSU Data Sheet

Typical values for uncolored product at 23°C		Testing method	Unit	Data
Mechanical Properties				
Tensile Strength		ISO 527-1/-2	MPa	70
Tensile Modulus		ISO 527-1/-2	MPa	2270
Tensile Elongation(Yield)		ISO 527-1/-2	%	7.8
Flexural Strength		ISO 178	MPa	105
Flexural Modulus		ISO 178	MPa	2400
Notched Izod Impact		ISO 180/A	KJ/m ²	68
Thermal Properties				
Heat Deflection Temperature HDT/A @1.8MPa		ISO 75-1/-2	°C	196
Glass Transition Temperature DSC, 10°C/min		ISO 11357-1/-2	°C	220
CLTE-Flow@23°C		ISO11359-1/-2	E %/K	55
Flammability				
Flame Rating@1.5mm thickness		UL94	Class	V-0
Electrical Properties				
100V Volume Resistivity		IEC 60093	Ω·m	>1E13
100V Surface Resistivity		IEC 60093	Ω	>1E15
Dielectric Constant	@100HZ	IEC 60250		3.8
	@1MHZ			3.7
Dissipation factor	@100HZ	IEC 60250		E ⁴
	@1MHZ			E ⁴
Dielectric Strength K20/K20, (60*60*1 mm3)		IEC 60243-1	KV/mm	44
CTI		IEC 60112		150
General Properties and Processability				
Density		ISO1183	g/cm ³	1.29
Moisture Absorption, Equilibrium 23°C/50% r.h		ISO62	%	0.6
Mold shrinkage(Flow)		ISO 2577, 294-4	%	0.9
Mold shrinkage (Vertical)		ISO 2577, 294-4	%	1
MFR @365°C/5kg		ISO 1133	g/10min	28-38
Processing (Melt)Temp, Injection/Extrusion			°C	350-390
Mold Temp, Injection/Extrusion			°C	140-180

Notes:

Typical values: These are not to be construed as specifications.



PPSU Rod Specification Table

Serial Number	Rod Diameter (mm)	Serial Number	Rod Diameter (mm)	Serial Number	Rod Diameter (mm)	Serial Number	Rod Diameter (mm)
1	5	13	25	25	48	37	95
2	6	14	26	26	50	38	96.5
3	8	15	26.7	27	53	39	100
4	10	16	28	28	55	40	106
5	12	17	30	29	60	41	110
6	13	18	32	30	65	42	115
7	15	19	33	31	70	43	120
8	16	20	35	32	75	44	125
9	18	21	38	33	80	45	130
10	20	22	40	34	85	46	140
11	21	23	42	35	90	47	150
12	22	24	45	36	94		

Typical Applications of PPSU in the Medical Industry



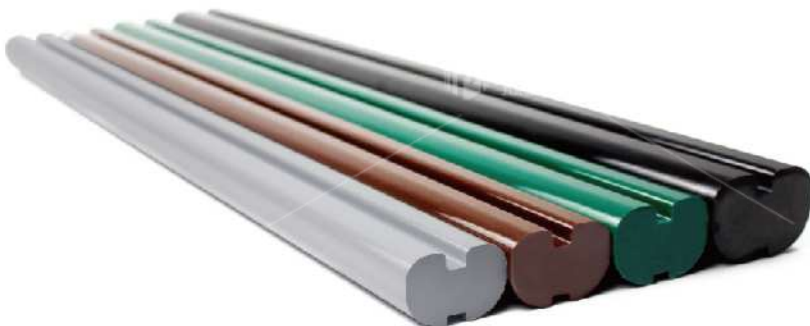
PPSU Battery Box



PPSU Spine Extension



PPSU Puncture Handle



PPSU Joint Head

PI Sheet/Rod/Products



Ultra High Temperature Polyimide (PI) Polymer

Feature advantages



High Temperature Resistance



Resistance to Deformation



Corrosion Resistance



Ultra-low Exhaust Volume in Vacuum



Wear Resistance



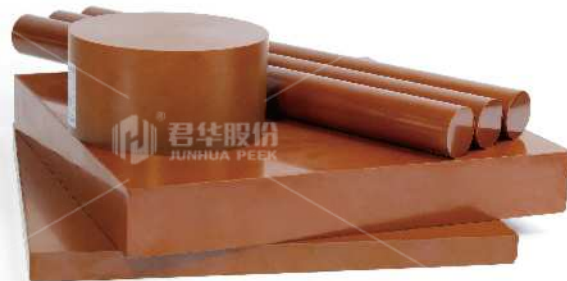
Electrical Insulation



Radiation Resistance

Application field

Now widely used in automotive, semiconductor, office equipment, electrical and electronic equipment, scientific instruments, hot runners, petrochemical equipment, general machinery, textile machinery, laser printing, medical equipment and other fields.



- ◆ Mould hot runner insulation board, insulation ring
- ◆ Chip test box
- ◆ Laser embossing roller
- ◆ Semiconductor industry fixture
- ◆ Rolling, sliding, thrust washer
- ◆ Gear
- ◆ Glass industry bracket
- ◆ Piston ring
- ◆ copier separation claw
- ◆ Semiconductor chip nozzle
- ◆ Gas Chromatography Seal
- ◆ Valve
- ◆ Plasma torch vortex ring
- ◆ Car engine gasket
- ◆ Microwave parts



PI Data Sheet

Test Items	Dielectric Constant	Unit	JHPI-10	JHPI-10-21 Containing 15% Graphite	JHPI-HT	JHPI-YS	JHTPI-01	JHTPI-02
Density	ISO 1183	g/cm ³	1.4	1.43	1.42	1.36	1.31	1.36
Tensile Strength	ISO 527	MPa	96	90	92	121	95	97
Elongation at Break	ISO 527	%	10	5	8	15	20	14
Bending Strength	ISO 178	MPa	148	126	140	171	121	143
Charpy Impact Strength	ISO 179	kJ/m ²	120	65	62	145	NB	135
Heat Distortion Temperature	ISO 75-1/-2	℃	>300	>300	>320	245	220	240
Continuous Using Temperature	UL746B	℃	350	350	380	240	/	240

• This parameter represents a value, not a guaranteed value. If you need to call me division technology department for more detailed technical indicators!

JHPI-10		JHPI-10-21	
			
<p>High temperature resistance grade, with a long-term service temperature of 300°C and a instantaneous temperature resistance of up to 400°C. It exhibits excellent processability and can be processed into rods or other custom-shaped parts.</p>		<p>A semi-thermoplastic polyimide material with a long-term service temperature of up to 245°C. It offers high dimensional stability and transparency.</p>	
JHPI-YS		JSJHTPI-02	
			
<p>Long-term service temperature of 220°C. Excellent processability allows for the production of various parts or profiles through injection molding or extrusion processes.</p>		<p>Long-term service temperature of 240°C. Excellent processability enables the production of various parts or profiles via compression molding processes.</p>	

PI Sheet Specification Table

Serial Number	Size(W*L)(mm)	Size(Thickness)(mm)	Serial Number	Size(W*L)(mm)	Size(Thickness)(mm)
1	320 × 325	4	20	290 × 440	4
2	320 × 325	6	21	290 × 440	6
3	320 × 325	8	22	290 × 440	8
4	320 × 325	10	23	290 × 440	10
5	320 × 325	12	24	290 × 440	12
6	320 × 325	15	25	290 × 440	15
7	320 × 325	16	26	290 × 440	16
8	320 × 325	18	27	290 × 440	18
9	320 × 325	20	28	290 × 440	20
10	320 × 325	22	29	290 × 440	22
11	320 × 325	25	30	290 × 440	25
12	320 × 325	30	31	290 × 440	30
13	320 × 325	32	32	290 × 440	32
14	320 × 325	35	33	290 × 440	35
15	320 × 325	40	34	290 × 440	37
16	320 × 325	46	35	290 × 440	39
17	320 × 325	50			
18	320 × 325	55			
19	320 × 325	60			

PI Rod Specification Table

Serial Number	Size(L)(mm)	Rod Diameter(mm)	Serial Number	Size(L)(mm)	Rod Diameter(mm)
1	307 / 320	4	20	290 / 440	4
2	307 / 320	6	21	290 / 440	6
3	307 / 320	8	22	290 / 440	8
4	307 / 320	10	23	290 / 440	10
5	307 / 320	12	24	290 / 440	12
6	307 / 320	15	25	290 / 440	15
7	307 / 320	16	26	290 / 440	16
8	307 / 320	18	27	290 / 440	18
9	307 / 320	20	28	290 / 440	20
10	307 / 320	22	29	290 / 440	22
11	307 / 320	25	30	290 / 440	25
12	307 / 320	30	31	290 / 440	30
13	307 / 320	32	32	290 / 440	32
14	307 / 320	35	33	290 / 440	35
15	307 / 320	40			
16	307 / 320	46			
17	307 / 320	50			
18	307 / 320	55			

PEEK Typical Application



Aerospace Industry

Junhua chinaPEEK has been working with national aerospace research agency to supply our PEEK components to satellites, rockets, and weapons, we do our part to support Chinese aerospace and military development.



PEEK Infrared Night Vision Case



PEEK Bending Pipe



PEEK Cable



Aerospace PEEK Part



PEEK Valve Core



PEEK Connecting Angle Slices



PEEK Radar Radome



PEEK Sealing Part

Medical Industry

PEEK has the advantages of high temperature resistance, corrosion resistance, high strength, X-ray transmission, resistance to repeated disinfection, and good biocompatibility. It has been widely used in the medical industry and has been equipped with many well-known medical treatments in domestic and foreign. The unit is developed and produced and successfully applied to the clinic.





Food Processing and Filling Machine

Tetra Pak, Newamstar and many other famous companies from food processing and filling machinery industry are using PEEK components from Junhua, PEEK components are widely used in washing, sterilization, aseptic packaging process.



PEEK Parts Three-piece Set



PEEK Wear-resistant Roller



PEEK Capping Machine Transmission Gear



PEEK Clamp Rail Column



PEEK Size Bottle Holder



PEEK Bottle Clamp Rail Column



PEEK Flat Fork



PEEK U-shaped fork

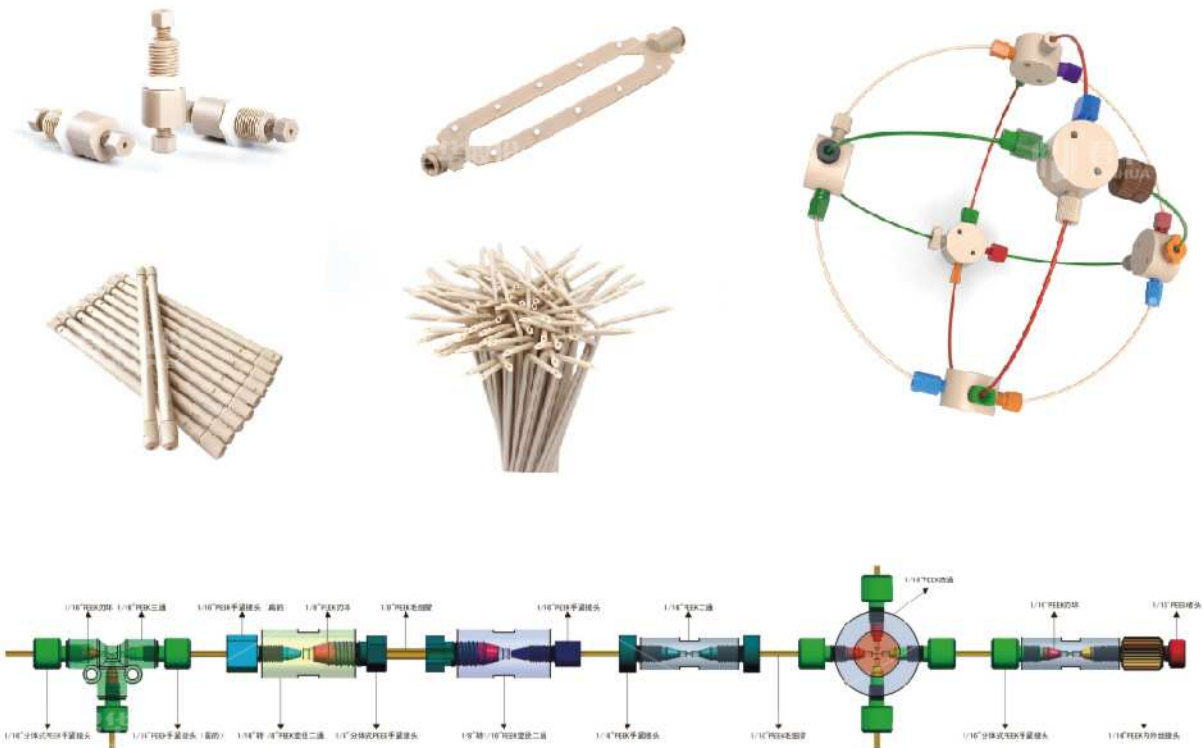
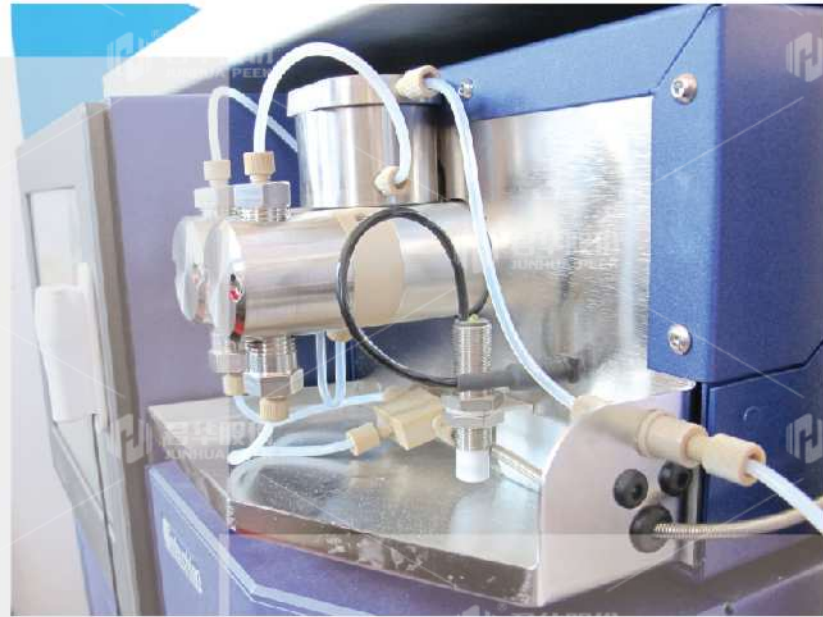


PEEK Bottle Mouth Guard

Analytical instrument

In the field of analytical instruments, we have successfully developed more than 200 kinds of high-performance PEEK parts, and produce typical analytical instruments such as PEEK hand tight fitting, PEEK Union, PEEK capillary, PEEK pump head, PEEK digestion tank, PEEK column. Standard parts are equipped with stocks, and non-standard parts can also be customized.

PEEK materials are high purity, low release, do not interfere with the separation and purification process, and have excellent chemical resistance and biocompatibility.



Semiconductor Industry

PEEK, PI has the characteristics of high temperature resistance, corrosion resistance, wear resistance, high purity and other advantages, which fully meet the harsh electronic semiconductor industry production environment to ensure its long-term use and improve equipment stability and reliability.



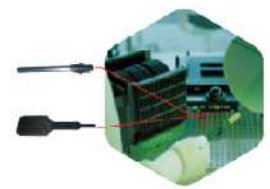
PEEK Sucker and PEEK Sucker Head



PI Partition



PEEK Wearing Roller



PEEK Screw



PEEK Wafer Clamp



PEEK Comb Parts



Oil&Gas, Petrochemical Machinery Industry

PEEK with chemical corrosion resistance, wear resistance, etc., can ensure the continuous and stable operation of equipment to avoid equipment shut down, securing devices to run safely.



PEEK Insulation Cable Frame



Drilling Pipe Protector



PEEK Ball Valve Seat



PEEK End Plug



PEEK Preventing Slider



PEEK Centralizer



PEEK (Cut) Sealing Ring

Textile Machinery Industry

PEEK has excellent high temperature resistance, wear resistance, self-lubrication performance, perfect replacement of metal parts such as copper slider sleeve on textile printing and dyeing machinery equipment, to solve the technical problems existing in the use of equipment, and has been widely recognized and praised by customers in this industry.



PEEK Amplitude Adjusting Nut



PEEK Hexagonal Shaft Sleeves



Monfuji PEEK Inner Sleeve



PEEK Guide Groove Bushings



PEEK Rapier Wheel



PEEK Amplitude Modulation Screw



ARTOS PEEK Slide Block



Wear-resistant Sleeve of Oxygen Bleaching Machine



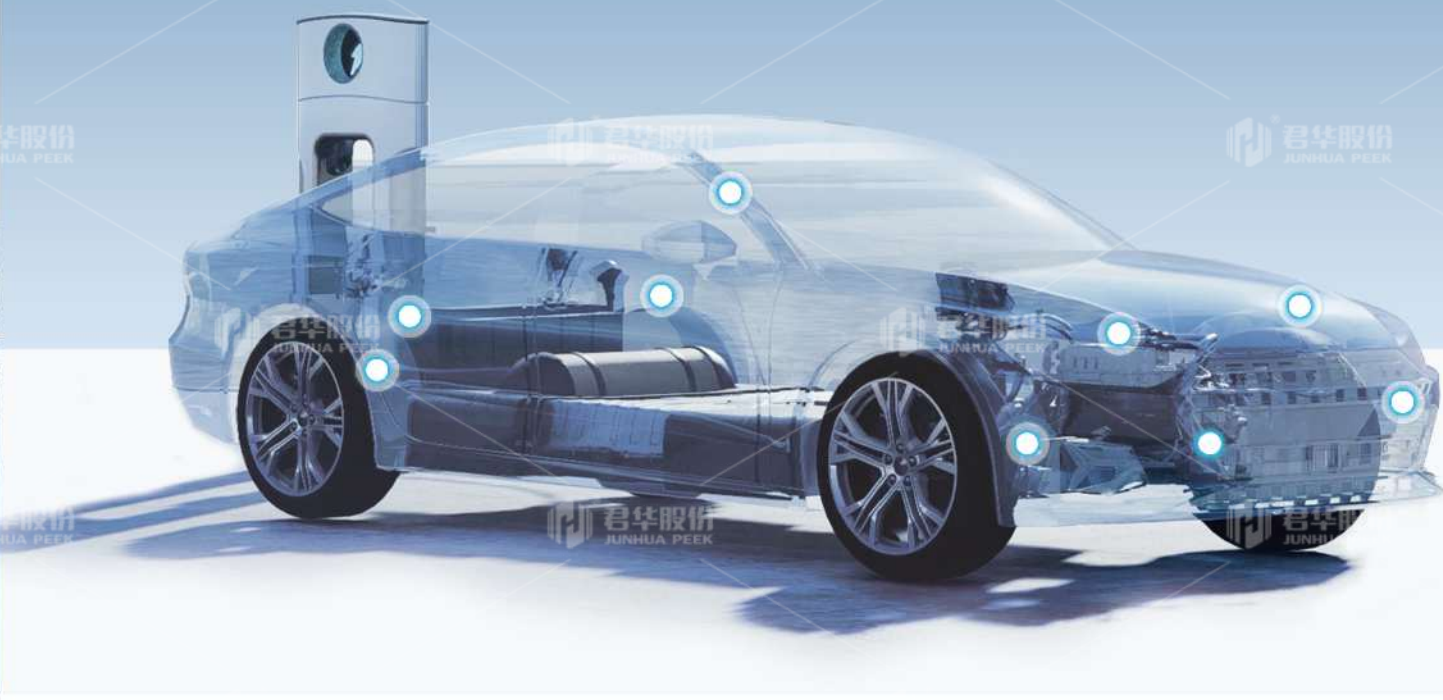
PEEK Covers



PEEK Lifting Wear Strips



PEEK Protective Covers



Automotive Industry

PEEK has a very promising future in automotive industry. In China, nearly 10 automotive vacuum pump manufacturers use Jiangsu Junhua's PEEK wear-resistant slide which is used in automotive brake booster and turbo system, it can reduce fuel consumption, reduce environmental impact, improve driving safety and driving comfort.



NEV PEEK hair- pin winding



PEEK slide, joint for automobile brake pump



PEEK bushing for automobile water pump



PEEK part for oil pump

PEEK Profile Inspection Equipment

Performance Testing Equipment

Ultrasonic Detector

It is mainly used to detect defects such as inclusions, looseness, cracks and pores inside the product.



FTIR Spectrometer

FTIR is mainly used for material identification. It has an automatic identification and matching function and can distinguish materials with different group structures such as PEEK, PPS, PPSU, and PI.



Thermal Gravimetric Analyzer

A thermogravimetric analyzer is an instrument that uses thermogravimetry to detect the temperature-mass change relationship of a substance.



Differential Scanning Calorimeter

Differential scanning calorimetry is a technique that measures the energy difference (or power difference) per unit time between a substance and a reference as a function of temperature under programmed temperature control.



Density Detector

Mainly used to detect the actual density of the product



Hardness Tester

mainly used to test Rockwell hardness of product



Universal Testing Machine

Mainly used to test the general mechanical properties such as tensile bending and modulus of the product. (can be tested at -100-200 °C)



Impact Tester

Mainly used for raw material inspection, inspection of impact strength



X-ray Foreign Matter Detection Equipment

Mainly used to detect whether the product is brought into the foreign material during the production process, such as metal cutting.

Dimensional Appearance Inspection Equipment

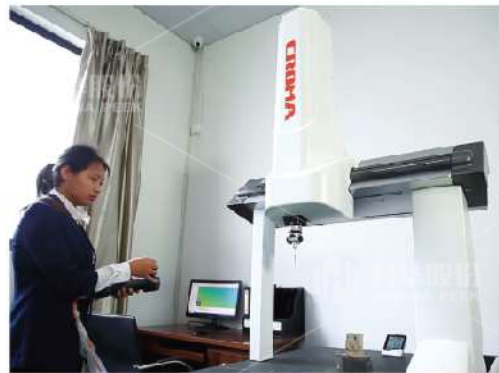
Image Measuring Instrument

It is mainly used to detect some products with high dimensional accuracy and geometrical tolerance accuracy. The detection accuracy can reach 0.001mm.



CMM

Mainly used to detect some products with high dimensional accuracy and geometric tolerance requirements. The detection accuracy can reach 0.0005mm and can provide an industry-recognized three-coordinate size inspection report.



Finish Instrument

It mainly controls some products with high requirements on appearance, and can specifically measure the surface finish value of processed products.

Cold Jet Dry Ice Deburring

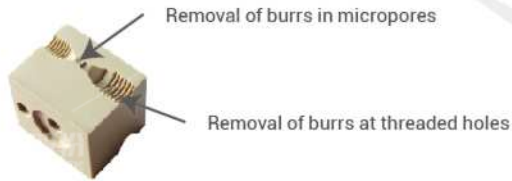
It Can effectively remove the burrs generated by machining, including small holes, cross-holes, etc., and no residue, no pollution. It can effectively prevent the reduction or blockage of pipeline flow caused by burrs .



New Deburring Technology of Dry Ice Blasting



Before deburring After deburring



Colorimeter

Used to compare the color difference of each batch raw materials, ensure color stability between each batch of profiles.



Universal Friction and Wear Testing Machine

Test the friction coefficient and wear amount of the material under certain load and speed.



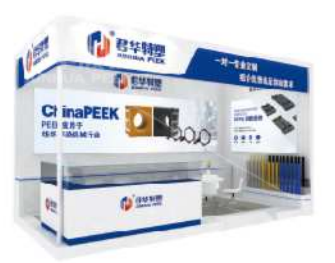
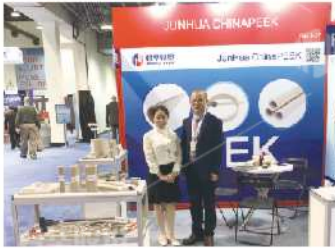
FD5000-P Pneumatic Fatigue Tester

Used to simulate and test the fatigue performance of materials or components under repeated pneumatic stress

Global Vision



Leading the Industrialization Process of China's High Performance Special Engineering Plastic Profiles with Overall Innovation as the Best Partner for World Customers



JUNDE
German wholly-owned subsidiary



PEEK Sales Network

China	France	United Kingdom	Egypt
US	Netherlands	Malaysia	Belgium
India	Pakistan	Spain	Qatar
Russia	Iran	Colombia	Saudi Arabia
Brazil	Argentina	Hungary	Uzbekistan
Mexico	United Arab Emirates	Turkey	Ireland
Singapore	Switzerland	Croatia	Bangladesh
Australia	Korea	Czech Republic	Ukraine
Germany	South Africa	Italy	Peru
Romania	Bulgaria	Finland	Denmark
Thailand	Chile	Jordan	Sweden
Canada	Vietnam	Sri Lanka	
Indonesia	Poland	Iraq	

Collaborative Customers



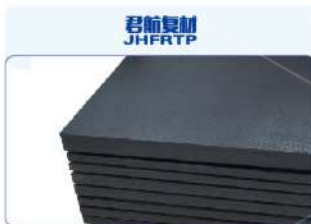
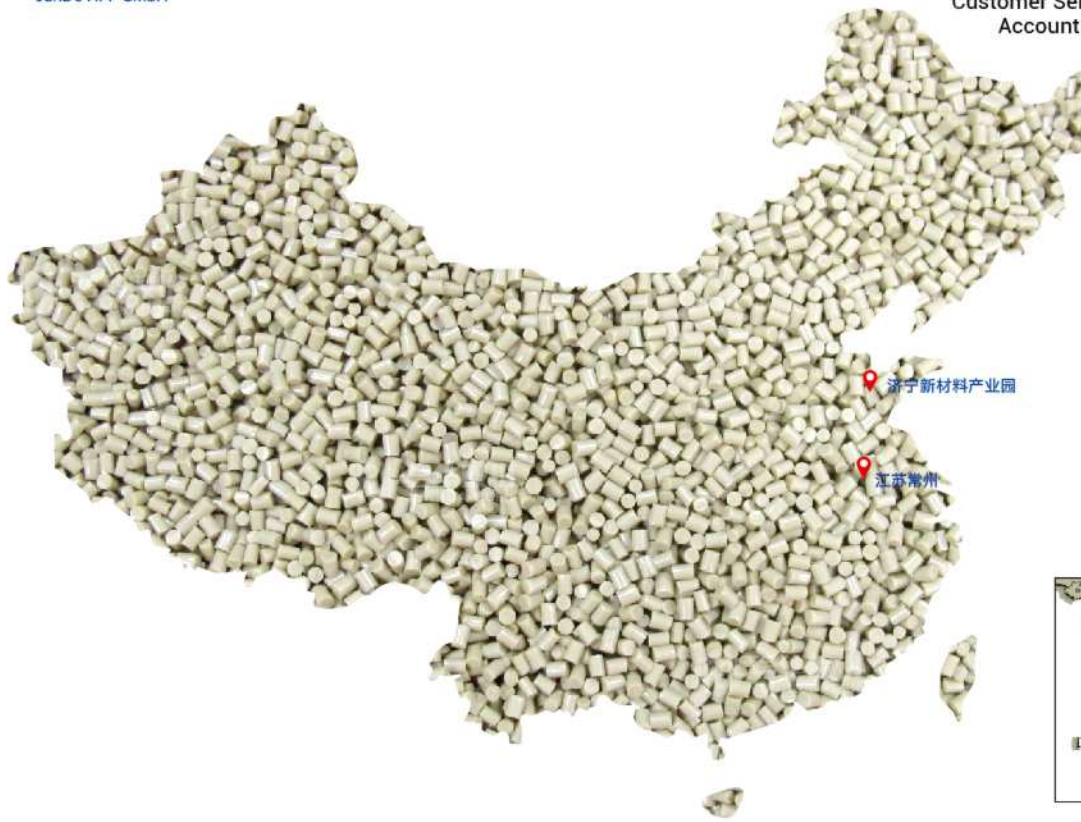
德国
JunDe HPP GmbH



Customer Service
Account



Official Wechat
Account



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