

Industrial FFF 3D Printing Material Solutions

Innovative • Professional • Excellent Quality



Putting our knowledge and experience to work for your success.

INTAMSYS, a global leader in the additive manufacturing industry, is focused on customer applications by providing innovative additive manufacturing solutions. The INTAMSYS FUNMAT 3D printer series has been on the market for years, providing customers with the perfect combination of industrial 3D printers and high-performance materials.

Through years of active insight into customer demand, INTAMSYS accumulated a wealth of knowledge in materials and the printing process. By developing industrial filament solutions that closely resemble commonly used production materials, the INTAM™ series of high-performance filaments was launched. INTAM™ filament and the FUNMAT 3D printer series with optimized slicing software brings customers an unparalleled printing experience.

INTAMSYS is committed to providing continued custom material development and third-party material evaluation and certification.

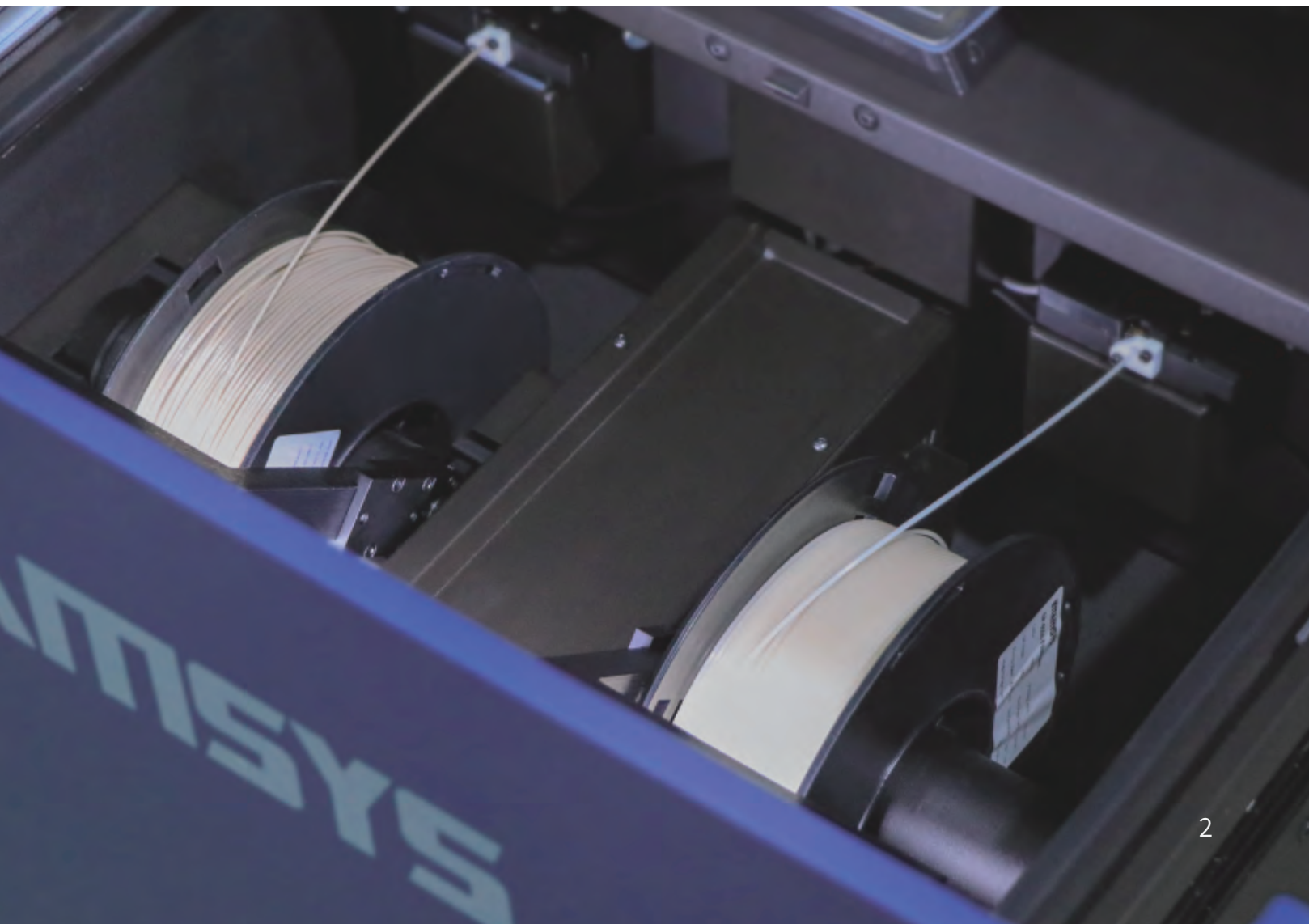
INTAM™ Performance	INTAM™ Engineering	INTAM™ Elastic	INTAM™ Support
PEEK	PC	TPU 95A	SP5000
PEEK-CF	PC-ABS		SP5030
PEEK-GF	PC-PBT		SP5040
PEKK	PC-FR		SP5080
ULTEM™ 9085	PA6/66		SP3040
ULTEM™ 1010	PA6-CF		HIPS
PPSU	PA12-CF		PVA
PPS	ABS		
	ASA		
	PLA		

Perfectly matched with INTAMSYS printing equipment

Plug and play operation utilizing pre-set parameters
and excellent printing experience out of the box

Trouble free and efficient, easy to print
Excellent printed results with spectacular details

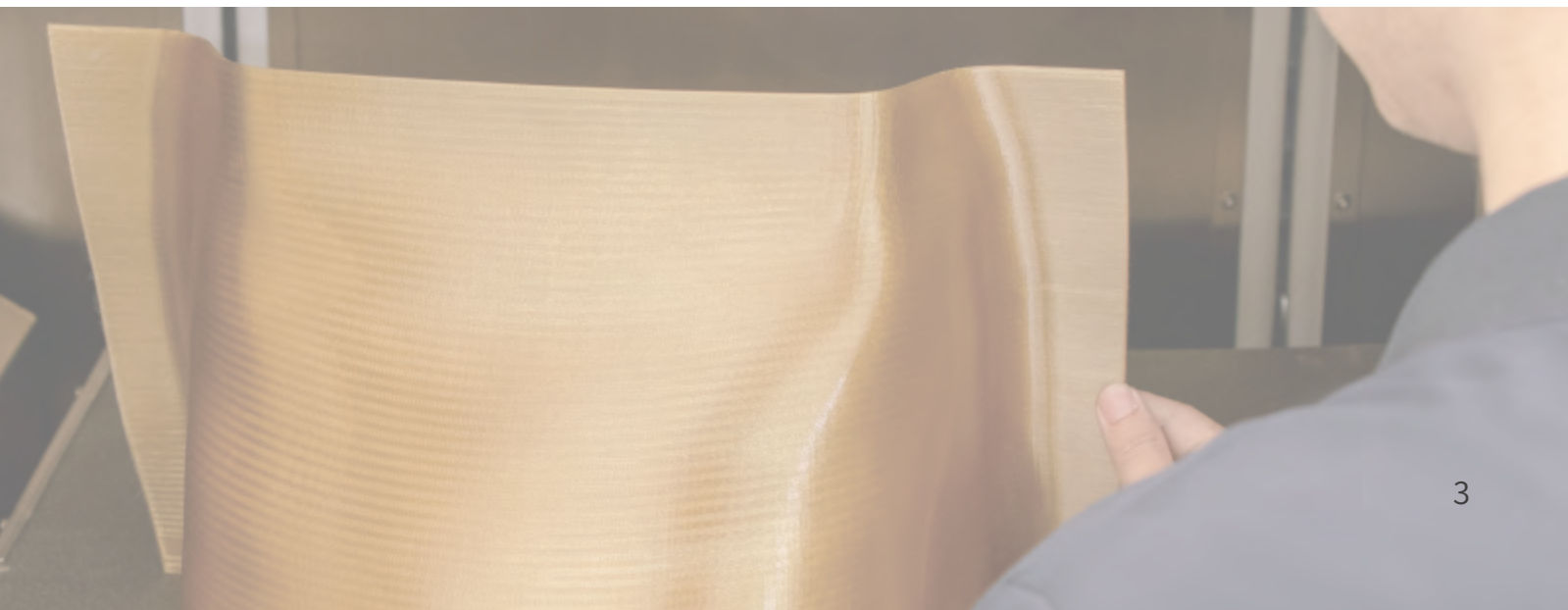
Cost savings of up to **80%**



INTAM™ Performance

High-performance materials suitable for various demanding environments

PEEK	Semi-crystalline polymer, high strength, good chemical resistance, long-term use temperature of 260°C Widely used in aerospace, automotive, oil and gas energy, medical, dental and scientific research industries
PEEK-CF	Carbon fiber reinforced PEEK, high dimensional stability and weight-to-strength ratio Higher stiffness at high temperatures, HDT A 315°C allows short term usage at even higher temperatures Commonly used for metal replacement, can be used in extreme environments such as aerospace, oil and gas industries
PEEK-GF	Glass fiber reinforced PEEK, high dimensional stability and electrical insulation HDT A 315°C allows short term usage at even higher temperatures Commonly used for metal replacement, can be used in extreme environments such as aerospace, oil and gas industries
PEKK	High strength, good wear and chemical resistance, high dimensional stability Able to withstand hot and humid environments
ULTEM™ 9085	Complies with FST protection standards Ideal for aerospace and military applications, this includes aviation and railway as well
ULTEM™ 1010	High temperature resistance, high strength and rigidity, strong flame retardancy Suitable for aerospace, automotive, medical and other industries
PPSU	Excellent high temperature and corrosion resistance, electrical insulation Excellent hydrolysis resistance Widely used in electronic and electrical equipment manufacturing as well as tooling for the medical industry
PPS	High temperature and corrosion resistance, good flame retardancy and mechanical properties Used in electronics, automobiles, machinery and other fields



INTAM™ Engineering

Selective, economical and practical engineering materials

PC High strength, excellent durability, and printability
Used for product models, brackets, mechanical parts, etc.

PC-ABS Good toughness, high temperature resistance and smooth surface finish
Suitable for automotive interiors, lighting equipment, high heat-resistant parts, etc.

PC-PBT PC/PBT polymer blend, high corrosion resistance, maintains high toughness at low temperatures
Used in auto parts, electronic equipment, etc.

PC-FR Highly flame-retardant PC material, achieves V0 performance in the UL94 flame-retardant test, high heat resistance and high mechanical strength
Used in aerospace, automotive, electronics and other industries with high flame retardant requirements

ABS Durable, high temperature resistance, good toughness
Suitable for automobiles, household appliances, etc.

ASA Excellent UV and weather resistance
Suitable for outdoor environments such as gardening and construction

PA6/66 High mechanical strength and toughness, high temperature, ductility and fatigue resistance
Suitable for industrial parts used in harsh environments

PA6-CF Good strength, high rigidity, and matte surface finish
Used as electronic equipment, fixtures, auto parts, etc.

PA12-CF High strength and rigidity, low water absorption, good interlayer adhesion and high dimensional stability
Used in automotive, aviation, gears and other products

PLA Bio-based polymer material, environmentally friendly and degradable, easy to print, economical and practical
Suitable for a variety of prototypes

INTAM™ Elastic Flexible and comfortable material

TPU 95A

High wear resistance and durability
High flexibility providing comfort and protection
Suitable for shoe materials, medical treatment, fashion design and other fields

INTAM™ Support

Support materials to help complex structure printing

SP5000 The preferred breakaway support material for polyaryletherketone (PAEK) high-performance materials
Easily removed with the aid of solvents

SP5030 Breakaway support material, used at high temperatures. Suitable for ULTEM™ 9085

SP5040 Breakaway support material, easy to remove. Suitable for ULTEM™ 9085

SP5080 Breakaway support material, can be used at over 200 °C. Suitable for ULTEM™ 1010

SP3040 Water-soluble support material. Suitable for ASA, PA, PA6-CF, PLA, TPU 95A and other materials
Faster dissolution rate

HIPS Breakaway support material, suitable for ABS, PC, PC-ABS, PC-PBT, PC-FR, ASA and other materials

PVA Water-soluble support material, suitable for PA, PA6-CF, PLA, TPU 95A and other materials

Products Performance Overview

Product Series	INTAM™ Performance								INTAM™ Engineering										INTAM™ Elastic
Product	PEEK	PEEK-CF	PEEK-GF	PEKK	ULTEM™ 9085	ULTEM™ 1010	PPSU	PPS	PC	PC-ABS	PC-PBT	PC-FR	PA6/66	PA6-CF	PA12-CF	ABS	ASA	PLA	TPU 95A
Tensile strength(MPa) ISO 527	99.9	91.2	91.7	100.4	76.7	89.8	68.4	64.8	60.7	42.7	43.2	66.8	72.7	74.8	69.3	28.8	43.8	45.6	29.0
Young's modulus(MPa) ISO 527	3,738	5,193	4,044	3,984	2,313	2,643	2,250	2,680	2,480	2,260	2,100	2,810	2,595	3,918	3,748	1,847	2,379	2,641	—
Elongation at break(%) ISO 527	9.1	2.9	3.4	4.2	8.5	5.8	3.9	4.4	5.6	4.7	6.9	3.5	4.6	5.8	2.9	3.8	6.7	2.4	330.1
Flexural strength (MPa) ISO 178	147.0	168.6	158.7	203.2	137.8	167.2	124.5	116.3	84.3	76.5	56.7	97	123.1	130.5	114.1	65.5	73.4	87.7	—
Flexural modulus (MPa) ISO 178	3,612	6,338	5,713	5,220	3,430	4,098	3,114	2,700	1,685	2,055	1,938	2,490	1,681	5,224	3,532	1,530	3,206	1,900	—
Notched impact strength (KJ/m²) ISO 178	7.1	9.7	8.9	5.2	12.7	4.9	21.8	5.2	15.6	16.2	26.9	12.1	8.1	12.0	12.1	16.4	10.3	2.7	—
Heat deflection temperature (°C) ISO 75 1.8MPa	152	315	315	139	152	190	198	—	99.3	106	91	107	69	140	105	98	100.2	58.1	—
Glass transition temperature(°C)	143	143	143	160	186	215	220	86	113	109	140	115	67	74	42	101	97.8	61	—
Melting point (°C)	343	343	343	335	—	—	—	300	—	—	223	—	190	220	178	—	—	150	168
Support material	SP5000	SP5000	SP5000	SP5000	SP5000 SP5030 SP5040	SP5000 SP5080	SP5000	—	HIPS	HIPS	HIPS	HIPS	PVA SP3040	PVA SP3040	—	HIPS	HIPS SP3040	PVA SP3040	PVA SP3040
Material characteristics	High strength High temperature resistance Anti-corrosion	High strength High temperature resistance Anti-corrosion High dimensional stability	High strength High temperature resistance Anti-corrosion High dimensional stability Insulation	High strength High temperature resistance Anti-corrosion High dimensional stability	FST certification Ideal aerospace material	High temperature resistance High strength and modulus	High temperature resistance Good insulation	High temperature resistance Anti-corrosion Good flame retardancy	Durable and stable Wide range of applications	Good toughness High temperature resistance High surface finish	Good corrosion resistance High toughness at low temperature	Excellent flame retardancy High mechanical strength	High strength Good toughness High temperature resistance	High strength High dimensional stability Smooth print surface	High strength High dimensional stability Low moisture absorption	Durable Good overall performance	Anti-UV Good weather resistance	Biodegradable Convenient and practical	Soft High elasticity Durable

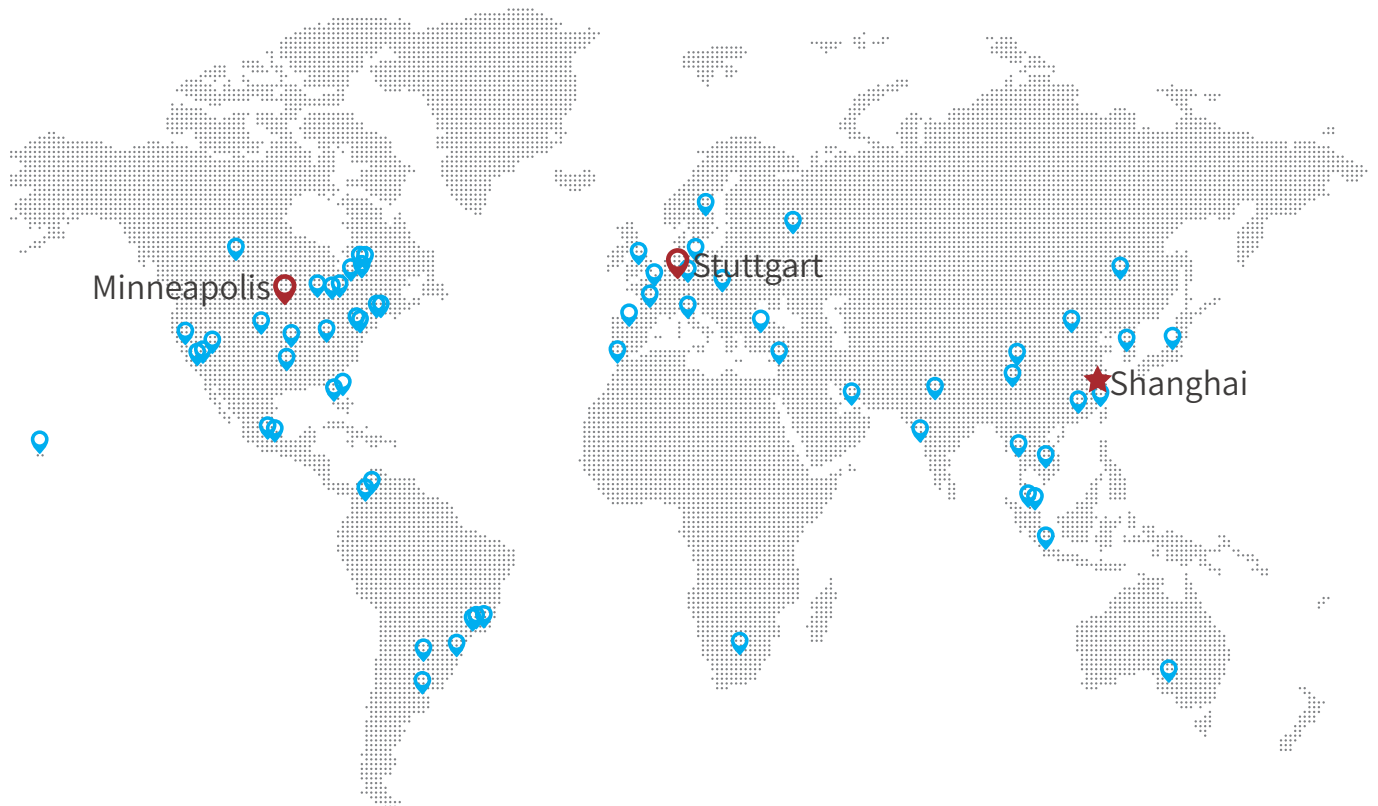
Note: The mechanical performance listed is based on samples printed by INTAMSYS 3D printers.

About INTAMSYS

INTAMSYS is a world-leading high-tech company providing 3D printing and industrial additive manufacturing solutions for high-performance materials. It is co-founded by a team of engineers from world-class high-tech companies engaged in precision equipment development and high-performance materials research for many years. The company is headquartered in Shanghai. Currently, it has established a complete marketing and after-sales service system covering the world, with European and American sales, marketing and technical service centers which can provide localized services for customers.

Focusing on aerospace, aviation, automotive, electronic manufacturing, consumer goods, healthcare, scientific research and other industries, the company provides comprehensive additive manufacturing solutions from functional prototyping, tooling and fixture manufacturing to direct production of final products.




Global sales and service network

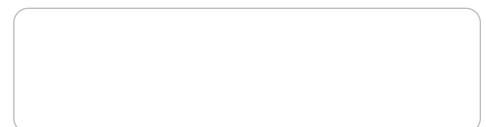


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INTAMSYS

www.intamsys.com
info@intamsys.com

 @intamsys_3d
 @intamsys
 @intamsys



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