AIRWOLF3D™ Compatible Material List

CERTIFIED MATERIALS

The listed material temperatures are for reference only . These temperatures may vary depending on printer model, hot-end, ambient temperature, filament quality, filament age, and many other factors. Use these temperatures as a starting point, and adjust accordingly to these variables.

Material		Description	Temp.	Bed Temp.	Class	Hot-end Compatible
ABS		Acrylonitrile butadiene styrene is the most commonly used 3D printing material. For example, most Lego building blocks are produced using this material. Airwolf 3D utilizes ABS in the manufacture of numerous manufacturing components due to ease-of-use and resistance to high temperatures.	250°C	110-120°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
ALLOY 910		With a combined tensile strength higher than the strongest of co-polyesters, the durability of Nylons, a shrinkage factor that rivals our t-glase, a vast range of chemical resistance and a 95°C working range, you now have one solution easily printable at 245°C.	245°C	80°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Bamboofill		PLA/PHA based compound mixed with natural bamboo fibers.	195-220°C	60°C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
Bendlay		Extremely translucent material that will allow you to print virtually clear items. Remarkably resilient and elastic.	210-240°C	100° C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Brassfill		Brassfill, based on a proprietary PLA formulation, produces a polished golden appearance when refinished.	190-210° C	60° C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
Bronzefill		Composed of an 80/20 bronze-to-PLA mixture. Sanding and polishing Bronzefill results in a shiny, metalic finish.	190-210° C	60° C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
bioFila Linen		bioFila Linen is composed of lignins (organic material) that are suspended in a PLA matrix. Lignins are responsible for providing strength and rigidity to the cell walls of plants and are one of the main ingredients found in paper. Non-toxic, biodegradable, and produces prints with a linen-like texture.	165-200° C	90° C	Experimental 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Carbon Fiber ABS		CFR-ABS consists of carbon fibers suspended in an ABS matrix. This filament is ideal for applications that require high strength and rigidity. The resulting print will have a matte black appearance.	240° C	110-120° C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
Carbon Fiber PLA		CFPLA is a durable filament with carbon fibers suspended in a PLA matrix. The resulting 3D prints are rigid with a matte black finish, and exhibit extremely low warping characteristics.	195-220° C	60° C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
ColorfabbXT		Similar to PLA, with improved temperature resistance and bonding strength. Printed objects have a smooth, glossy sheen.	240-260° C	70-80° C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Copperfill		When sanded and polished, this material will produce a metallic shine. Copperfill is approximately 3 times heavier than traditional PLA/PHA polymers.	190-210° C	60° C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
ESD ABS		ESD ABS belongs to a family of specialty filaments that utilize carbon wall nanotubes and produces objects capable of conducting electricity. This product is commonly used in applications that require electrostatic discharge (ESD) protection.	240-245° C	110° C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
GEL-LAY		A jelly-like material that is ideal for creating rubbery, squishy objects. Gel-Lay is part rubber-elastomeric polymer and part PVS. When rinsed in water, the rubber polymer remains as a micro-porous and flexible object.	225-235° C	20-55° C	Experimental 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
HIPS		HIPS is short for High Impact Polystyrene. It has very similar properties to ABS, and works well as a support material when dissolved with Limonene.	240° C	110-120° C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Igus Iglidur		Igus iglidur is a relatively new material that is up to 50 times more abrasion resistant than conventional 3D print materials.	240° C	110-120° C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
LAY FOMM 40		Composed of rubber-elastomeric polymer and PVA, Lay Fomm 40 has a foamy, porous consistency. When rinsed in water, the rubber polymer remains as a micro-porous, flexible, object.	220-230°C	40-60°C	Experimental 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
LAY FELT		LAY FELT prints porous, flexible objects with a felt consistency. When rinsed in water, the PVA component dissolves and leaves behind a felt-like rubbery material.	225-235°C	20-55°C	Experimental 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
LAY FOMM 60		Composed of rubber-elastomeric polymer and PVA, Lay Fomm 60 has foamy, porous consistency. When rinsed in water only the rubber polymer remains as a micro-porous, flexible object that is slightly more firm than Lay-Fomm 40.	220-230°C	40-60°C	Experimental 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
LayWOO-D3		LayWOO-D3 is a mixture of recycled wood fibers and polymer binders. The printed wood can be made to appear rough (similar to MDF) or have a smooth surface.	200-230°C	60°C	Experimental 3D Printing Materials	Compatible with: **JR2X, JRX, JR**

Material		Description	Temp.	Bed Temp.	User Class	Hot-end Compatible
Nylon Platinum Series		Platinum Series Nylon is a strong, durable material that is ideal for applications that require abrasion and impact resistance. Unlike most Nylon filaments, Platinum Series Nylon prints at lower temperatures; ideal for use with print projects that require two different types of materials.	245°C	80°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX**
Nylon 618		The Taulman 3D 618 is a high-strength nylon co-polymer. It is very strong but tends to warp, (similar to ABS). Unlike ABS, however, it can be difficult to get it to stick to the print surface. The best prints are produced when 1/4" Garolite LE is placed over the heated bed of an Airwolf 3D printer.	235-260°C	80°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX**
Nylon 645		The Taulman 3D 645 offers high strength, high durability, and good chemical resistance.	245-270°C	80°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX**
NYLON 680		A pure polymer that is FDA approved. No additives used in the chemical manufacturing or extrusion processes. Nylon 680 is designed for use in FFM type 3D printers.	240°C	70°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Nylon Bridge		Named "Bridge" for its ability to bridge the gap between ABS and Nylon filament FFF style 3D printing. Nylon Bridge has strength characteristics similar to Nylon 645, with better printing characteristics, including enhanced bed adhesion.	285°C	80°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX**
PCTPE		PCTPE has several unique features that allow users to print highly flexible parts with the durability of nylon polymers. PCTPE provides the smooth lustrous texture of nylon with the added flexibility offered in rubbery products like TPE.	240°C	70°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX**
PET		PET (PolyEthylene Terephthalate) is a lightweight, colorless material commonly used to print translucent objects that are strong and impact-resistant.	240°C	80-100°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX**
PETG		PETG is also known as glycol modified PET (or less commonly as GPET). This material has a high degree of durability and impact resilience, yet is also very flexible and recyclable. PETG can be found in many colors, including transparent.	240°C	80-100°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
PLA		Polylactic acid is one of the most commonly used materials in 3D printing today. It is biodegradable, easy to use, and provides great surface finish and print quality. PLA can be dissolved in lye-based drain cleaner (such as Drano), leaving other materials such as ABS unaffected. An excellent support material.	200-220°C	60-70°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
PC/ABS		Incredibly tough material designed for strong, resilient parts. PC-ABS alloy features vast improvements over standard ABS in terms of heat deflection, impact resistance, rigidity, and surface finish.	285°C	130°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Polycarbonate		Strong, durable material that can be put to the test with functioning prototypes. Polycarbonate filament is a high temperature material that offers good heat resistance and layer bonding, and produces an excellent finish.	300-315 °C	135-140°C	Engineering 3D Printing Materials	Compatible with: **JR2X, JRX**
Soft PLA		Flexible 3D printing material that feels and acts like rubber. It prints and can be removed easily when used as a support material. This material is best used with small layer heights due to increased stress during flexion.	220-235°C	55°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Stainless Steel PLA		Metallic powder is suspended in PLA to produce objects that appear to be made of steel. The material can be sanded and polished to produce a metalic sheen or left with a rough texture to produce the effect seen in the picture to the left.	195-220°C	60°C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
T-Glase		T-glase (pronounced Tee Glass) is a special formulation of PETG produced by Taulman 3D. It is composed of FDA approved polymers for direct food contact. Printed parts have a clear, crystal-like quality. T-glase prints easily on acrylic, glass, and PET film.	250°C	90°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
TPU (Wolfbend)		TPU stands for Thermoplastic polyurethane. TPU features good elasticity and transparency, and is resistant to oil, grease, and abrasion. WOLFBEND TPU is much stronger than typical TPU. Layer-to-layer bonding is incredible and layer separation is virtually non-existent.	230-240°C	70-80°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
Laybrick		Laybrick utilizes fine milled chalk, suspended in polymers, to produce objects with a stone-like consistency.	180-200°C	55°C	Infused Hybrid Materials	Compatible with: **JR2X, JRX, JR**
Ninjaflex TPE		Thermoplastic elastomer (also known as Thermoplastic rubber). TPE feels rubber-like and springs back into shape when compressed.	240°C	70°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX, JR**
PVA		Polyvinyl alcohol is a water-soluble synthetic polymer. It prints very easily, and can be used as a wash-away support structure.	170-190°C	55°C	Standard 3D Printing Materials	Compatible with: **JR2X, JRX**

GoMeasure3D is an authorized distributor of Airwolf AXIOM 3D printers.