

**Laser Sintering Solutions** 

# Selective Laser Sintering Systems FARSOON 402P SERIES





#### Performance

The Farsoon 402P series of selective laser sintering systems bring state of the art production capabilities to rapid prototyping and additive manufacturing users. High performance imaging components, multi-zone heating systems, thermal stability advancements, bi-directional single powder feed system, and removable powder cylinders make the 402P an extremely productive and efficient solution for the most demanding applications.

#### Value

Farsoon is the only selective saser sintering manufacturer that controls all aspects of the entire software, machine, and material development in one factory location providing the highest value proposition in the industry through its unique production capabilities. Customers experience low cost of ownership by utilizing one of the fastest, most thermally-stable, material-efficient additive manufacturing solutions in the world.

#### Freedom

Farsoon is committed to true innovation by offering complete freedom to operate with any open platform application. With complete access to machine parameters and settings, users can choose the right materials to meet any production or prototyping need. Customers finally have a choice to use Farsoon or 3rd party materials without restrictions.



# 402P SERIES SPECIFICATIONS



SPECIFICATIONS	FS402P	HS402P	SS402P
External Dimensions	2660x1540x2150 mm (104.8 x 60.7 x 84.7 in)		
Weight	3000 kg (6613 lb)		
Effective Build Size*	350x350x430 mm (13.78 x 13.78 x 16.93 in)		
Max Build Size*	400x400x450 mm (15.75 x 15.75 x 17.72 in)		
Layer Thickness (Typical)	0.06-0.3 mm (0.1 mm) / 0.002-0.011 in (0.004 in)		
Volume Build Rate	0.7 l/hr (43 in³/h)	1.5 l/hr (92 in³/h)	3.0 l/hr (183 in³/h)
Scanning Speed	7.6 m/s (300 in/s)	7.6 m/s (300 in/s)	12.7 m/s (500 in/s)
Scan Spacing	0.15 mm (0.006 in)	0.30 mm (0.012 in)	0.30 mm (0.012 in)
Scanner	Dynamic-focusing, high-accuracy galvo scanning system		
Laser Type	CO <sub>2</sub> 30W	C O <sub>2</sub> 60W	CO <sub>2</sub> 100W
Laser Power Control System	High-precision, digital signal		
Laser Window	Removable, easy to clean		
Power Requirements	2.5 kW (15 kW Max)	2.5 kW (15 kW Max)	3.0 kW (15 kW Max)
Powder Feed Mode	Bi-Directional powder feed system with single feed cylinder		
Powder Deliver	Precision counter-rotating roller		
Max. Chamber Temperature	190°C (374°F)		
Heating Element	Shortwave gold-plated twin tube (Fast-heating and easily accessible)		
Thermal Field Control	Eight-zone heater & intelligent temperature control systems		
Temperature Regulation	Real-time build surface temperature monitoring & optimization		
Operating System	Windows XP / Windows 7 (Coming soon)		
System Control Software	Farsoon AllStar™ open platform control interface		
Data File Format	.STL		
Key SoftwareFeatures	Manual and automatic control modes, real-time build parameter modification, three-dimensional visualization, diagnostic functions		
System Warranty	One-year parts and labor warranty		



\* Build Quality degradation may occur outside the effective build size.

# Selective Laser Sintering Systems FARSOON 251P SERIES





## **Compact Solution**

The Farsoon 251P series of selective laser sintering systems offer the high performance of an industrial production machine while providing the best value on the market. The compact frame of the 251P series is suitable for businesses and educational institutes where space is at a premium.

#### High-Temperature-Capable

The 251P series is offered in a high-temperature-capable configuration. Enhanced temperature shielding, laser power and thermal controls enable the HT251P to process high-performance materials for direct-use applications and advanced research.

#### **Research Advantage**

Farsoon is the only selective laser sintering producer that allows for complete freedom of operation for its machines. For research purposes this means that Farsoon not only allows, but encourages innovation of new applications and materials. The AllStar software is easily controlled and open parameters can be adjusted during the build.

# Break free with Farsoon Technologies

## 251P SERIES SPECIFICATIONS



SPECIFICATIONS	FS251P	HT251P	
External Dimensions	1750x1150x1915mm (68.9 x 45.3 x 75.4 in)		
Weight	1800 kg (3968 lb)		
Effective Build Size*	235x235x305mm (9.25 x 9.25 x 12.00 in)		
Max Build Size*	250x250x320mm (9.84 x 9.84 x 12.60 in)		
Layer Thickness (Typical)	0.06-0.3 mm (0.1 mm) / 0.002-0.011 in (0.004 in)		
Volume Build Rate	0.3 l/hr (18 in³/h)	0.6 l/hr (37 in³/h)	
Scanning Speed	7.6 m/s (300 in/s)	7.6 m/s (300 in/s)	
Scan Spacing	0.15 mm (0.006 in)	0.30 mm (0.012 in)	
Scanner	Dynamic-focusing, high-accuracy galvo scanning system		
Laser Type	30W CO <sub>2</sub>	60W CO <sub>2</sub>	
Laser Power Control System	High-precision, digital signal		
Laser Window	Removable, easy to clean		
Power Requirements	2.0 kW (12 kW Max)	3.0 kW (12 kW Max)	
Powder Feed Mode	Bi-Directional powder feed system with single feed cylinder		
Powder Delivery	Precision counter-rotating roller		
Max. Chamber Temperature	190°C (374°F)	220°C (428°F)	
Heating Element	Shortwave gold-plated twin tube (Fast-heating and easily accessible)		
Thermal Field Control	Eight-zone heater & intelligent temperature control systems		
Temperature Regulation	Real-time build surface temperature monitoring & optimization		
Operating System	Windows XP / Windows 7 (Coming soon)		
System Control Software	Farsoon AllStar™ open platform control interface		
Data File Format	.STL		
Key SoftwareFeatures	Manual and automatic control modes, real-time build parameter modification, three-dimensional visualization, diagnostic functions		
System Warranty	One-year parts and labor warranty		



\* Build Quality degradation may occur outside the effective build size.

# Metals Laser Sintering System FARSOON FS271M





## **Metals Solution**

The FS271M sets new standards for metal laser sintering price-performance. With a 500W Yb-fiber laser, high-accuracy custom scanning algorithms and a 275x275x320mm build size, the FS271M is the logical choice for the demanding customer including aerospace, automotive, and medical applications.

#### **Price & Performance**

The FS271M brings both performance and price advantage to the user. Farsoon is dedicated to high quality utilizing imported parts for all key components. In addition to precisely fabricating nearly any metal powder, the FS271P incorporates the latest safety systems with inert gas supply and over-sized protective filter systems.

#### **Open Platform**

Farsoon is committed to true innovation by offering complete freedom to operate with any open platform application or development program. Similar to other Farsoon systems, the 271M offers complete access to machine parameters and settings offering customers the choice of utilizing high-quality Farsoon materials or a wide range of 3rd-party materials.

# Break free with Farsoon Technologies

# FS271M SERIES SPECIFICATIONS



SPECIFICATIONS	FS271M	
External Dimensions (LxWxH)	1750x1420x1860mm (68.3 x 56.3 x 73.3 in)	
Weight	2033 kg (4481 lb)	
Effective Build Size (LxWxH)	275x275x320mm (10.83 x 10.83 x 12.60 in)	
Layer Thickness (Typical)	Adjustable 0.02-0.1mm (0.0007 - 0.004 in)	
Volume Build Rate	5-20 ml/hr (0.3 - 1.2 in³/h)	
Scanning Speed	15 m/s (590 in/s)	
Dimensional Accuracy	0.02mm (0.0007 in)	
Scanner	Dynamic-focusing, high-accuracy galvo scanning system	
Laser Type	JK 500W Yb-fibre laser	
Spot Diameter	0.1mm (0.004 in)	
Laser Power Control System	High-precision, digital signal	
Power Requirements	3.0 kW (8 kW Max)	
Powder Delivery	High performance heat resistant ceramic blade	
Powder Feed Mode	Uni-Directional powder feed system with single feed cylinder	
Inert gas supply	Argon or Nitrogen	
Gas protective system	Gas advection dust recovery system	
Inert Gas Consumption	<3L/min	
Safety	Safety execution standard GB/T 15605-2008 dust explosive & pressure relief guide	
Operating System	Windows XP / Windows 7 (Coming soon)	
System Control Software	Farsoon AllStar™ open platform control interface	
Data File Format	.STL	
Key SoftwareFeatures	Manual and automatic control modes, real-time build parameter modification, three-dimensional visualization, diagnostic functions	
System Warranty	One-year parts and labor warranty	



## Headquarters

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