



Fusion
Factory
XS

You go rough? We go tough.

The Fusion Factory XS

The Fusion Factory is an integrated Additive Manufacturing solution for metal and ceramic parts. As a print - debind - sinter combination it integrates all technological steps in one system.

The newest member of the Fusion Factory family is our new ultra compact version for mobile, demanding and versatile use away from the supply chain: Fusion Factory XS.

The XS is a complete production line that fits into three highly protective, extra rugged 19" cases that can be easily transported on trucks or ships.

This way necessary spare parts no longer have to be manufactured in the factory and transported time-consuming to the place of use; instead, production takes place directly on site and components can typically be manufactured within one day.

The filament-based manufacturing process is especially predestined for use in harsh conditions, as neither powder spillage nor laser radiation is used.

The metal/ceramic powder embedded in the filament is found 100% in the finished component, representing efficiency and sustainability not achieved with other manufacturing processes.



The boxes are divided into :

- ① Printer
- ② Debinder / Sintering furnace
- ③ Chiller for cooling water

Data Sheet

The units in detail



①

PRINTER

| | |
|-------------------|--|
| OUTER SIZE | W 686 mm / D 1.029 mm / H 870 mm |
| CONSTRUCTION | Double nozzle system Spools also moving |
| WORKING SPACE | W 100 / D 200 / H 100 mm |
| FILAMENT DIAMETER | 1,75 mm |
| TOUCH DISPLAY | 7" with remote function |
| CONNECTION | • 230 VAC / 10 A |



②

DEBINDER / SINTER

| | |
|----------------|--|
| OUTER SIZE | W 686 mm / D 1.029 mm / H 1.181 mm |
| DEBINDER | • Catalytic debinder • N2 atmosphere • Super Safe acid handling |
| SINTER FURNACE | Tmax 1.550°C Vac, N2, N2/H2 |
| WORKING SPACE | W 80 mm / D 150 mm / H 70 mm |
| CONNECTIONS | • 230 VAC / 10 A • Process gas • Propane • Cooling water In / Out |



③

CHILLER

| | |
|---------------|--|
| OUTER SIZE | W 686 mm / D 1.029 mm / H 508 mm |
| COOLING POWER | 2.000 W |
| CONNECTIONS | • 230 VAC / 10 A • Cooling water In / Out |



All three units are safely mounted inside rugged PELICAN CLASSIC 19" TM 21U racks.

Renowned as the toughest and smartest transport systems available, their exterior shells withstand all kinds of mechanical abuse, in every environment - damage free.

Filaments

One for all



GENEAL FILAMENT SPECS

| | |
|---------------------|---------|
| Outer roll diameter | 100 m |
| Length of filament | ≈ 40 m |
| Filament diameter | 1,75 mm |



STAINLESS STEEL 316 L

| | |
|--------------------|---------|
| Sinter temperature | 1.390°C |
| Sinter atmosphere | N2/H2 |

BASF ULTRAFUSE™ 316L USABLE !



STAINLESS STEEL 17-4 PH

| | |
|--------------------|---------|
| Sinter temperature | 1.390°C |
| Sinter atmosphere | N2/H2 |

BASF ULTRAFUSE™ 17-4PH USABLE !



PURE COPPER CU

| | |
|--------------------|---------|
| Sinter temperature | 1.060°C |
| Sinter atmosphere | N2/H2 |



CERAMIC Al₂O₃

| | |
|--------------------|---------|
| Sinter temperature | 1.550°C |
| Sinter atmosphere | Air |



POLYMER PLA

Ready parts after printing !



POLYMER ABS

Ready parts after printing !



The Fusion Factory XS provides a highly efficient tool for quickly producing spare parts on site using a variety of materials.

The range of usable filaments already includes three metal, one ceramic and two polymer materials. The scope will expand significantly.

Contact Us

If you have any specific questions or interest in a customized solution for your business, we look forward to hearing from you.

FUSION FACTORY XS

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