



MAKE IT  
SMARTER

**S600D**





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specifications

ORTHOPEDIC INSOLES  
RTV2 40shA silicone



SURFACE TREATMENT MASK  
TPU



SENSOR HOLDER  
PA6-CF



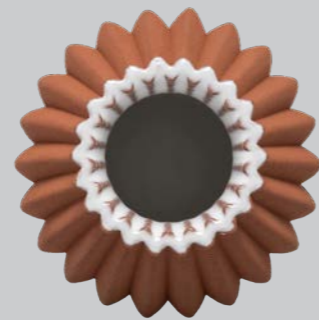
SUCTION CUP  
PLA + RTV2 45shA silicone



SOFT ROBOTIC  
RTV2 40shA silicone



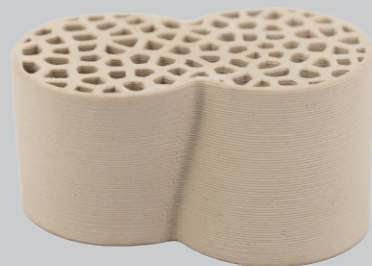
VASE  
Clay



VENTILATION DUCT  
PEKK



CERAMIC FILTER  
Cordierite



S600D

## FIELDS OF APPLICATION

### LOCAL EMERGENCY MANUFACTURING

Spare parts – Maintenance –  
Jigs & Tooling

- Simplified stock management and optimized operations with short lead times.
- Increased reactivity and autonomy thanks to on-site production.

### CUTTING EDGE DEVELOPEMENT

Training – Innovation –  
Custom production

- Reduced development & prototyping cycles thanks to an easy-to-implement iterative approach.
- Fuels innovation by enabling material experimentation and custom manufacturing.

## WHAT IF YOU COULD 3D PRINT ANY MATERIAL ON A SINGLE MACHINE?

At Lynxter, we break boundaries. The S600D is the first powerful and versatile 3D printer capable of printing a wide range of materials using different processes: thermoplastic filaments, liquid silicones and ceramic pastes.

### Benefits

- Modularity: freedom to use different materials
- Large build volume
- Integrated Web interface
- Machine interconnection
- Heated enclosure
- Automatic calibration



Our products are designed and manufactured with passion in our workshop in France.



# S600D

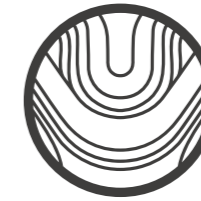
A scalable, industrial, open, and ultra-versatile multi-process center. Ready to be equipped with toolheads for a variety of materials and processes.



1 MACHINE  
3 PROCESSES  
6 TOOLHEADS



**LIQUID**  
Silicone, PU, epoxy



**PASTE**  
Ceramic



**FILAMENT**  
Thermoplastic



**LIQ11**



**PAS11**



**FIL11**



**LIQ21**



**FIL21**



**FIL33**

A single machine for all projects and materials. Choose the setup that matches your printing needs.

A powerful and unique solution for printing with silicones, thermoplastic filaments and ceramics.

1

### Versatile

Multiple materials and processes on a single machine. Mix colors, materials and processes. Be creative.

Broad selection of thermoplastics, silicones, and ceramics.

2

### Open

Achieve your goals with help from the Lynxter community.

Choose from our selection of preconfigured materials or experiment with new ones.

3

### Scalable

A constantly evolving platform with a growing number of new modules.

4

### Powerful

Rapid, precise and more powerful than traditional 3D printers. The S600D successfully prints technical materials in an instant.

5

### Smart

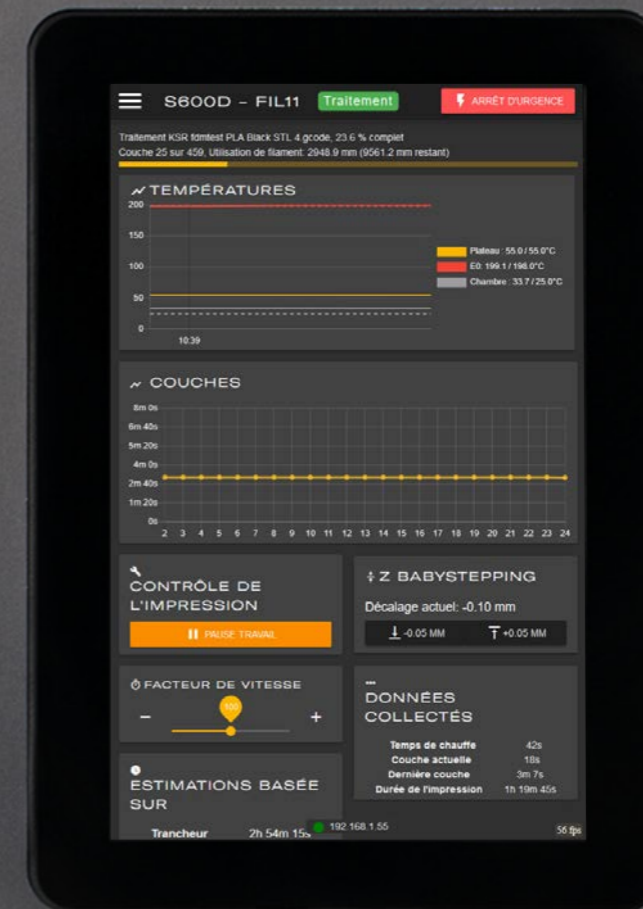
Automatic piloting system.

Remote connectivity.

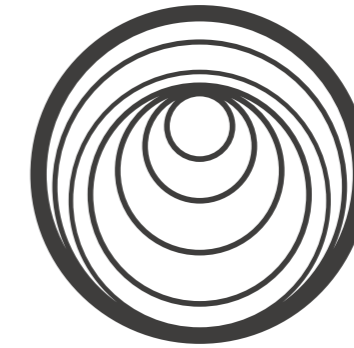
6

### Safe

The S600D respects the health and safety of the user thanks to its closed and filtered printing environment (HEPA 14 + activated carbon filtration).



Lynxter



## LIQUID

Silicone, PU, epoxy

### EXTENSIVE RANGE OF VISCOSITIES AND HARDNESS LEVELS

Liquid materials are packaged in 55ml syringes and used with our LIQ11 and LIQ21 toolheads. For larger projects, 960ml cartridges can be used.

#### Compatible materials \*

- **Silicone**
  - RTV2 medical (5, 10, 25, 40 shA) (ISO 10993-05 certified)
  - RTV2 industrial (45 shA)
- **Polyuréthane\***
  - Industrial (50 to 80 shA)
- **LSR\***
- **Epoxy\***

\* Coming Soon



## LIQUID

Silicone, PU, epoxy

Take additive manufacturing to the next level by 3D printing silicones.



- 1 Precise and clean dosage**  
Stack lines and liquid dots with precision thanks to the industrial dosing pump for high-precision dosing of materials.
- 2 Different flow rates, finishes, and materials: Modulate**  
Switch between different nozzles with suitable diameters and properties. Accessorize the toolhead with different cross-linking solutions.

- 3 The reliability of industrial dispensing at the heart of your 3D printer**  
No trade-offs. Components of unrivaled durability designed for intense usage with all types of materials.
- 4 From small to large parts**  
Make the most of the substantial build volume: Up to  $\varnothing 390 \times 600$ mm.



### LIQ11

## SINGLE-COMPONENT LIQUID EXTRUSION TOOLHEAD

### LIQ21

## TWO-COMPONENT LIQUID TOOLHEAD

#### Benefits

- Use with single-component materials
- Simple & easy to use
- Heat the material cartridge and dosing system

#### Benefits

- Print two-component technical and medical-grade materials
- Easy to clean
- Seamlessly adjust the mixing ratio





# FILAMENT

Thermoplastic

## AN OPEN APPROACH TO EXCELLENCE

The  $\varnothing 1.75\text{mm}$  thermoplastic filament is the most widespread standard among users and suppliers.

### Compatible materials \*

- PEKK-A
- TPU
- PC
- PA
- PLA
- ABS
- PETG CF
- TPC ESD
- Alumine
- Zirconia
- PP
- PCL
- ASA

\*The list of compatible materials is evolving. Our team is working on new print profiles every day.



**FILAMENT**  
Thermoplastic

Print new materials  
fast and precisely



- 1 Convenient and powerful filament deposition**  
Efficiently print thermoplastic filaments of your choice. This cutting edge single nozzle toolhead is remarkably reliable and efficient.
- 2 High-temperature extruder**  
A dedicated liquid cooling system makes it possible to extrude at temperatures of up to 450°C. Enjoy the liberty of printing the most demanding high-temperature filaments.

- 3 Wide range of compatible materials**  
Large variety of compatible thermoplastic filaments: soft, brittle, recycled, food-safe, flexible, and high-temperature resistant filaments.
- 4 Performance and ergonomics**  
Precise, fast and easy 3D printing: benefit from 3 times more flowrate, change your extrusion block under 10 seconds and double your printing speed.

**FIL11**  
**SINGLE EXTRUSION  
FILAMENT TOOLHEAD**

**FIL21**  
**DIRECT DRIVE FILAMENT  
EXTRUSION TOOLHEAD**

**Benefits**

- Simple, easy to use, strong and compact
- High-temperature build chamber (80°C) – suitable for printing PEKK
- Build volume: ø390 x 600mm

**Benefits**

- Soft and brittle filaments printing
- High-temperature build chamber (80°C) - suitable for PEKK
- Build volume : ø390 x 600 mm
- Easy to use, high-performance, precise and fast



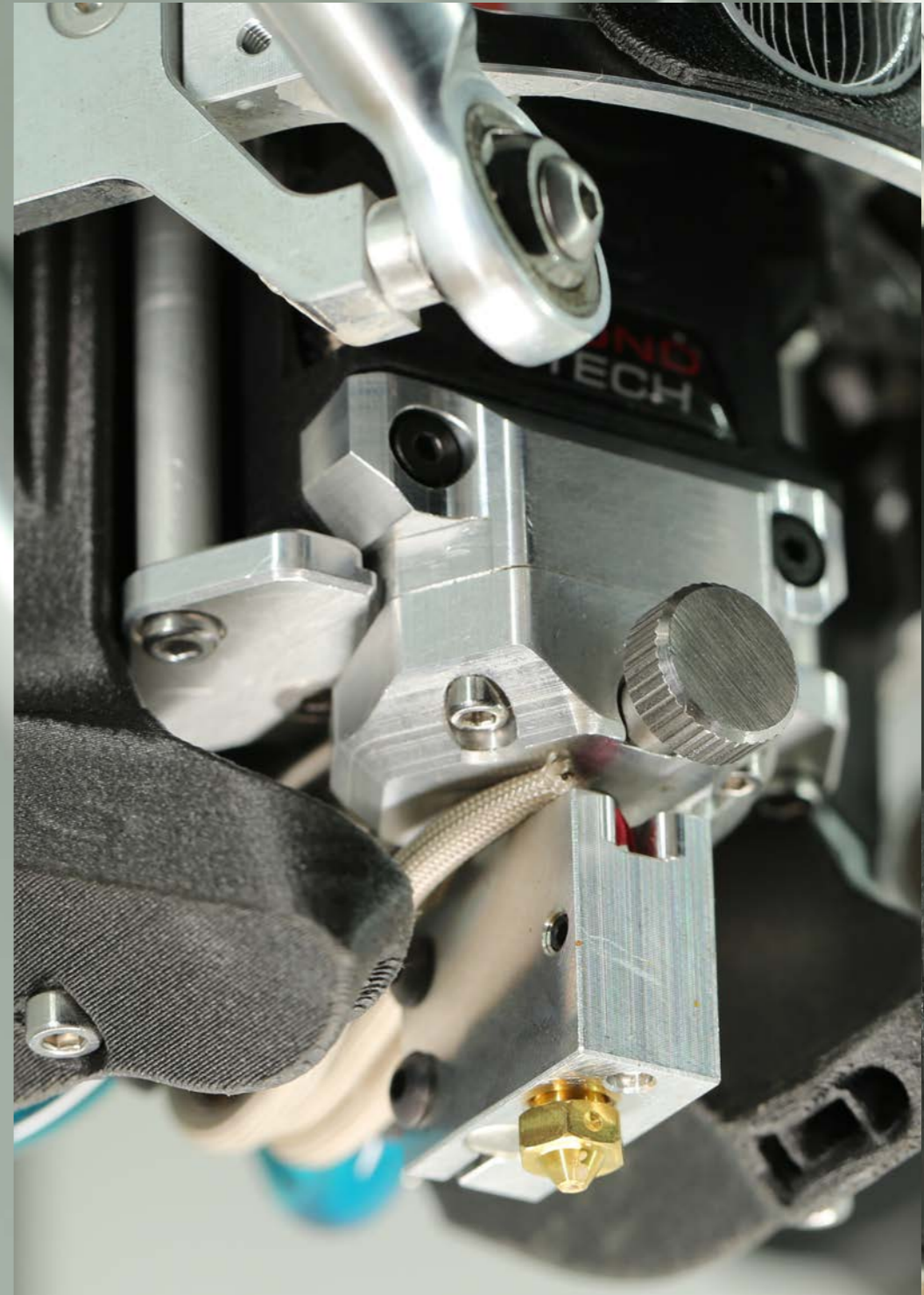
**FILAMENT**  
Thermoplastic

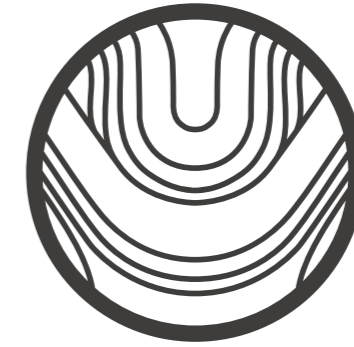
- 5 Different flow rates, finishes and materials: Modulate**  
Simply set up your toolhead with magnetic heating blocks and nozzles with suitable diameters and properties.
- 6 Automatic nozzle leveling**  
Makes it simple to change the toolhead, nozzles and achieve a successful first layer. Facilitates calibration when printing with multiple materials.

## **FIL33** TRIPLE FILAMENT EXTRUSION TOOLHEAD

### Benefits

- 3 separate nozzles (independent extrusion lines)
- Temperature-controlled build chamber (60°C)
- Build volume: ø390 x 600mm





## PASTE

Ceramic

### TECHNICAL OR TRADITIONAL CERAMIC PASTE

Ceramic paste for 3D printing is packaged in 55ml syringes. PAS11 gives you the freedom to choose from a wide range of different ceramic materials.

#### Compatible materials \*

- **Traditional**  
Porcelain  
Clay  
Sandstone
- **Technical**  
Alumina  
Cordierite

\*The list of compatible materials is evolving. Our team is working on new print profiles every day.



**PASTE**  
Ceramic

Get creative with  
PAS11 technology



**PAS11**  
TOOLHEAD FOR 3D  
PRINTING OF CERAMICS

- 1 3D print ceramics on your S600D**  
PAS11 is well-suited for different types of projects: industrial, artistic and research.
- 2 Introducing precise ceramic robocasting**  
PAS11 features a microdispensing pump which dispenses the material precisely. The PAS11 toolhead for ceramic 3D printing is pressurized to ensure consistent extrusion. The deposited lines of paste are fine, precise and regular.



**Benefits**

- Wide variety of compatible pastes
- Large build volume: Ø390mm x 600mm
- High-speed movement
- Precise and accurate lines
- Modular: add extra functions to the PAS11 tool to widen the field of applications



## MATERIALS, OPTIMIZED MATERIAL SUPPLY SYSTEM

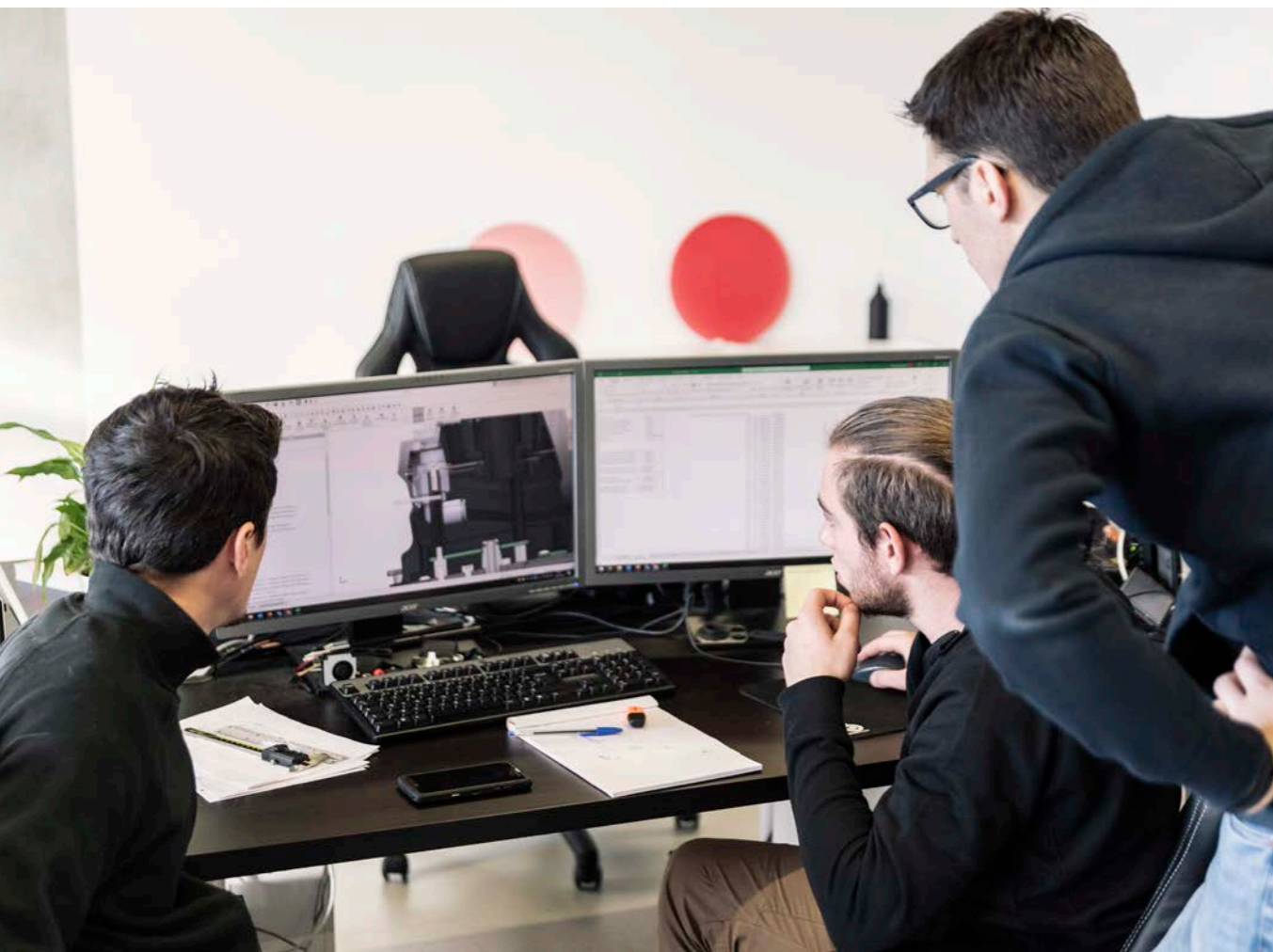
Attach the material supply unit to your S600D and select the best materials for your projects.

Choose from our selection of preconfigured materials for guaranteed results or experiment freely.

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Numerous materials with preconfigured print profiles are available on the S600D; a library of preset files.

# CREATE DESIGN PRODUCE



## CAM

The S600D can be interfaced with any CAM software\*.

### Benefits

- Library containing all print profiles (preconfigured settings)
- Quick and easy to use, just plug & play!
- Adjust settings to optimize manufacturing strategies.

\* Simplify 3D is included when you purchase a S600D: lifetime license, training, unlimited access etc.

## EMBEDDED SOFTWARE

The S600D is based on open source firmware (entirely revised by Lynxter) and interfaces easily with third-party software (web and .gCode). Easy to configure and customize, the S600D is ideal for highly specialized projects.

Multiple settings – easy to use: calibration, automated loading and priming of materials, digital inventory, remote monitoring etc.

### Benefits

- Touch screen
- Ergonomic interface
- Remote control via web interface.
- Regular updates

# LYNXTER OFFERS TECHNOLOGICAL SOLUTIONS TO ENCOURAGE INNOVATION

- **DEVELOPMENT OF CUSTOMIZED APPLICATIONS**

We provide tailored solutions to our customers' unique projects

- **SPECIALIZED TRAINING**

We offer specialized training to help our customers develop their knowledge of additive manufacturing and related issues.

- **CUSTOMER SERVICE**

Our customer service team is happy to assist you. We also provide access to an online training platform with a collection of tutorials, (videos and written articles).

- **HUB**

We offer you a connected and straightforward solution. All your activities: service contracts, documentation and printing profiles are collected in a single place with an easy access.

## HUB

Focus on what matters





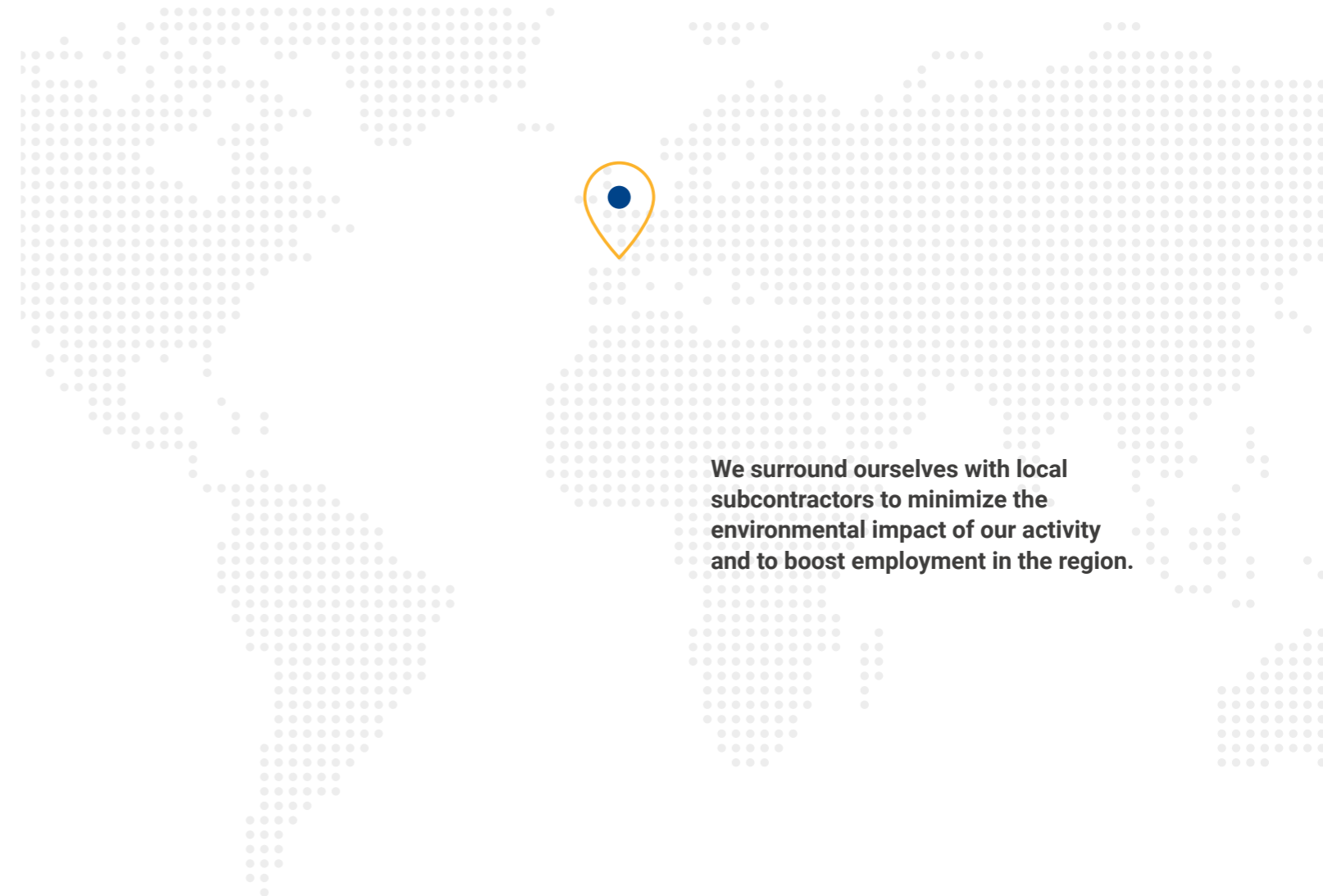
## MISSION

We strive for a more intelligent and fairer world by entirely rethinking complex problems

- **Democratize** additive manufacturing and overcome resistance to change
- **Boost** the additive manufacturing industry
- **Optimize** the exploitation of natural resources
- **Enable** emergency manufacturing
- **Improve** product performance and manufacturing processes
- **Promote** latent innovation for a better world

## LOCATION

Our products are designed and manufactured with passion in our workshop in France.



We surround ourselves with local subcontractors to minimize the environmental impact of our activity and to boost employment in the region.



We work with an international network of partners and distributors. Please contact us to find your nearest distributor.



## SPECS. S600D

### Build volume

Ø390mm x 600mm

### Layer height

50µm à >1mm

### Max. moving speed of toolhead

500mm/s

### Build surface

Removable  
Hot-swappable  
Precision-ground surface

### Print job protection

Material run-out detection

### Piloting

Standalone touch screen and Web interface

### Connectivity

Ethernet

### Automatic calibration

Build surface levelling  
Geometrical correction  
Tool height levelling

### Dimensions

I 913 x L 851 x H 1644 mm

### Toolheads

Modular. Quick mechanical, electronic  
and water-cooling connectors.

### X,Y,Z resolution

12.5µm, 12.5µm, 12.5µm

### Material supply

Modular

### Thermal environment

Heated build surface: 20°C to 180°C  
Build chamber: 20°C to 80°C  
Water-cooled toolhead

### Manufacturing file format

Gcode standard

### Customizable firmware

Lynxter S600D firmware (RepRapFirmware base)

### Power

230V AC 16A 50-60Hz

### Health and safety

Removable double HEPA H14/activated  
carbon filtration  
Locked machine access



**FIL11**

**FIL21**

**FIL33**

<b>Filament diameter</b>	Ø1,75mm	Ø1,75mm	Ø1,75mm
<b>Filament material input</b>	1	2	3
<b>Filament material output</b>	1	1	3
<b>Build volume</b>	Ø390 x H.600mm	Ø390 x H.600mm	Ø360 x H.600mm
<b>Maximum enclosure temperature</b>	80°C	80°C	60°C
<b>Maximum extrusion temperature</b>	450°C	450°C	450°C
<b>Filament feeding system</b>	Bowden	Direct Drive (and/or Bowden)	Bowden
<b>Retractable nozzles</b>	No	No	Yes
<b>Nozzle diameter</b>	Ø0,25mm to Ø1,2mm	Ø0,25mm to Ø1,2mm	Ø0,25mm to Ø1,2mm
<b>Nozzle material</b>	Brass – Steel Plated copper – Stainless Steel	Brass – Steel Plated copper – Stainless Steel	Brass – Steel Plated copper – Stainless Steel
<b>Multi-extrusion</b>	No	No	Yes
<b>High-temperature filament compatible (e.g PEKK)</b>	Yes	Yes	No



**LIQ11**

**LIQ21**

**PAS11**

<b>Liquid material input</b>	1	2	1
<b>Liquid material output</b>	1	1	1
<b>Build volume</b>	Ø360 x H.600mm	Ø360 x H.600mm	Ø390 x H.600mm
<b>Single-component material compatible</b>	Yes	Yes	Yes
<b>Two-component material compatible</b>	No	Yes	No
<b>Maximum enclosure temperature</b>	40°C	40°C	40°C
<b>Viscosity</b>	10-3 Pa.s to 1000 Pa.s	10-3 Pa.s to 1000 Pa.s	10-3 Pa.s to 1000 Pa.s
<b>Volumetric flow rate</b>	0.03 to 3,3ml/min	0.03 to 3,3ml/min	0.05 to 5,5ml/min
<b>Volumetric resolution</b>	0,03ml/rev	0,03ml/rev	0,05ml/rev
<b>Precise start and end points</b>	Yes	Yes	Yes
<b>Chemical resistance</b>	Yes	Yes	No
<b>Abrasion resistance</b>	No	No	Yes
<b>Nozzle thread</b>	Luer-Lock	Luer-Lock	Luer-Lock
<b>Nozzle diameter</b>	Ø0,23mm to Ø1,04mm	Ø0,23mm to Ø1,04mm	Ø0,23mm to Ø1,04mm
<b>Nozzle material</b>	Steel	Steel	Steel
<b>70°C heating option</b>	Yes	No	Yes
<b>Large volume option (960cc)</b>	Coming Soon	Coming Soon	Coming Soon

WE FOCUS ON REMARKABLE  
INNOVATION PROJECTS.  
OUR GOAL?

TO PROVIDE THE MOST  
AMBITIOUS PROJECTS WITH  
OUR KNOW-HOW AND  
TECHNOLOGICAL SOLUTIONS:  
MAKE IT SMARTER





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