



Welcome in Omni3D's World



INDUSTRIAL PRINTING 3D

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Export Manager

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# COMPANY MILESTONES

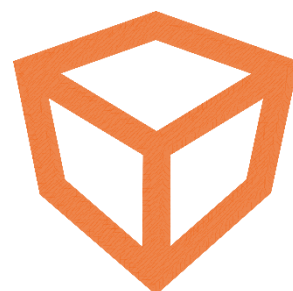


# ABOUT US

We are the first Polish manufacturer of industrial 3D printers in **FFF technology**.

We offer industrial **3D printing systems** and **3D printing on demand**.

**Award winning technology**

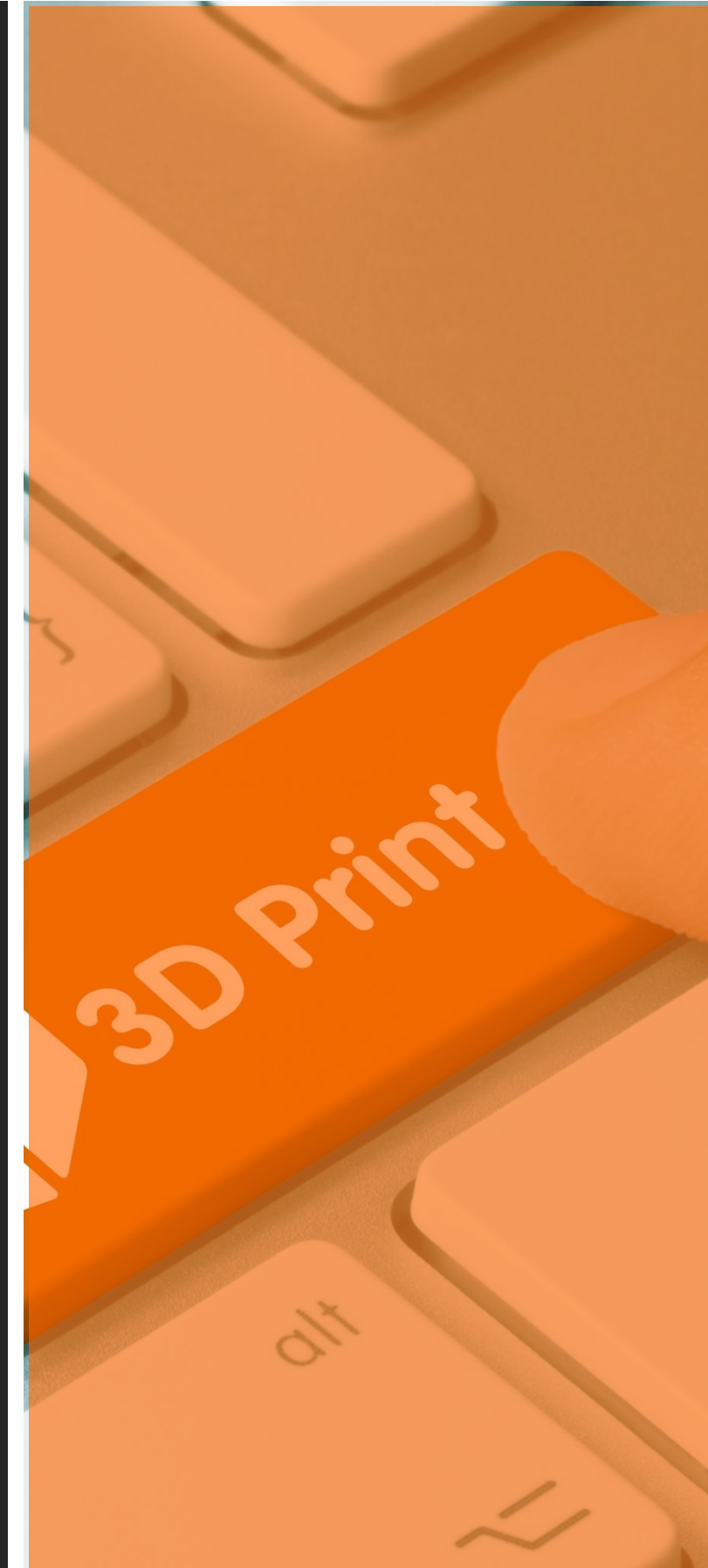


## MADE IN EU

Our products are designed and manufactured in Europe

# 2

## Production plants



# 7

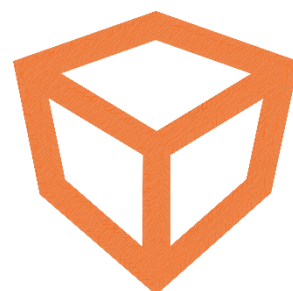
## YEARS

of experience and more than 30 peoples working for Your setisfaction

# KEY HIGHLIGHTS

Available packages also  
include:

- post-sales services,
- audits,
- installation,
- training,
- service and filaments.



**Big Building  
Value**

460mmx460x  
600mm

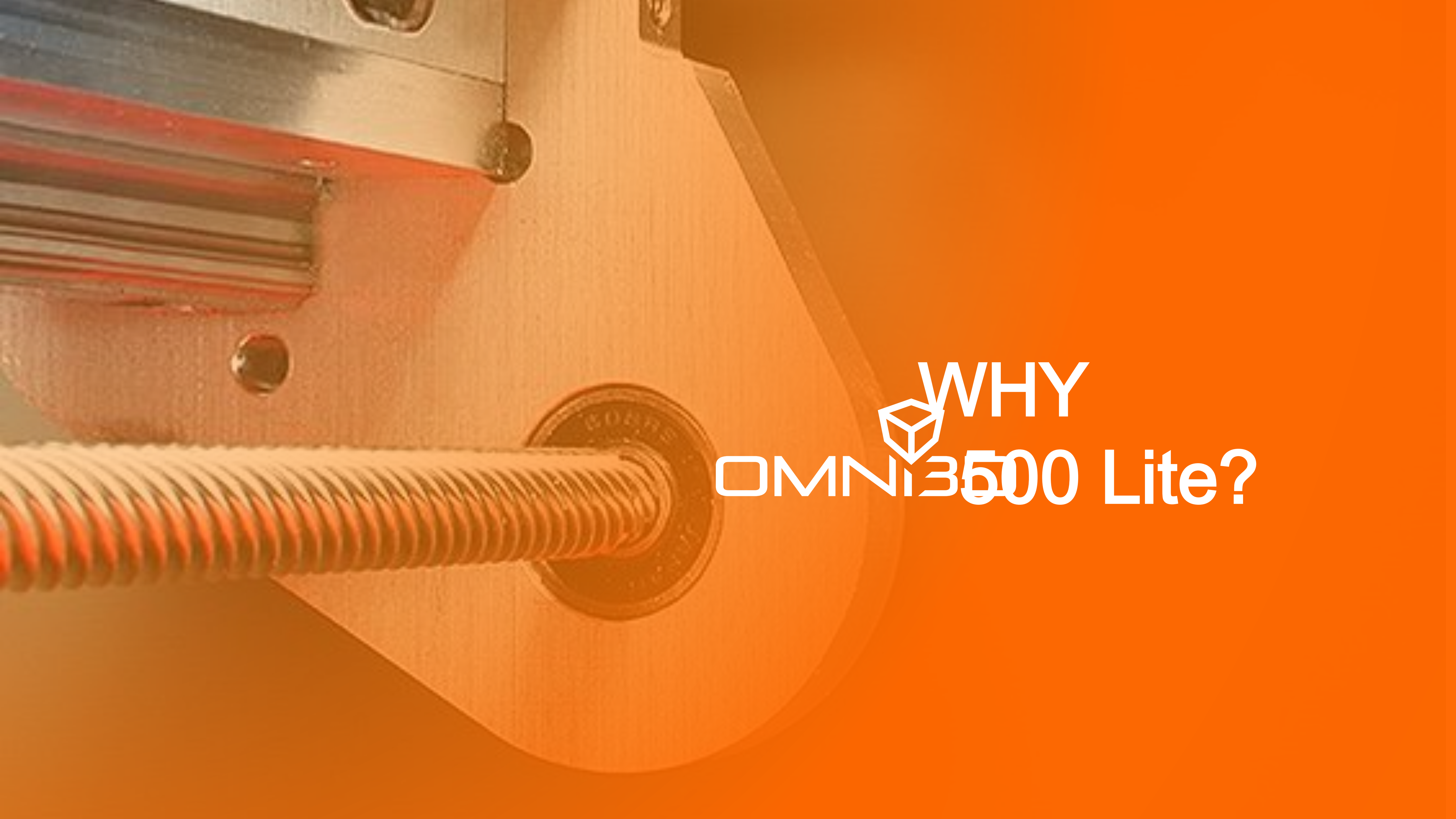
**Light  
construction  
and  
modern  
technology**

Fully useful  
modern  
Technology



**21**

**AUTHORIZED**  
filaments



WHY  
 OMNI360 Lite?

## Filament extrusion = 3D Printing

### KEY HIGHLIGHTS ABOUT PRINTING

Right printing depends of:

- Filament preparation,
- Stable extrusion (pressure and temperature),
- Stable temperature of nozzles and chamber because of close chamber
- Drying process of printout.

#### Dual Drive Extruders

Modern Extruder  
with  
Special feeding  
Gear form  
Bondtech

#### Enclosed Chamber

Chamber  
heated by  
Heated table  
up to 50C

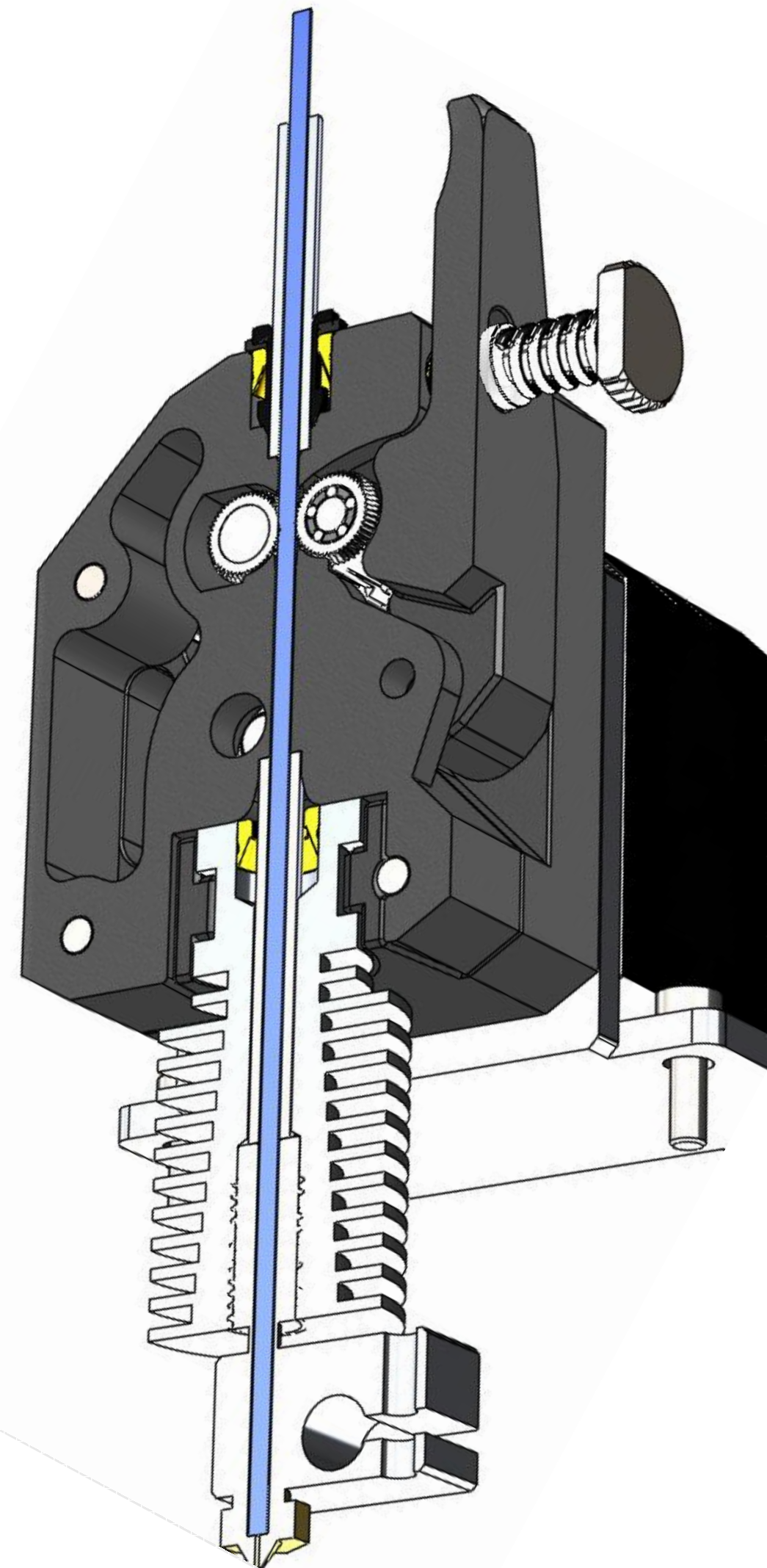
Omni3D's  
Printers  
give You

#### Direct Extruder for Universal Use

Construction  
Of nozzles  
and extruder  
for many  
filaments type

## Feeding Precision by dual-drive

- 200 steps 256 micro steps
- Special Double Feeding Gear
- Easy maintenance



## 3D Printing process

- 200 steps and 256 micro steps in every step with filament pressure regulation (adjusted at 64 microsteps)
- Easy open of filament gear for cleaning
- Dual Drive – for uninterrupted filament flow without fear of grinding or slipping
- Easy pressure control

# KEY HIGHLIGHTS ABOUT PRINTING

Right printing depends of:

- Warping control,
- Filament presence detector
- Bad –  
460mmx460mmx600mm
- Ceramic Glass surface

## Printing Area, Filament Control

### Filament Control

Sensor  
that  
Gives an info if the  
filament is inside

### High Bed Temperature

Up to 150C –  
and a Ceramic  
Glass Surface  
to minimize  
warping

Omni3D's  
Printers  
give You

### Big Printing Area

0,127m<sup>3</sup>

# KEY HIGHLIGHTS ABOUT PRINTING

Right printing depends of:

- Minimizing printing errors,
- Constant printing
- 1,75mm filament

## Printing with Compensation Of Inequalities

Moving bad  
Up and down  
during first  
printing layers

## Printing Resuming

Printer  
remember the  
ending of  
printing after  
power outage

Omni3D's  
Printers  
give You

## Printing Properties

## Big Spools System

Up to 3kg  
spools of  
filament

# Omni<sup>3</sup> 500 LITE



0,127m<sup>3</sup>

PRINTING AREA



## DUAL EXTRUDER

You can print complex and unusual shapes using dedicated support material.



## 460 x 460 x 600 OF BUILD VOLUME

You can print large items or a whole series of smaller parts



## AUTOMATIC PLATFORM CALIBRATION

We optimise your work thanks to automatic platform calibration, filament control and predefined print settings.



## CARBON + HEPA FILTRATION



## WIFI AND ETHERNET CONNECTION OPTIMISED ELECTRONICS

steering system optimised to reduce cost of production



## DEDICATED WEB

the ability to remotely manage the machine



## UNIQUE PRINTING SYSTEM

increase print repeatability



## FARM CONFIGURATION

the ability to combine printers into one remote management system



OMNI<sup>3</sup>D

# Omni<sup>3D</sup> 500 LITE



## Filaments

### BASIC Filaments

-  ABS42
-  Ultrafuse ABS Fusion+ 750g
-  ASA
-  PLA
-  PC-ABS
-  PET-G32
-  HIPS-20

### FLEXIBLE AND ENGINEERING Filaments

-  TPU
-  PA-6/66
-  CF-PA-12
-  XSTRAND GF-PA-6
-  PA-12
-  3DXSTT ESD-PETG

### SUPPORT Filaments

-  ODS-20
-  WS-20

# KEY HIGHLIGHTS ABOUT NET

Unique for Factory 2.0 NET:

- Controlled by Lan ,
- Network managing system = FARM
- User control system

## LAN Operating

LAN  
connection with  
inside system web  
control – with multi  
options – Inc.  
updates

## IP Camera

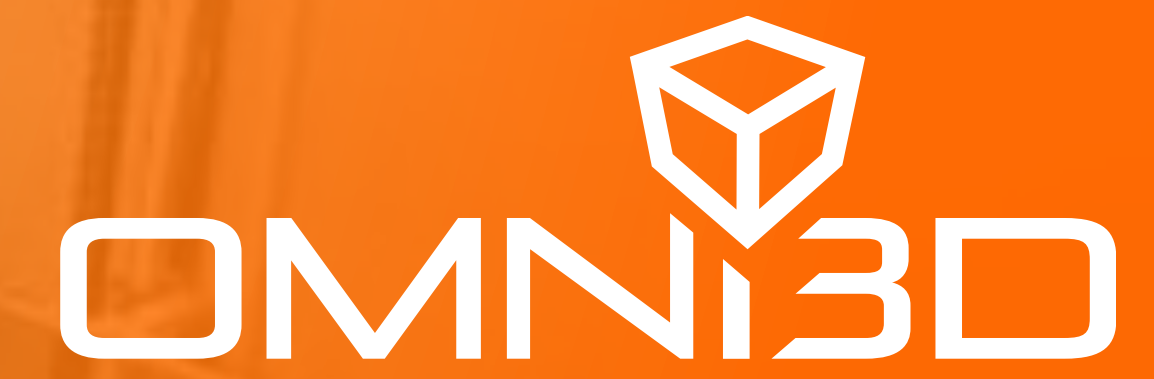
Remote  
preview of the  
printing  
process

Omni3D's  
Printers  
give You

## LAN operating

## User and Process Control System

User  
identification,  
Events  
control, IP  
Camera, Full  
process  
control



# LAN Managing System of Single Printer



Current Job



Status



Machine Control



Dashboard



Events



File Management



G-Code Files



Procedures



Settings



General

No Job running.



Job Control



PAUSE JOB



Enable Auto-Sleep



Estimation

Time Left

0s



Collected Data

Warm-Up Time

n/a

Current Layer Time

n/a

Last Layer Time

n/a

Job Duration

0s

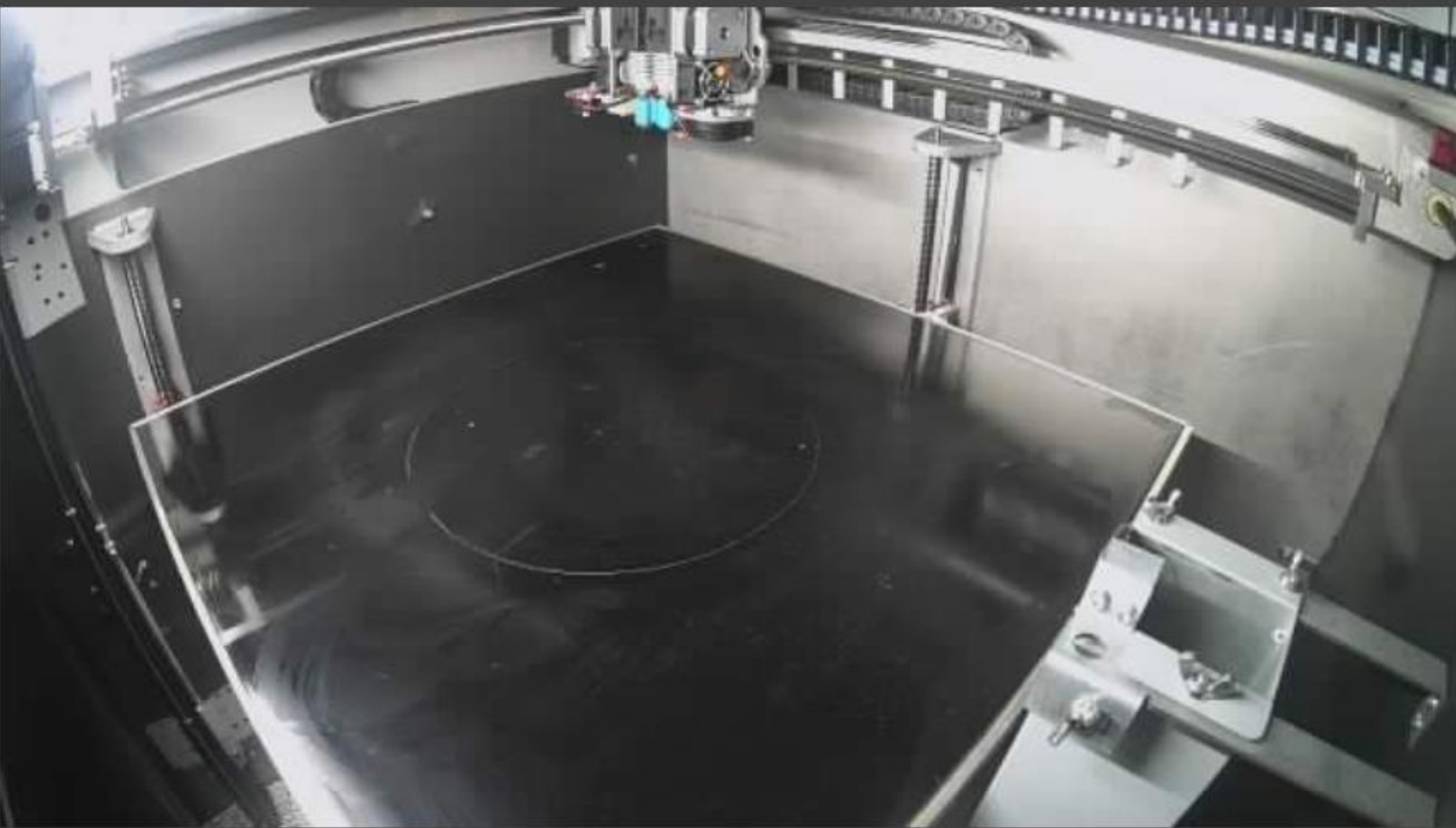


Job Information

Height: n/a

Generated by: n/a

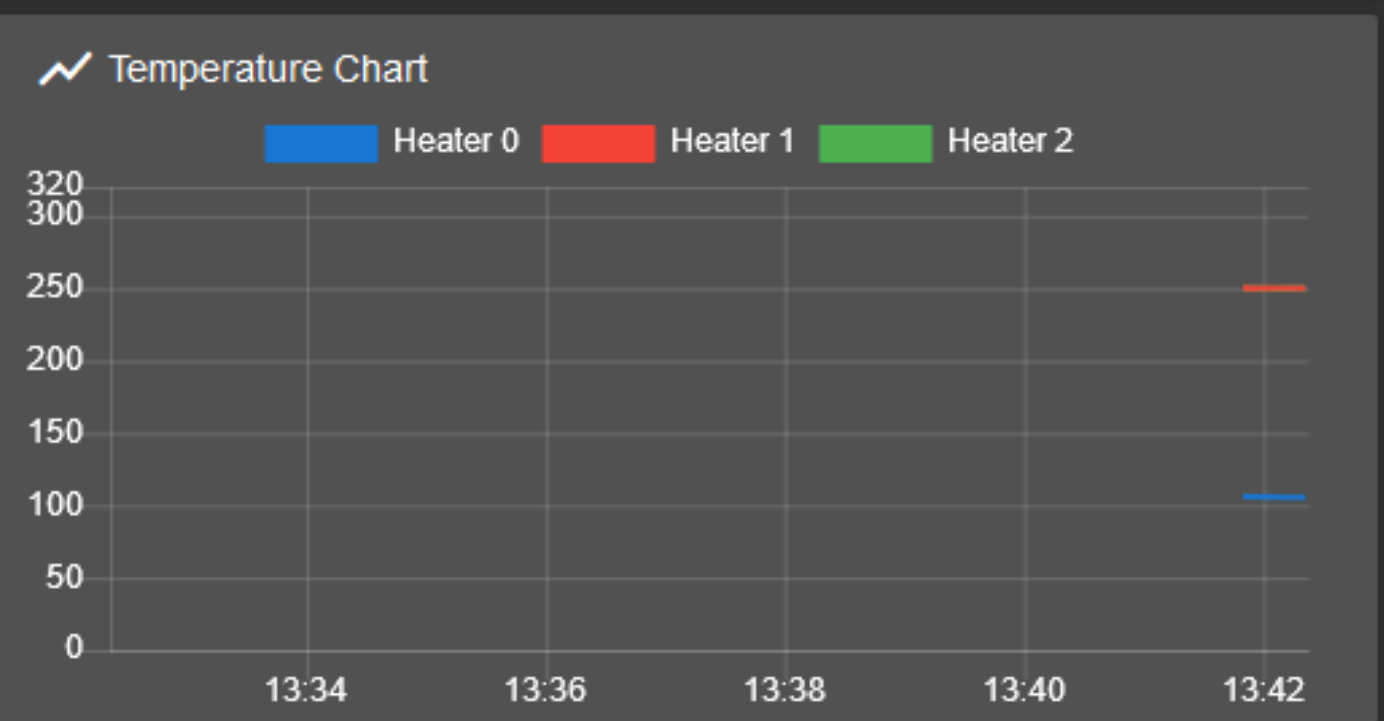
Camera



- Current Job
- Status
- Machine Control
- Dashboard
- Events
- File Management
- G-Code Files
- Procedures
- Settings
- General

|                 |                           |                           |                     |
|-----------------|---------------------------|---------------------------|---------------------|
| Status          | Idle                      |                           |                     |
| Tool Position   | X<br>0.0                  | Y<br>0.0                  | Z<br>122.00         |
| Extruder Drives | Drive 0<br>0.0            | Drive 1<br>0.0            |                     |
| Speeds          | Requested Speed<br>0 mm/s |                           | Top Speed<br>0 mm/s |
| Sensors         | Vin<br>24.1 V             | MCU Temperature<br>33.6 C | Z-Probe<br>0        |

|       |                     |         |        |         |
|-------|---------------------|---------|--------|---------|
| Tools | Heater              | Current | Active | Standby |
| T0    | Heater 1<br>standby | 250.0 C | 250    | 250     |
| T1    | Heater 2<br>standby | 250.2 C | 250    | 250     |
| Bed   | Heater 0<br>active  | 105.2 C | 105    | 0       |



HOME XY

Machine Movement

< X-100

< X-50

< X-10

< X-1

< X-0.1

X+0.1 >

X+1 >

X+10 >

X+50 >

X+100 >

< Y-100

< Y-50

< Y-10

< Y-1

< Y-0.1

Y+0.1 >

Y+1 >

Y+10 >

Y+50 >

Y+100 >

< Z-50

< Z-25

< Z-5

< Z-0.5

< Z-0.05

Z+0.05 >

Z+0.5 >

Z+5 >

Z+25 >

Z+50 >

The following axes are not homed: X, Y

Fan Control

Fan Selection:

TOOL FAN

FAN 0

FAN 1

0

+

Extrusion Control

Feed amount in mm:

100

50

20

10

5

1

Feedrate in mm/s:

60

30

15

5

1

RETRACT

EXTRUDE

Speed Factor

100

+

- Procedures
- Root
- Filament
- Maintenance
- Preheat
- Omni Config



OMNI3D Factory NET

192.168.1.8:8080/Events

OMNI3D

UPLOAD & START

EMERGENCY STOP

Machine Control

Status

Dashboard

Events

Files

Settings

General

| Date ↓               | Event                                                                                     |
|----------------------|-------------------------------------------------------------------------------------------|
| 17.02.2020, 10:40:26 | M203<br>Max speeds (mm/sec): X: 200.0, Y: 200.0, Z: 10.0, E: 100.0:100.0, min. speed 0.50 |
| 17.02.2020, 10:39:44 | G37<br>Warning: G37 command is not supported                                              |
| 17.02.2020, 10:39:36 | M589                                                                                      |
| 17.02.2020, 10:39:33 | M586                                                                                      |
| 17.02.2020, 10:39:17 | M210                                                                                      |
| 17.02.2020, 10:39:12 | M208<br>Axis limits X:70.0:505.0, Y:0.0:500.0, Z:0.0:500.0                                |
| 17.02.2020, 10:39:08 | Connected to 192.168.1.8:8080                                                             |

OMNI3D Factory NET

192.168.1.8:8080/Files/Jobs

Szukaj z DuckDuck

OMNI 500 Lite

OMNI3D

UPLOAD & START

EMERGENCY STOP

Machine Control

Status

Dashboard

Events

Files

Settings

General

SD CARD 0

G-Codes Directory

NEW DIRECTORY

REFRESH

UPLOAD G-CODE FILE(S)

|  | Filename              | Size      | Last modified ↑      | Object Height | Layer Height | Filament Usage | Print Time | Simulated Time | Generated by                |
|--|-----------------------|-----------|----------------------|---------------|--------------|----------------|------------|----------------|-----------------------------|
|  | fpi-test.gcode        | 275.2 KiB | 26.11.2019, 12:45:08 | 36.17 mm      | 0.2 mm       | 6511.1 mm      | 1h 0s      | n/a            | Simplify3D(R) Version 4.1.1 |
|  | atlas2.gcode          | 9.7 MiB   | 26.11.2019, 12:45:27 | 175.71 mm     | 0.2 mm       | 58227.4 mm     | 3h 23m 0s  | n/a            | Simplify3D(R) Version 4.0.1 |
|  | NintendoGames.gcode   | 2.5 MiB   | 26.11.2019, 12:46:04 | 30 mm         | 0.3 mm       | 65089.7 mm     | 4h 43m 0s  | n/a            | Simplify3D(R) Version 4.1.1 |
|  | 15_min_print.gcode    | 128.4 KiB | 13.12.2019, 09:54:00 | 19.8 mm       | 0.2 mm       | 1232.2 mm      | 15m 0s     | 16m 5s         | Simplify3D(R) Version 4.1.1 |
|  | Marvin_KeyChain.gcode | 1.5 MiB   | 13.12.2019, 09:54:07 | 33 mm         | 0.2 mm       | 1895.3 mm      | 27m 0s     | n/a            | Simplify3D(R) Version 4.1.1 |
|  | marcin_T0_15min.gcode | 674.6 KiB | 13.12.2019, 09:54:11 | 18.6 mm       | 0.2 mm       | 429.2 mm       | 12m 0s     | n/a            | Simplify3D(R) Version 4.1.2 |
|  | testRygli.gcode       | 34 B      | 16.01.2020, 10:06:29 | n/a           | n/a          | n/a            | n/a        | n/a            | n/a                         |
|  | 40mmcube.gcode        | 161.0 KiB | 22.01.2020, 12:58:00 | 20 mm         | 0.2 mm       | 1504.8 mm      | 16m 0s     | n/a            | Simplify3D(R) Version 4.1.2 |
|  | heaters.gcode         | 32 B      | 23.01.2020, 12:52:26 | n/a           | n/a          | n/a            | n/a        | n/a            | n/a                         |
|  | TEST_FPI.gcode        | 4.5 KiB   | 13.02.2020, 10:36:15 | n/a           | n/a          | n/a            | n/a        | n/a            | n/a                         |
|  | nawiew_harm.gcode     | 275.2 KiB | 13.02.2020, 13:42:13 | 36.17 mm      | 0.2 mm       | 6511.1 mm      | 1h 0s      | n/a            | Simplify3D(R) Version 4.1.1 |
|  | SD_Card_Holder.gcode  | 1.7 MiB   | 13.02.2020, 13:42:15 | 13.4 mm       | 0.2 mm       | 4294.7 mm      | 45m 0s     | n/a            | Simplify3D(R) Version 4.1.2 |

OMNI 500 Lite

Machine Control

Status

Dashboard

Events

Files

Settings

General

OMNI3D

UPLOAD & START

EMERGENCY STOP

Appearance

Dark theme

Language

English

Use binary file sizes

Notifications

Do not close error messages automatically

Default notification timeout (ms)

5000

Omni Duet Web Control 2.0.0

Web Interface developed by [Christian Hammacher](#) for Duet3D

Licensed under the terms of the [GNU General Public License v3](#)

UPLOAD SYSTEM FILES

UPLOAD PROCEDURE FILE(S)



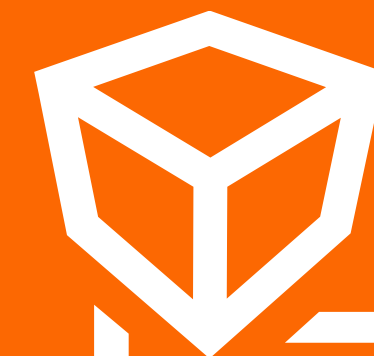
# OMNI3D Sample system

# Omni3D Print Room Sample Printing



-  **15 MACHINES**  
Full professional Omni3D machines with modern equipment that gives high repeatability
-  **DEDICATED WEB**  
Web side with individual calculations and all necessary informations
-  **TECHNOLOGY SUPPORT**  
To follow and control the process from start to the end
-  **MULTI FILAMENTS CHOICE**  
All filaments included the individual created for the customer
-  **HELP DESK – CAD Design**  
Specialists of CAD by request to prepare the project right

TRUSTED BY MANY  
OWNED BY THE  
BEST

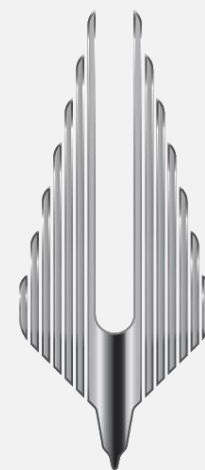


OMNI3D

INDUSTRIAL 3D PRINTING

## CASE - STUDY

- Prototyping
- Small value production
- Customize production
- logistic
- Spare parts production
- Tooling



## Successful Stories



**BOSCH**



# COMPANIES THAT TRUST OMNI3D



**SIEMENS**

**S A M S U N G**



**BAE SYSTEMS**



**OLYMPUS**



**Volkswagen**



**MEYRA**

**MAHLE**



**GE Power**



**IVECO**



INDUSTRIAL 3D PRINTING

THANK YOU FOR YOUR ATTENTION

**Tomasz Garniec**

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[www.omni3d.com](http://www.omni3d.com)

If You have any questions do not hesitate to contact me