



PRODUCT PRESENTATION

3DGence
**INDUSTRY
F340**

industrial 3D printer



3DGence INDUSTRY F340

Main features:

1. **Interchangeable modules** – wide use of technical materials
2. **Autocalibration** – low maintenance solution
3. **Heated printing chamber** – accurate and durable parts
4. **PEEK 3D printing**– functional prototypes
5. **Soluble materials** – complex and easy to post-process parts
6. **High-quality components** – dedicated electronics and made in EU
7. **TÜV Safety** - safe printing environment and air filtration system

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INDUSTRY F340



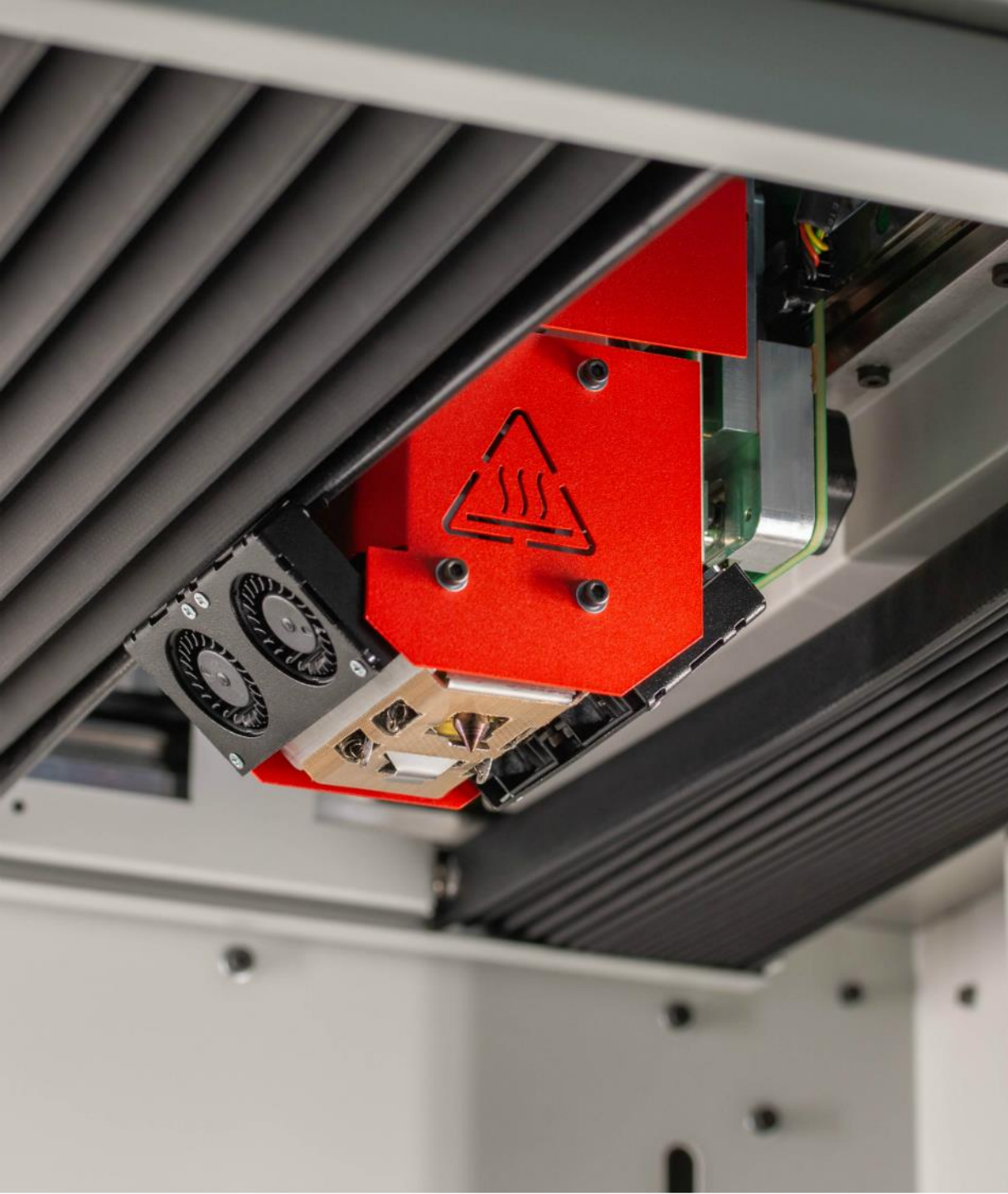
Dual extruder 3D printer designed for industrial applications where accuracy, speed, comfort and safety of the entire 3D printing process are crucial.

This 3D printer is suitable for working with a wide range of technical materials including the high-grade thermoplastics like PEEK.

SPECIFICATION	
Build volume (w × d × h)	260 × 300 × 340 mm
Layer resolution (min)	150 microns
Printing nozzles	2
Hotend temp. (max)*	500°C
Table temp. (max)*	160°C
Chamber temp. (max)	85°C
Filament chamber temp. (max)	70°C
Software	3DGence Slicer

*depends on the printing module





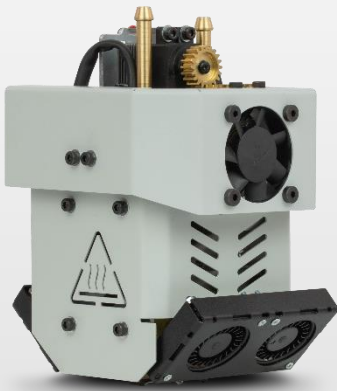
3DGence INDUSTRY F340 Interchangeable printing modules

Each module enables different application and material choice.

What distinguishes the modular system?

1. Easy and tool-less change
2. No calibration needed due to internal module memory
3. Direct drive
4. Mechanical hotends plugs

Interchangeable printing modules



Module **PRO**

Max. temp.:
265°C

Nozzle diameter:
0.4mm

Model materials:
ABS, PET, Nylon, PLA, ASA, PP

Support materials:
breakaway (HIPS),
water soluble (BVOH)
soluble (ESM-10)



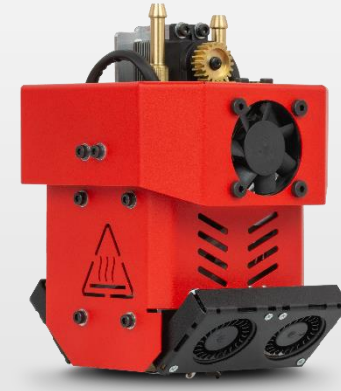
Module **HT**

Max. temp.:
340°C

Nozzle diameter:
0.4mm

Model materials:
PC, PC-ABS, PC-ESD, PC-CF

Support material:
dedicated breakaway (ABS)



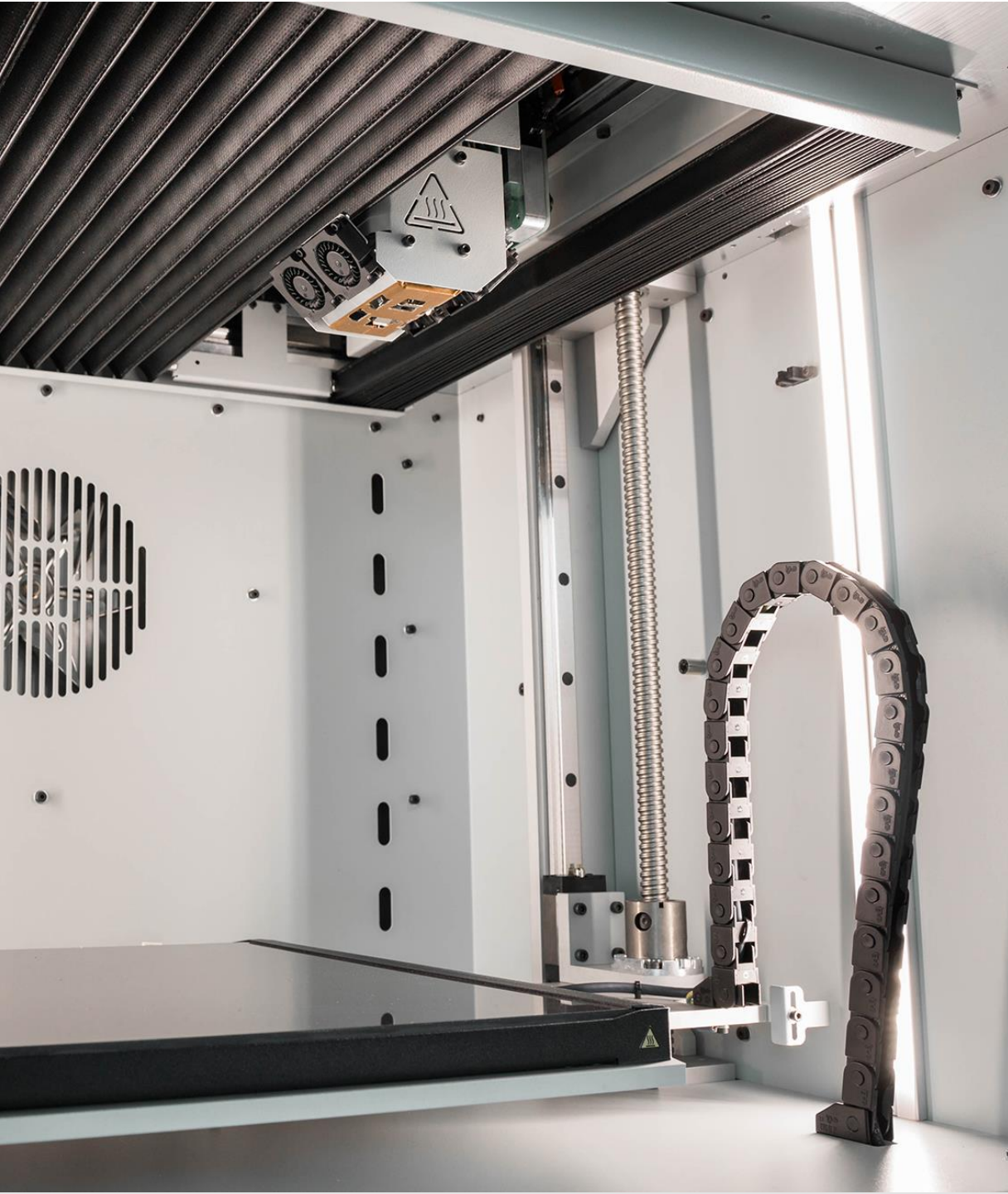
Module **HTmax**

Max. temp.:
500°C

Nozzle diameter:
0.4mm

Model material:
PEEK

Support materials:
dedicated breakaway
soluble (ESM-10)



3DGence INDUSTRY F340 Autocalibration

3D printer is equipped with tensometric system that automatically calibrates the machine.

All modules are equipped with internal memory where calibration values are saved.

New calibration values are loaded automatically upon module change.



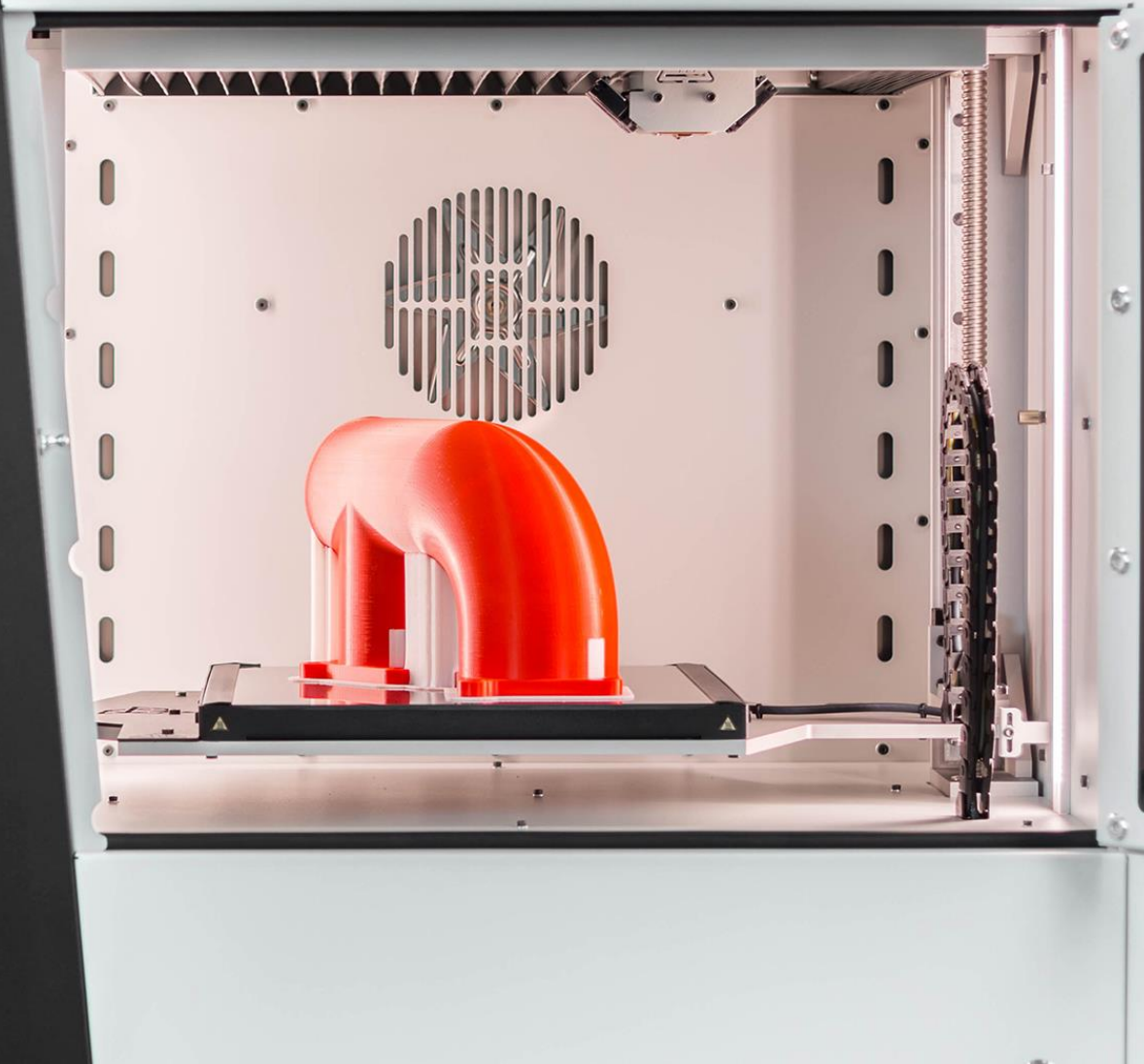
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3DGence INDUSTRY F340 Heated printing chamber

The actively heated chamber makes printing with ABS, PEEK and other technical materials an easy task. It also ensures perfect print quality and durability of the models.

Air filter used in INDUSTRY F340 makes it possible to work in the production hall or office. This solution prevents odours and ensures user's safety.



3DGence INDUSTRY F340 TÜV-certified 3D printer

3DGence INDUSTRY F340 has been certified by TÜV Rheinland in 2018.

The certification process for this 3D printer confirms:

- the repeatability and quality of production,
- safety of the product.

3DGence is the only 3D printer manufacturer certified by this organisation in Poland.



Safety
Regular
Production
Surveillance



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3DGence INDUSTRY F340

Smart Material Manager

Optimal working conditions guaranteed by SMM - intelligent filament and printing environment control system.

How does it work?

The NFC scanner collects data connected with the filament used during the printing process – optimal working conditions and maximum speed. All the information concerning the weight, type, colour and percentage quantity of remaining filament loaded on a particular hotend.

SMM system is built of:

- NFC reader recognizing loaded material,
- material weight control system,
- automatic material loading system,
- flow control system.



3DGence INDUSTRY F340

Heated material chamber

The **active chamber heating system** enables to maintain the optimal printing environment with reduced humidity for the loaded materials regardless of the operation's condition.

The **material weight control system** indicating the weight of the loaded material on each of the reels measures its accuracy up to 5 grams. The data is compared with the information about the required amount of filament needed to complete the printing process.

In the case of undersupplying the system informs the user about the lack of the material before the start of the printing process.

The **flow control system** located in the extruders is designed to maintain constant control of print precision during the process. When the margin of error is exceeded, 3DGence INDUSTRY F340 will automatically stop printing.





3DGence INDUSTRY F340 is capable of **PEEK 3D Printing**

PEEK is one of the world's highest performing engineering thermoplastics with exceptional chemical resistance and mechanical properties

Main applications of PEEK include:

- metal-replacement,
- functional prototyping,
- end-use parts,
- medical implants.

Support materials for PEEK and ABS

Features:

removable in the water solution

support material for PEEK and ABS

easy removal with no risk of model damage



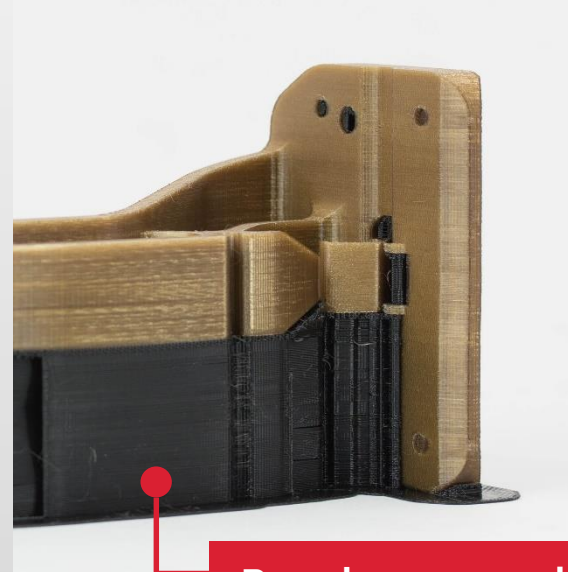
Soluble – ESM 10

Application:

Printing out the models with very complex geometries in which mechanical removal of supports is difficult or impossible.

Accessories needed:

- Support Dissolving Systems



Breakaway – dedicated

Accessories needed:

- Pliers
- Scrapers
- Other tools required for mechanical separation

Features:

mechanically removed

cost-effective, allows expenditure reduction on technical materials like PEEK and ABS

Application:

Printing out the models with less advanced geometry.

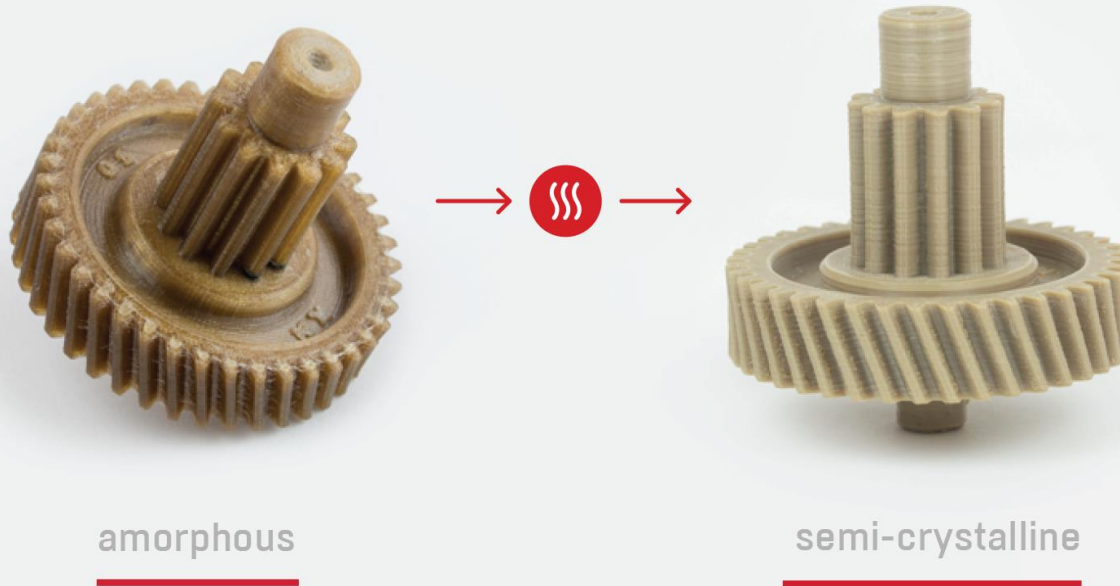
New procedure developed by 3DGence

PEEK annealing



PEEK annealing allows changing the material phase from amorphous to semi-crystalline. Controlled annealing rate changes the structure of the material.

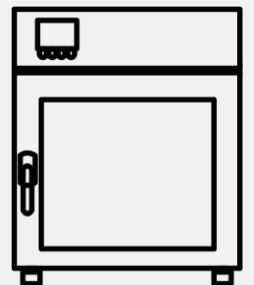
The aim of this process is to obtain 3D prints characterized by increased mechanical strength.



Drying Oven SLW 53*

The procedure of PEEK annealing is carried out in a dedicated laboratory dryer, while the 3D model itself is covered with quartz sand in order to maintain its dimensional and shape accuracy.

Internal dims [mm]	
Width	400 mm
Height	390 mm
Depth	360 mm
Chamber capacity	56 l



*additional accesories

Support Dissolving System (SDS) Circulation tank



3DGence Support Dissolving System

designed to dissolve the support materials like ESM-10

dedicated for chemical solvents, durable and easy to operate

automated rinsing process for efficient supports dissolving

connected to the water system and equipped with water pump for easy cleaning



Technical specifications

Power supply	220 – 240 V AC
Power rating	10 amp
Control circuits	24v DC
Tank capacity	55,2 l

Dimensions of the internal basket

Height	360 mm
Length	360 mm
Depth	280 mm

3DGence INDUSTRY F340 STAND



STAND

facilitates the use of
3DGence INDUSTRY F340

allows to organize
necessary accessories

Stand is available in **two versions**:

BASIC

includes dedicated
filament storage
compartment



POWER

includes a slot for the
UPS

includes a built-in
accessory drawer



3DGence Slicer

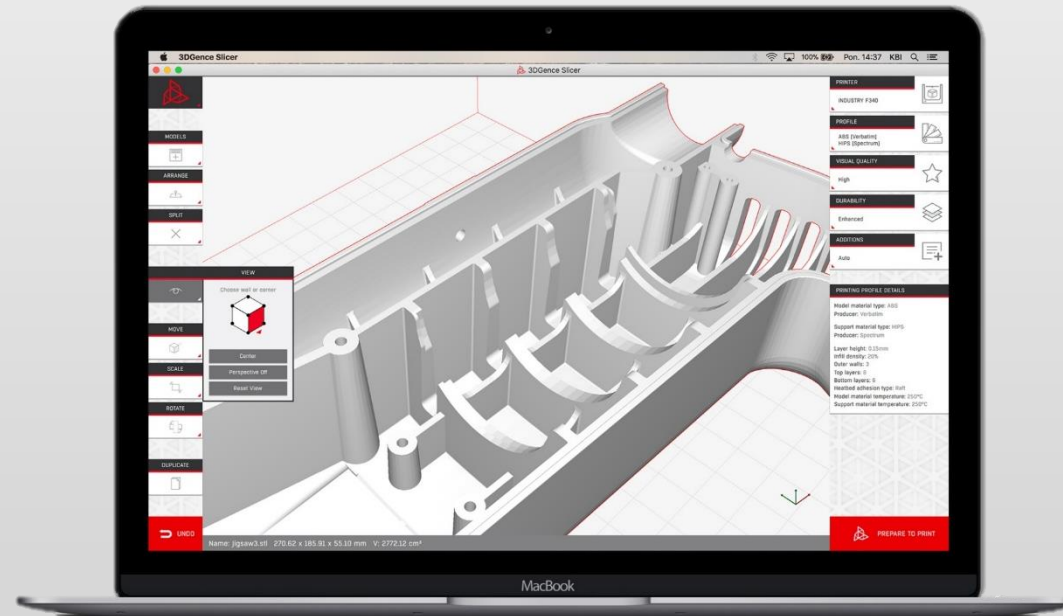
Main features

dedicated tool for all of the
3DGence 3D printers

simplifies the use of
3DGence printers

designed for preparing
G-codes, based on CAD files
in .STL format

advanced settings, for
experienced users



includes premade settings
for particular material

automatic and free update of
the latest material profiles

support Windows and
macOS systems

an intuitive selection system
for materials and settings

3DGence INDUSTRY F340

Testimonials



” *3D Printing Industry, United Kingdom:*

3DGence INDUSTRY F340 is carefully designed, mechanically and electronically an exceptionally well built device.

It is one of the **best industrial 3D printer** on the market at the moment. Potential buyers should be assured that the 3DGence INDUSTRY F340 delivers on the manufacturer's claims.



” *3Dnatives, France:*

3DGence INDUSTRY F340 is one of the best FDM 3D printer capable of 3D printing with PEEK.

It is an evolution of the first industrial machine of the Polish company 3DGence.





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