



product catalogue



Contents

10

Industrial 3D printers

Make your work easier with advanced solutions provided within the INDUSTRY line 3D printers.



40

3D services

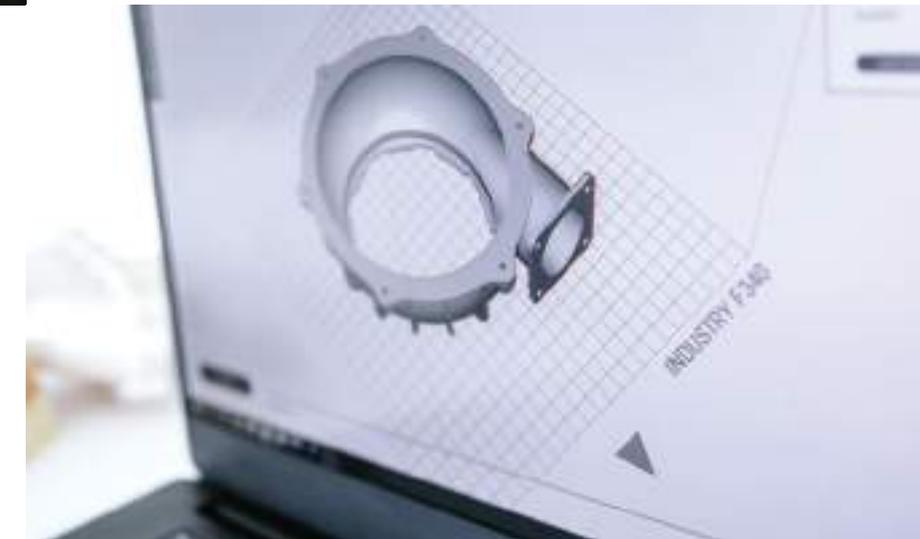
Best technologies to provide the most efficient 3D printing services you need.



30

Professional accessories

Expand your 3D printing capabilities with genuine 3DGence accessories.



36

Software dedicated to 3DGence printers

About 3DGence	04
Industrial 3D printers	10
INDUSTRY F421 & F350	12
Modules for INDUSTRY F421 & F350	16
INDUSTRY F340	22
Modules for INDUSTRY F340	26
Accessories – industrial line	30
Software	36
SLICER 4.0	36
CLOUD	37
Support	38
3D printing services	40
Contact	42



38

Support

The team determined to provide you with the best solutions.

About 3DGence

Work with the
world leader
in the industrial
3D printing
market

Engineer your change and inspire the future of the industry.

Do it now. Choose technologically best industrial 3D printers on the market.

Since 2014 we are providing you with 3D printing solutions that will boost your production performance and prototyping capabilities. With headquarters both in North America and Europe, we are fully covering the needs of global customers.

3DGence delivers advanced 3D printing technologies based on a high level of industry expertise, to influence the development of companies from various industry segments and meet their technological expectations.

Improve your company performance with additive manufacturing and benefit from our knowledge and experience.

INDUSTRIAL 3D PRINTERS

- create prototypes at lower cost
- speed up the production process
- make durable final parts

PROFESSIONAL 3D SERVICES

- post-processing of 3D models
- 3D modeling and scanning
- 3D printing from low-volume production

EXPERT CONSULTING

- make the most of our 3D printing engineers knowledge
- implement 3D printing technology to your business with the help of our engineers
- benefit from our quick and professional support, always ready to help in case of any doubt

ADVANCED PRINTING MATERIALS

- 3D print from wide range of technical filaments (PEEK, ABS) for various applications
- use soluble support materials without manual removal
- print with high-temperature resistant materials up to 140°C (PC, PEEK)



Rapid Prototyping



Speed to market is speed to value.

Optimize your product development cycle.



From first concept to final working models, optimize the product development cycle

PROTOTYPE

- Create concept prototypes faster with a wide range of materials
- Verify project assumptions quickly and efficiently

Prototyping enables the verification of project assumptions and design requirements. Compared to conventional prototyping and tooling processes, 3D printing gives full control over the process of creating prototypes at controlled cost and optimized timeline. 3D printing allows for rapid testing of functionality and durability of concepts before requiring tooling, and in some cases, eliminating the need for tooling and long wait times to implement the concepts.

JIGS & FIXTURES

- Print, customize and revise jigs, fixtures and tooling on-demand
- Reduce the cost of production tooling in both time and materials

3D printing allows creating industrial tools, mountings, jigs and fixtures according to dimensional, material and color requirements. Our printers enable the production of customized elements for production equipment and assembly processes, reducing the production time and create a final product tailored to specification and customization.

PRODUCTION LINE ASSEMBLY

- Reduce and streamline production assembly
- Expand customized capabilities in assembly

3D printing allows for on-demand enhancement of production processes, including end-of-line assembly

Support the shift and implementation of automated production lines with efficiencies and less manual processes of 3D printed end-effectors with mechanical properties that work in the factory. Avoid traditional machining methods that can become a bottleneck in production assembly.

FINAL PROTOTYPES

- Print final design working prototypes
- Proof of concept before high-spend tooling

Proof of concept with final working models can often be time consuming with many revisions. 3D Printing significantly reduces the time-to-market for products with accelerated cycle times for proof of concept models.

Have final working models in-hand and make necessary refinements in a matter of hours and days, instead of weeks and months.

Rapid Production

Shift from Rapid
Prototyping
to Rapid Production
to take your
manufacturing
to the next level



Ultra-fast, reliable technology and the strongest materials for end use part runs

PROOF OF CONCEPT

- Refine and implement with materials suitable for live production environments
- Work with advanced polymers for metal replacement

Flexibility, speed, affordability and multiple test pieces printed at once with 3DGence industrial printing solutions.

Enhance pre-production processes with test models in full specification for future light production items and replacement parts.

Fine-tune, test and verify before shifting into production.

KICKSTART PRODUCTION

- The link between pre-production and live production
- Initial runs to ensure production ready processes

3DGence Industrial 3D Printers provide capacity and capability to have limited runs while waiting for larger scale manufacturing to start.

Additional tooling and preparation is often required before full-scale production is ready, adding lead time to the product introduction.

Leverage 3D technology to kick-start production.

LOW VOLUME PRODUCTION & RAPID CUSTOMIZATION

- Reduce the projects' lead time
- Simplify and speed production line assembly

3D printing provides the capability to produce quickly in lower volumes with significant savings in lead-time and cost.

Beyond speeding up the prototype process, 3D printing enables acceleration of final project verification as well as making jigs to test final parts.

Test parts can be used in industrial robot programming processes, which significantly shortens assembly time of new production

END CYCLE PRODUCTION & MAINTENANCE/REPAIR

- Product low-volume parts for end-of-cycle products
- Product low-volume replacement parts

At the end of production life, it can be costly to produce and store a part.

Eliminate the need for minimum order quantities and inventory on-hand – and shift to virtual inventory on-demand with 3D Printing.

Support maintenance and repair efforts with small volume, hard to source parts in real-time.



INDUSTRIAL 3D PRINTERS

Advanced, total solutions provided by the INDUSTRY 3D Printers to increase innovation, productivity, efficiency, and cost optimization.

ENGINEERED ADVANCED PRINT PROFILES BASE

Continuous development and addition of advanced materials and printing profiles are available in the 3DGence SLICER 4.0. Dedicated profiles are optimized to ensure the best print quality and dimensional accuracy of prints.

EASE OF USE – SMART MATERIAL MANAGER

The solution that gives you comprehensive information regarding the materials used during the printing process. It automates many steps of the printer operations.

PRICE TO PRINT VOLUME RATIO

Benefit from the best price to volume ratio among the industrial-grade 3D printers with 3DGence INDUSTRY F421, INDUSTRY F350 and INDUSTRY F340.

DEDICATED INDUSTRIAL GRADE SOFTWARE

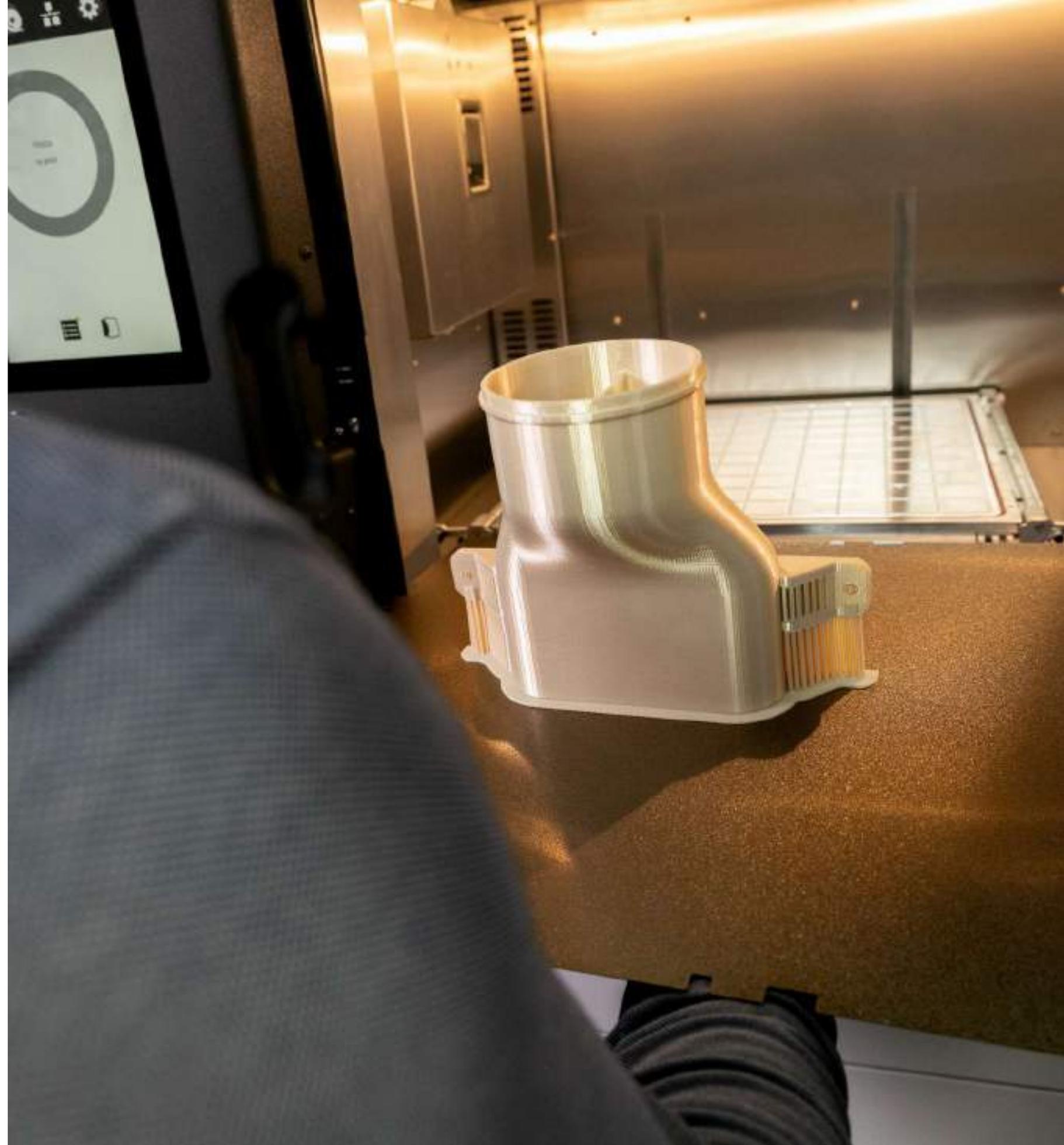
Prepare models for 3D printing quickly with 3DGence SLICER 4.0. Manage your prints and user access levels, check printing status, and schedule maintenance remotely via 3DGence CLOUD.

INTERCHANGEABLE PRINTING MODULES

3D print from the widest range of filaments, from PLA to PEEK, on a single machine. Swapping the printing modules is efficient, fast, and simple.

SAFE WORKING ENVIRONMENT

The advanced air filtration system, signal tower, and emergency power supply – combined auxiliary devices that provide both safety for the user and quality for the end-product.



INDUSTRY

F421 & F350



**High-performance 3D printers
for demanding industrial applications**

PRODUCTIVITY

achieve the best results with unmatched
print speed - up to 400 mm/s

HEATED PRINTING CHAMBER

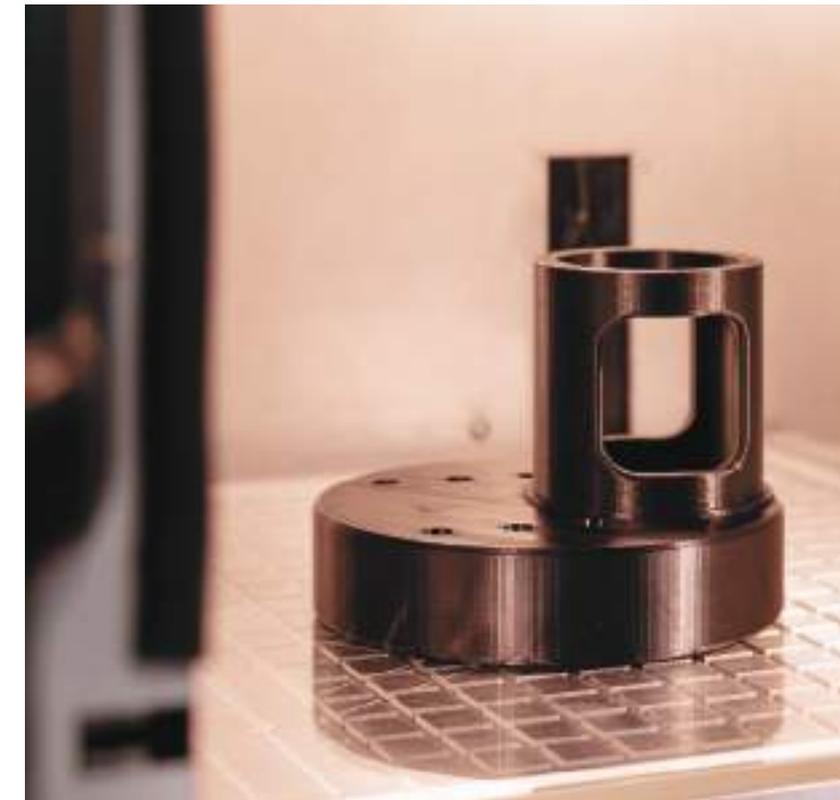
actively heated build chamber for
optimum printing conditions

COST-EFFICIENCY

best in class total cost of ownership

VERSATILITY

print high-performance and engineering-
grade materials on one machine



The powerful and full-fledged manufacturing system for:

F421 & F350

PRODUCTION

FAST | SAFE | RELIABLE | COST-EFFECTIVE

Produce parts faster and more cost-effective than before with advanced materials. Easily produce end-parts or spare parts that can replace worn components or low volume parts.

Rapid production of durable and accurate end-parts.

Batch printing with large build volume.

Cost control by high print speed and minimal downtime.

Maximum material performance ensured by optimal processing conditions, engineered profiles, and industrial software.



PROTOTYPING

VERSATILE | ACCURATE | SPACIOUS | CONNECTED

Accelerate your product development and shorten the cycle to market by replacing conventional prototyping processes with 3D printing. The use of a 3D printer allows for a significantly reduced design to prototype time frame.

Higher performance, durable parts from highest-performance materials for proof of concept.

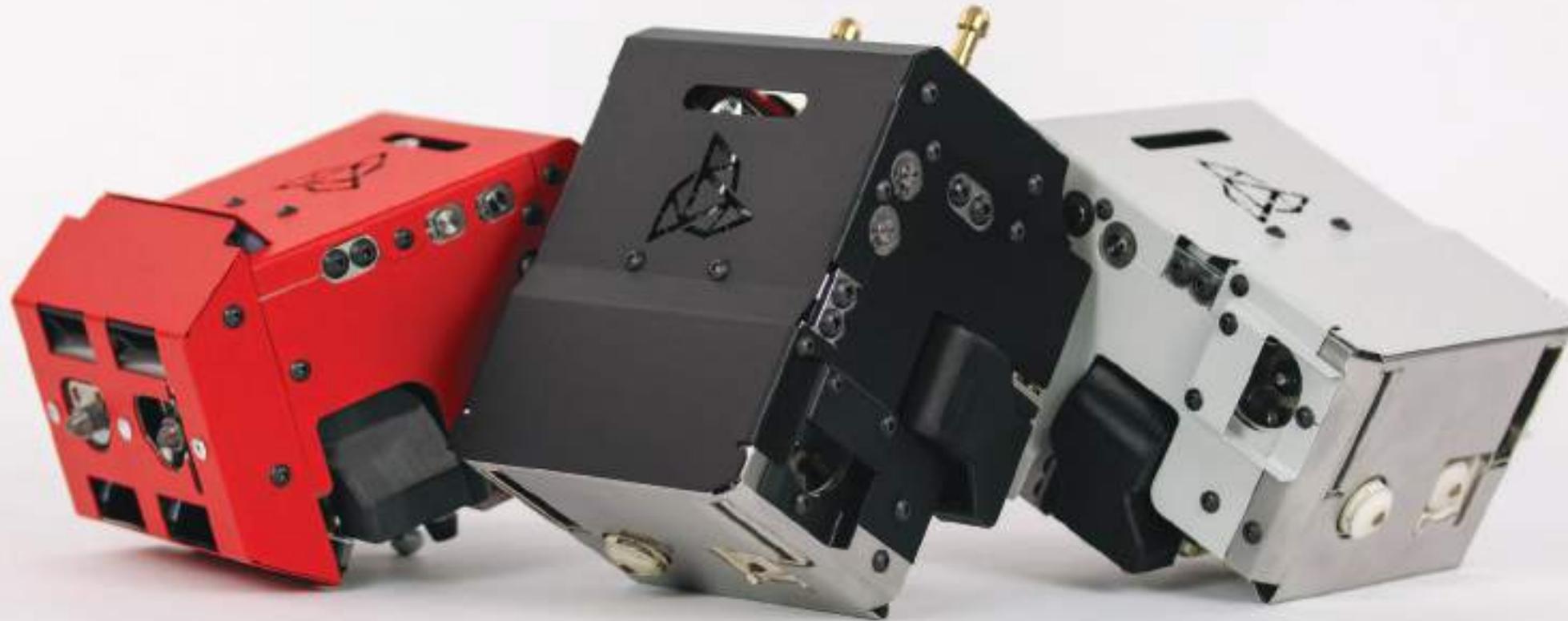
Complex geometries and higher resolution with the use of soluble supports and post-processing technologies.

Controlled environment in the high-temperature chamber.

Widest range of materials with interchangeable modules.



Flexibility and performance



Job-specific printing
modules with our
predefined printing
profiles

M280

TEMPERATURE:
up to 280°C

NOZZLE DIAMETER:
0,5 mm/0,5 mm

MODEL MATERIAL:
F421: PLA, ABS, ABS-ESD, ASA, PA6,
PA-CF
F350: PLA, ABS, ASA, PA6, PA-CF

SUPPORT MATERIAL:
ESM-10* (soluble), breakaway



M360

TEMPERATURE:
up to 360°C

NOZZLE DIAMETER:
0,4 mm/0,4 mm

MODEL MATERIAL:
F421: LEXAN, PC, PC-ABS, PEKK-CF,
ULTEM 9085
F350: PC

SUPPORT MATERIAL:
ESM-10* (soluble)



M500

TEMPERATURE:
up to 500°C

NOZZLE DIAMETER:
0,4 mm/0,4 mm

MODEL MATERIAL:
F421: PEEK, PEKK, VICTREX AM™ 200
F350: PEEK

SUPPORT MATERIAL:
ESM-10* (soluble)



*check required accessories

F421 SPECIFICATION

Build volume

380 × 380 × 420 mm (60 648 cm³)

Printing system

Dual extruder equipped with purging station

Filament diameter

1.75 mm

Model materials

PLA, ABS, ABS-ESD, ASA, PA6, PA-CF, LEXAN, PC, PC-ABS, PEKK-CF, ULTEM 9085, PEEK, PEKK, VICTREX AM™ 200 – for printing from ULTEM you need air preparation unit, PEI heatbed sheet, compressor – check page 34

Support materials

Breakaway support material, soluble support material ESM-10 – for removing the ESM-10 you need solvent and Support dissolving system – check page 30

Material chamber

4 bays with automatic filament change

Nozzle temperature (max.)

500°C

Buildplate temperature (max.)

180°C

Chamber temperature (max.)

180°C (active heating)

Filament chamber temperature (max.)

50°C

Software

3DGence SLICER 4.0, 3DGence CLOUD

Additional accessories

Advanced filtration unit, UPS – emergency power supply, signal tower



F350

SPECIFICATION

Build volume

340 × 340 × 350 mm (40 460 cm³)

Printing system

Dual extruder equipped with purging station

Filament diameter

1.75 mm

Model materials

PLA, ABS, ASA, PA6, PA-CF, PC, PEEK

Support materials

Breakaway support material, soluble support material ESM-10 – for removing the ESM-10 you need solvent and Support Dissolving System

Material chamber

2 bays (model material, support material)

Nozzle temperature (max.)

500°C

Buildplate temperature (max.)

160°C

Chamber temperature (max.)

130°C (active heating)

Filament chamber temperature (max.)

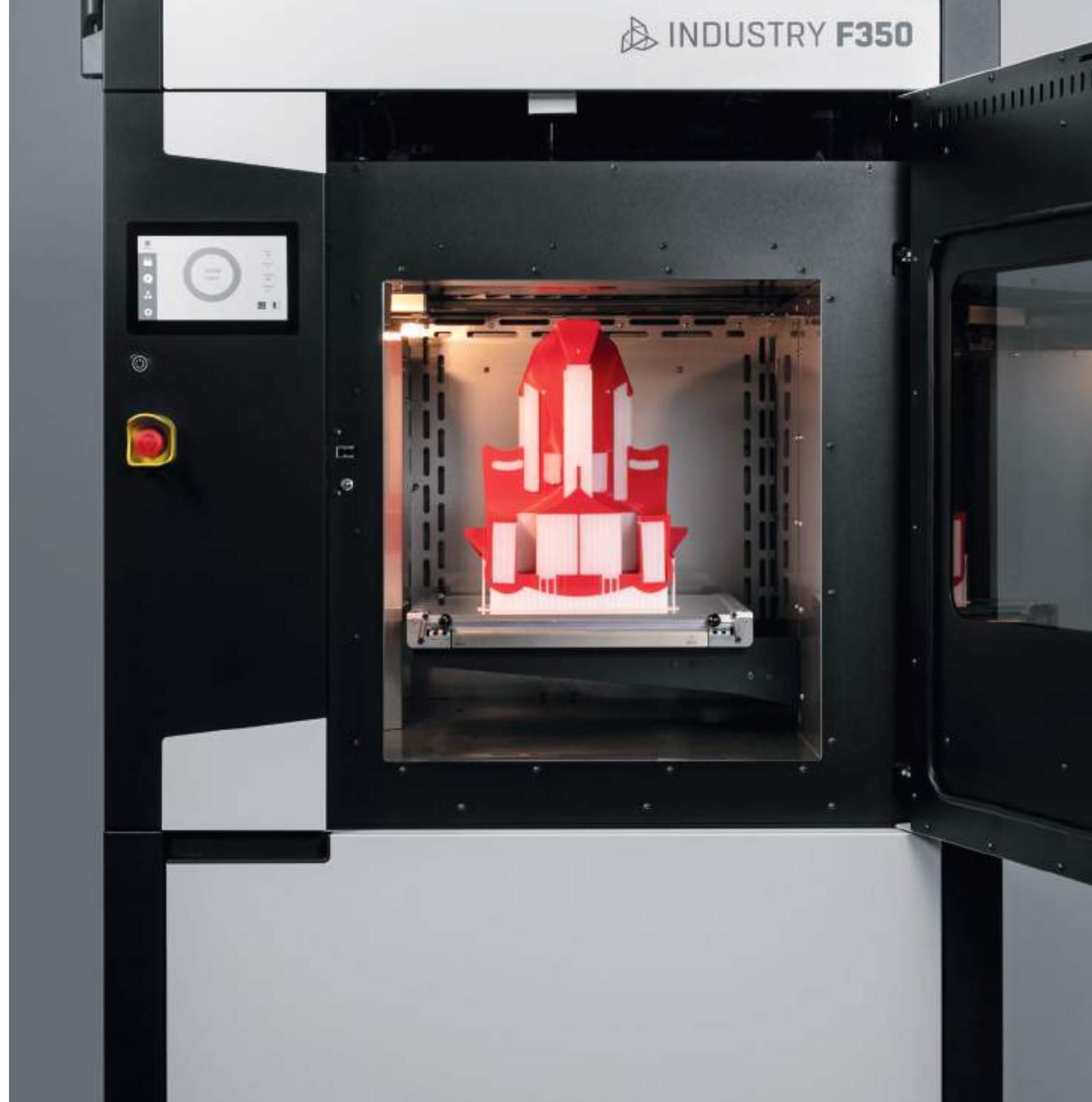
50°C

Software

3DGence SLICER 4.0, 3DGence CLOUD

Additional accessories

Advanced filtration unit, UPS – emergency power supply, signal tower



INDUSTRY F340

The most versatile
3D printer for
industrial use



**ACTIVELY HEATED
CHAMBER**
up to 85°C

**INTERCHANGEABLE
MODULES**
for various applications

LARGE BUILD VOLUME
260 × 300 × 340 mm

**WIDE RANGE OF
PROFESSIONAL MATERIALS**
PEEK, PEKK, PC, reinforced
materials, soluble supports





Flexibility, performance and best-in-class cost of ownership

TOOLING

SAFE | RELIABLE | COST-EFFECTIVE

Fast preparation of tools & jigs that enable you to run production lines quicker and more effectively. Easy spare parts production, and lead times shorter than ever before.

Complex tools & jigs for production line assembly.

Rapid customization with lower manufacturing costs.

Stable and uninterrupted work for higher performance productivity - with TUV Certification in Safety and Production.



F340

PROTOTYPING

VERSATILE | ACCURATE | CONTROLLED

Create functional prototypes for project validation. Avoid costly retooling and benefit from fast and cost-effective prototyping using INDUSTRY F340.

Prototype with various materials for validation of desired properties.

High dimensional accuracy and complex geometries with the use of soluble support materials.

High-quality and durable parts with stable temperatures and a controlled printing environment.



Versatility and best printing results

with job-specific printing
modules and developed
printing profiles

*check required accessories

PRO

TEMPERATURE:
up to 265°C

NOZZLE DIAMETER:
0,4 mm/0,4 mm

MODEL MATERIAL:
ABS, PLA, PA, ASA, PP, TPU

SUPPORT MATERIAL:
ESM-10* (soluble), breakaway,
BVOH (water-soluble)

HF

TEMPERATURE:
up to 265°C

NOZZLE DIAMETER:
0,6 mm/0,6 mm

MODEL MATERIAL:
ABS, ASA, PA-CF, PA-GF, PA, PP

SUPPORT MATERIAL:
ESM-10* (soluble), breakaway

HT

TEMPERATURE:
up to 340°C

NOZZLE DIAMETER:
0,4 mm/0,4 mm

MODEL MATERIAL:
PC, PC-ABS, PC-ESD, PC-CF

SUPPORT MATERIAL:
ESM-10* (soluble), breakaway

HT max

TEMPERATURE:
up to 500°C

NOZZLE DIAMETER:
0,4 mm/0,4 mm

MODEL MATERIAL:
PEEK, PEEK-CF, PEKK

SUPPORT MATERIAL:
ESM-10* (soluble)





F340 SPECIFICATION

Build volume

260 × 300 × 340 mm (26 520 cm³)

Printing system

Dual extruder

Filament diameter

1.75 mm

Model materials

ABS, PLA, PA, ASA, PP, TPU, PA-CF, PA-GF, PC, PC-ABS, PC-ESD, PC-CF, PEEK, PEKK

Support materials

Water-soluble support material BVOH, breakaway, soluble support material ESM-10
– for removing the ESM-10 you need solvent and Support dissolving system
– check page 30

Material chamber

2 bays for model and support material

Nozzle temperature (max.)

500°C

Buildplate temperature (max.)

160°C

Chamber temperature (max.)

85°C (active heating)

Filament chamber temperature (max.)

70°C

Software

3DGence SLICER 4.0

Additional accessories

UPS – emergency power supply, stand Basic, stand Power

Accessories

Expand your 3D printing capabilities with genuine 3DGence accessories.



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 a water pump for easy cleaning.

Power supply 220–240 V AC	Width 360 mm	Tank capacity 55,2 l
Power rating 10A	Height 360 mm	
Control circuits 24V DC	Depth 280 mm	



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.

Width 400 mm	Chamber capacity 56 l
Height 390 mm	
Depth 360 mm	



Stand F340

Facilitates the use of 3DGence INDUSTRY F340 allows the user to organize necessary accessories.

BASIC:
includes a dedicated filament storage compartment

POWER:
includes a UPS device includes a built-in accessory drawer

Accessories



Emergency power supply for F421

UPS unit for INDUSTRY F421 supports all printer functions during short power outages. UPS is integrated with the system at a deeper level, monitoring UPS battery life. In case the power loss is longer, the printer will switch to idle support mode. Printing will be paused, and only key thermal control and logic functionalities will be maintained.

- unaffected printer performance during short power outages
- longer battery life in case of longer power issues



Emergency power supply for F350

UPS unit for INDUSTRY F350 supports all printer functions during short power outages. The backup power supply takes care of printing process safety which is crucial especially while working with engineering and high-performance materials.



Filtration unit

F421 and F350 filters offer unprecedented filtering efficiency among FFF AM platforms. This advanced filtration unit, is capable of filtering:

- macro dust
- nano dust (VOC, UFP)
- solvent vapor
- noxious gases
- foreign particles

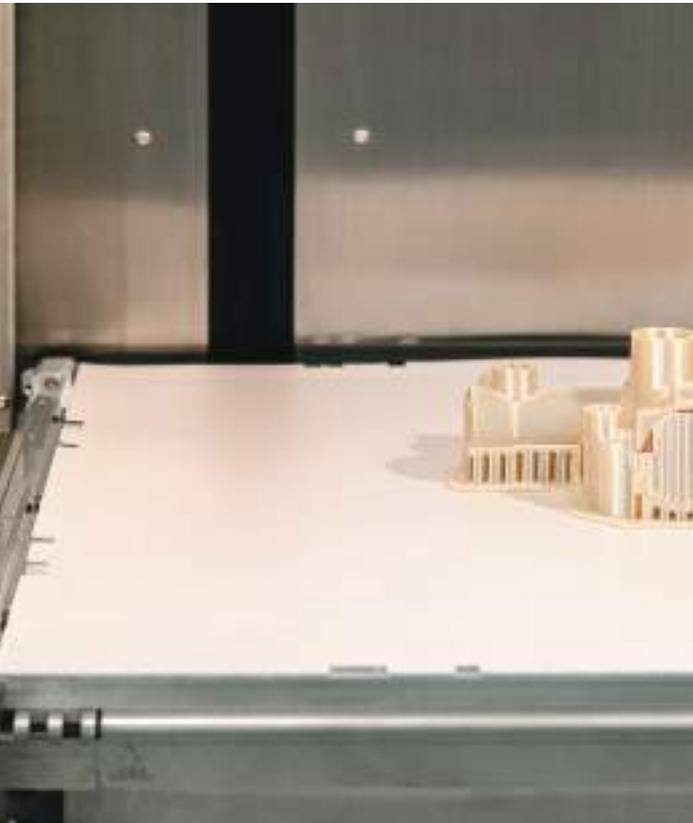
The filtration unit sets differ between F421 and F350. Please make sure you order the correct set.



Signal tower

Indicates the status of the print. The signal tower makes the machine clearly visible at the production site.

Accessories



Various heatedbed sheets

Mounted by vacuum, makes 3D printing from various materials, such as PEI and PC, possible.



Compressor

Needed to mount the heatedbed sheet.



Air preparation unit

Is used to clean the compressed air mainly from solid particles, oil condensate particles, water.



Nozzle tip set

Nozzle tip sets for F421 and F350's printing modules.

Software

SLICER 4.0

Industrial 3D model slicing software dedicated to 3DGence printers to prepare your files seamlessly for 3D printing.

Engineered Profiles

Wide choice of accurate and fine-tuned material profiles with continuous, automatic updates. Custom profile options are available and user-friendly.

Large Model Split Options

SLICER 4.0 provides the capability to split large models that exceed the build area. Two methods are available for splitting models: simple and advanced, where the tongue and grooves are precisely created on the parts. This feature enables seamless merging of the parts post-printing. The advanced splitting option is unique and available only in SLICER 4.0.

Print Profile Modification Options

For intermediate users, there are available options to modify the print profiles. Adjustments of parameters can be made after choosing the material and profile.

Online Options

3D printing via the local web or the Internet is available while using the INDUSTRY F421, INDUSTRY F350 and 3DGence CLOUD. The web printing will be possible only using the dedicated .3dg file format, prepared by 3DGence SLICER 4.0.



CLOUD

Dedicated cloud-based functionality for industrial printers developed to meet Industry 4.0 requirements.

Remote Access and Control

The user can start, cancel or queue the prints. The user has full control of the printing process and job order, even on multiple printers, as well as real-time monitoring of the machine and print status.

Detailed Data

The software is able to aggregate and provide machine and material usage statistics. All user data transferred via CLOUD is secure thanks to asymmetric encryption.

User Access Permissions

The access for the particular options in the CLOUD can be restricted to predefined user groups. The administrator can differentiate the user groups in order to follow company security and permission protocols.

Service Access Module

3DGence support team may use the CLOUD software to access, diagnose and provide help remotely, in real-time.

Live Camera Feed

Get a remote preview feed of what is printing, or has been printed, without the need of being near the printer.

Support

- Active technical support for 3DGence products, materials and software
- Application support during the printer evaluation process, as well as after-sales support for print optimization
- Custom solutions and development
- Service and Maintenance
- Back-up printing support available under 3DGence CARE plans



In order to respond quickly to any technical issues that may come up during the 3D printing process, our Service and Support team is always ready to help

The Service and Support team will collect your warranty claim or any other notification regarding service scheduling or maintenance issues.

3DGence aims to find rapid and complete solutions to user questions, requests, and challenges. Help is only a phone call away, and 3DGence CLOUD provides additional options for quick, remote issue diagnosis and getting you back on track to printing.

CONTACT

+48 32 438 98 64
support@3dgence.com

www.3dgence.com/support

3D printing services



WHY 3D PRINTING?

- Speeds up the production process
- Speeds up the production of jigs&fixtures
- Reduces the cost of tooling production
- Enables making of the final parts
- Allows to create functional designs

CONTACT

Europe:
+48 502 299 157
3dservices@3dgence.com
www.3dgence.com/3d-services

Americas:
+1.855.466.3813
Industrial3D@3dgence.com

Best technologies to provide the most efficient 3D printing services you need

3D SERVICES

3D printing services in FDM, SLS, SLA, DMLS, and PolyJet technology

Creating prototypes and final parts

Batch and single production

Advanced post-processing of 3D prints, both chemical and mechanical

Analysis, repair and editing the STL models

Design of CAD models based on customer documentation

Choice of optimal technical materials and process parameters

3D PRINTING TECHNOLOGIES

SLS

Laser sintering of polyamide powders guarantees the highest durability and repeatability of serially produced elements.

FDM

FDM makes it possible to create utility models, prototypes, marketing mock-ups or composite elements.

SLA

Hardening of the liquid resin with a laser beam guarantees good quality and fineness of the created details.

POLYJET

PolyJet is an ultra-precision photopolymer resin printing technology using soluble support material.

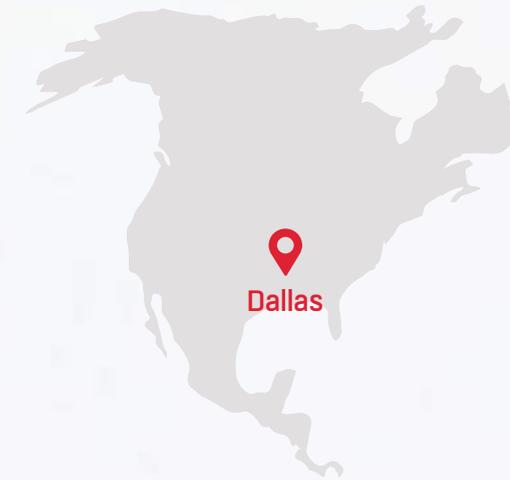
DMLS

DMLS is a 3D printing from powdered metal alloys that guarantees the highest quality.





Contact details



SALES DEPARTMENT

Our Product Sales and Application Engineer Teams are ready to answer your questions and support you through your evaluation and selection process.

SUPPORT DEPARTMENT

On-hand and ready to support with any technical or service related requests.

3D PRINTING SERVICES

Your Rapid Prototyping and Rapid Production Partner, from 3D Modeling, 3D Scanning, 3D Printing and Post-Processing in a variety of 3D Printing technologies.

AMERICAS

3DGence America Inc. Dallas, Texas, USA

+1.855.466.3813
inquiries@3dgence.com

EUROPE

3DGence sp. z o.o. Graniczna 66
44-178 Przyszowice, Poland

+48 32 438 98 63
cs@3dgence.com

Europe:
+48 32 438 98 63
cs@3dgence.com

Americas:
+1.855.466.3813
inquiries@3dgence.com

Europe:
+48 32 438 98 64
support@3dgence.com

Americas:
+1.855.466.3813
Industrial3D@3dgence.com

Europe:
+48 502 299 157
3dservices@3dgence.com

Americas:
Americas: +1.855.466.3813
Industrial3D@3dgence.com

www.3dgence.com

