## Get started

With large-format, sustainable 3D-printing.

Getting started with 3D printing can seem intimidating, but it doesn't have to be. With the right equipment, you can create your own 3D-printed objects in no time. It's essential to consider the size and resolution of the printer, as well as the materials it can print with when making your selection.

The Industry has a long tradition of developing XL 3D-printing solutions. Its most advanced platform is called MAGNUM, offering state-of-the-art functionality, sustainability at the core, and fast production turnaround times.
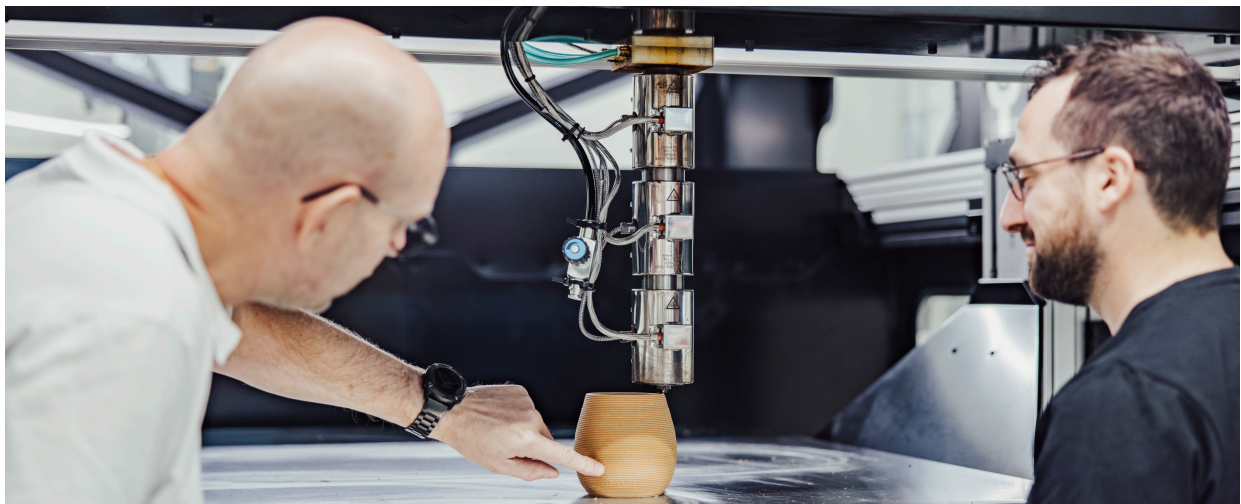
3D-manufacturing pipelines offer a broad spectrum of filaments and open-source materials to guarantee a minimal environmental footprint.

Advantages of XL printing platforms.

One of the key advantages of large-size 3D printing is the ability to create large, complex objects that would be difficult or impossible to manufacture using traditional methods. For example, large 3D printers can be used in the

construction industry to create prefabricated building components or even entire buildings. In the aerospace industry, large-size 3D printers enable the effective production of large, lightweight aircraft parts that can improve fuel efficiency.

Once you have a printer, you'll need to choose design software. Many different software options are available, ranging from free, open-source programs to more advanced, commercial options.

MAGNUM is a large-format AM powerhouse.

MAGNUM offers a complete printing platform, including effective cloud-based slicing software, various powerful accessories to extend your platform, and a seamless support program.

As large-format AM is a young, rapidly developing sector born from recent technical advances, there are also challenges associated with large-size 3D printing. Printers are typically much more expensive than standard 3D printers, and the materials and software required to operate them can also be costly.

To make MAGNUM available and feasible to broad markets, Industry has designed its powerful platform to come as close as possible to a turnkey system. The user operates advanced functionality from a very simple UX, requiring very little specialist knowledge.

MAGNUM also redefines turnaround times. The time required to create large objects has typically been one 0f the hurdles of getting into XL printing; with MAGNUM, it is now possible to generate a 2.16m3 print volume at 1-8 kg per hour. Traditional manufacturing methods can produce large objects on short notice, but MAGNUM is rapidly shortening the gap between the future of AM and the conventional platforms.

Preparation & Material selection.

Once you have a design, you'll need to prepare it for printing. This typically involves "slicing" the design, which is breaking it down into individual layers that the printer can understand. You'll also need to choose the appropriate

print settings, such as the layer height and infill, which will affect the final quality of the printed object.

Once your design is prepared, you can start the printing process. This typically involves loading the material into the printer and starting the print job.

MAGNUM accepts a broad spectrum of materials and open-source filaments. Granules or pellets have many advantages over filaments when printing large objects. The time required to print an object can vary, depending on the size and complexity of the object.
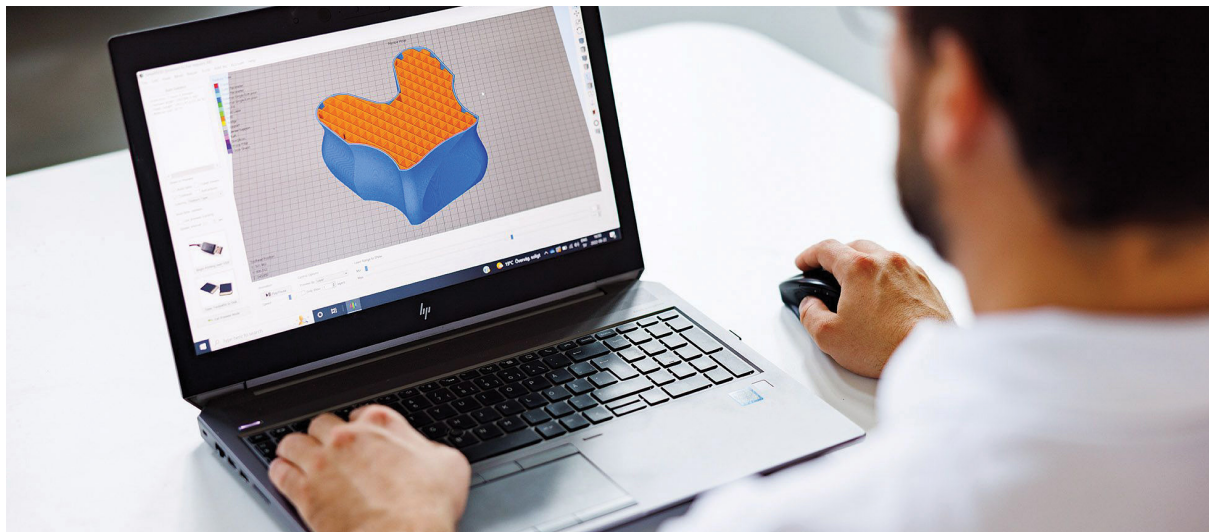
The MAGNUM system is a complete package of equipment, software, and services that is ready to use once installed.

Complete platform

In conclusion, getting started with 3D printing is not as complex as it seems, the first step is choosing a printer that fits your needs, then choosing a design software, preparing your design, and finally starting the printing process.

MAGNUM offers a complete platform with a cloud-based slicer, a wide range of nozzles, and a truly flexible open material system, including granules, pellets, and open-source materials.

Contact The Industry for a full demo or factory tour of the next-generation manufacturing pipeline.