



# **Wematter Gravity** SLS 3D printing system

**A complete additive manufacturing platform  
for product development directly at your office**

# Wematter Gravity

## SLS 3D printing system

**Wematter Gravity is a groundbreaking and easy-to-use SLS 3D printing platform for additive manufacturing.**

Imagine printing functional components for testing and end use directly at your office, with the push of a single button. Wematter's novel SLS 3D printing platform can increase your team's performance through the use of additive manufacturing.



# A complete SLS solution for in-house additive manufacturing

## Gravity

SLS 3D printer

- Stronger than conventional SLS technology

## Density

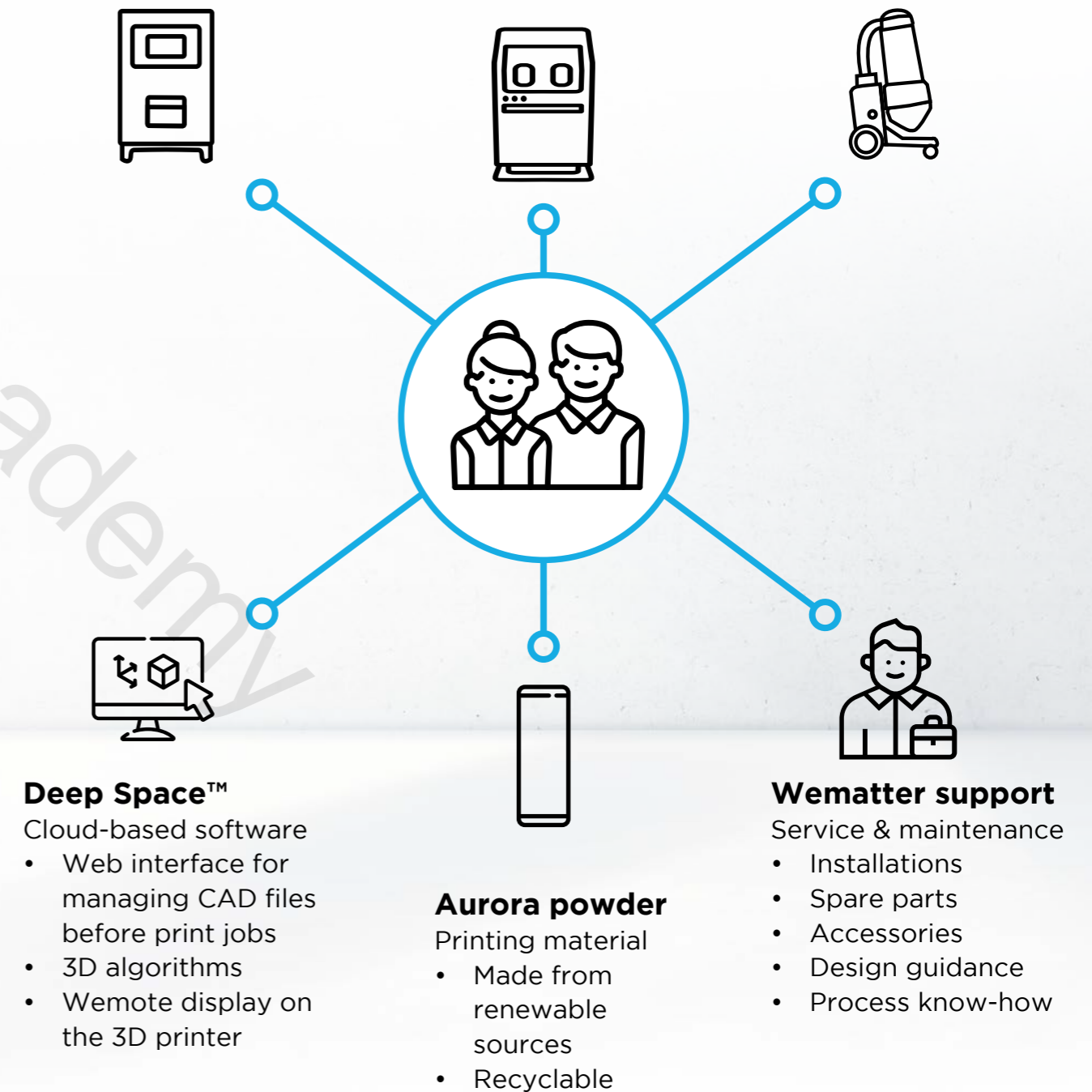
Water-jet cabinet

- Used for cleaning 3D-printed models by removing powder

## Inertia

Powder collector

- Vacuums excess powder after print job



# High-end SLS technology in a user-friendly format

- **Strong & Flexible**

SLS 3D-printed parts with mechanical properties as strong as those made by using injection molding but without the need of a support structure.

- **Just Plug & Play**

A CE-certified, easy to install ecosystem that is up and running less than an hour after delivery. You only need a standard power socket for your AM production.

- **Patented powder system**

Easily refill the Wematter Gravity with our patented powder packaging. The powder is recycled and stored inside Gravity for your next print.

- **No More Service Plans**

Cloud-connected, novel machine built for a sustainable long-term rental. Self-diagnosis and autonomous troubleshooting with Wematter's cloud software.



- **Work remotely**

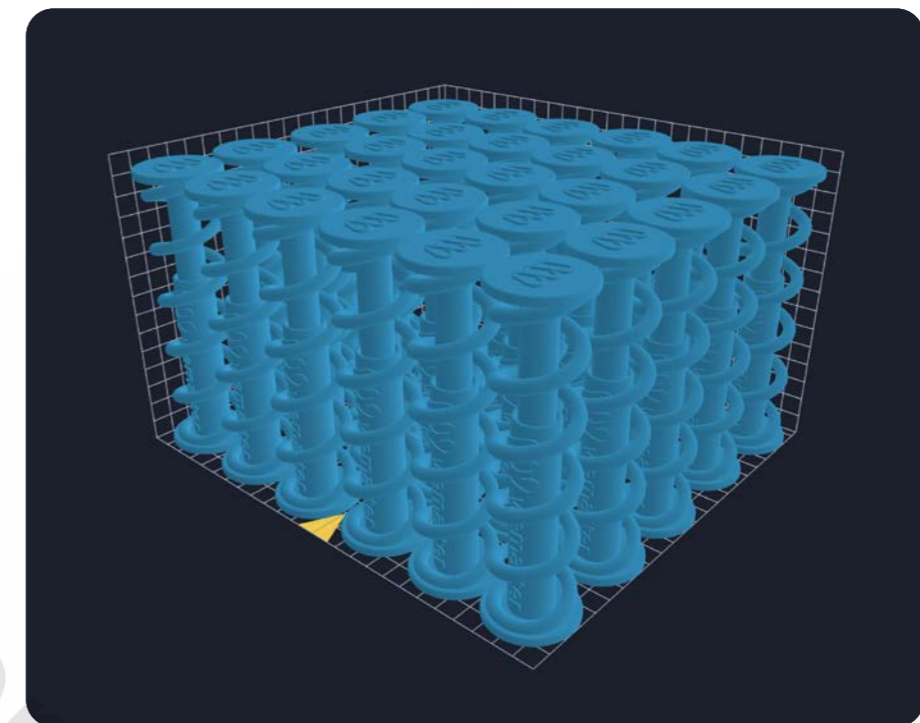
Start and monitor print jobs with your phone, laptop, or tablet with the help of Wematter's IoT platform.

- **Easy to use for everyone**

Self-instructing software and machine-guidance pair with ergonomic design for an effective printing process.

# SLS prints that can be produced & delivered in hours

**Reduce lead time and cost** for your 3D-printed parts by having your own SLS 3D printer at your office. Print functional prototypes, tools, and replacements in your own additive manufacturing system without extensive labour time, or powder-safe facilities. See how you can save time and money with Wematter in the example below.



<b>Pieces per print job</b>	30
<b>Material</b>	Aurora PA11
<b>Running time</b>	12 hours
<b>Typical service bureau cost per unit</b>	70 EUR
<b>Wematter 3D-printed cost per unit</b>	3,5 EUR
<b>Cost savings*</b>	95 %
<b>Time savings*</b>	85 %

\*compared to price and lead time for a service bureau print job

[Request your free quote at wematter3d.com](https://www.wematter3d.com)

# Deep Space™ Cloud service, always connected & ready

We have developed a complete software platform with no installation requirements that is always maintained and serviced through the cloud.

## No more desktop software

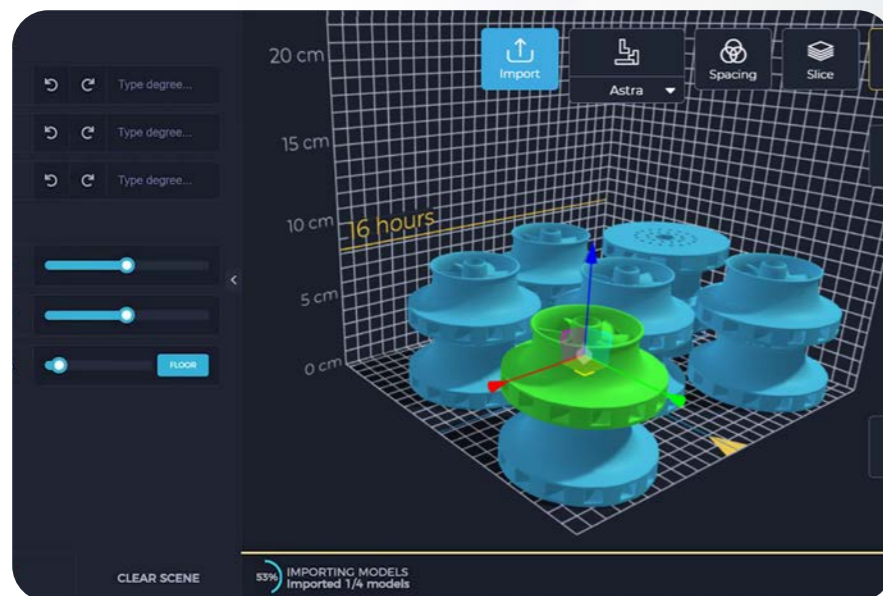
With Wematter you can control your printer from anywhere in the world, simply by logging in to our website portal. The Gravity Camera Stream allows you to monitor the entire process remotely.

## Slicing software in the cloud

No more long wait times for the slicing process, no more software updates, and no more discussions with IT-security gatekeepers.

## Packing made simple with Stacker™

Our proprietary smart algorithms handle multiple 3D objects at the same time and package them as closely as possible. This increases efficiency while simultaneously reducing the powder use.



24/7  
connected

100%  
updated

1000  
prints with  
1 button



# Print your models with our Aurora powder material

## Aurora SLS powder

Aurora is an incredibly strong SLS printing material. It is a material family developed for the future of additive manufacturing, providing excellent mechanical properties.



## Innovative powder container

Easily refill the Wematter Gravity with our patented powder packaging. Insert the package, turn it, and Gravity empties the powder container in just a few seconds.

See all material options at [wematter3d.com](https://wematter3d.com)

# Used Aurora powder can be recycled for new print jobs

Used powder is **mixed with 50% new powder** to ensure that all its mechanical properties are maintained.

The combined new and recycled material is transferred into **Aurora powder containers** and sent to a Gravity 3D printer.

**New material** is processed at Wematter's office, and quality tested in our lab

Received powder is filtered and **quality tested** before it is stored and processed for new prints.

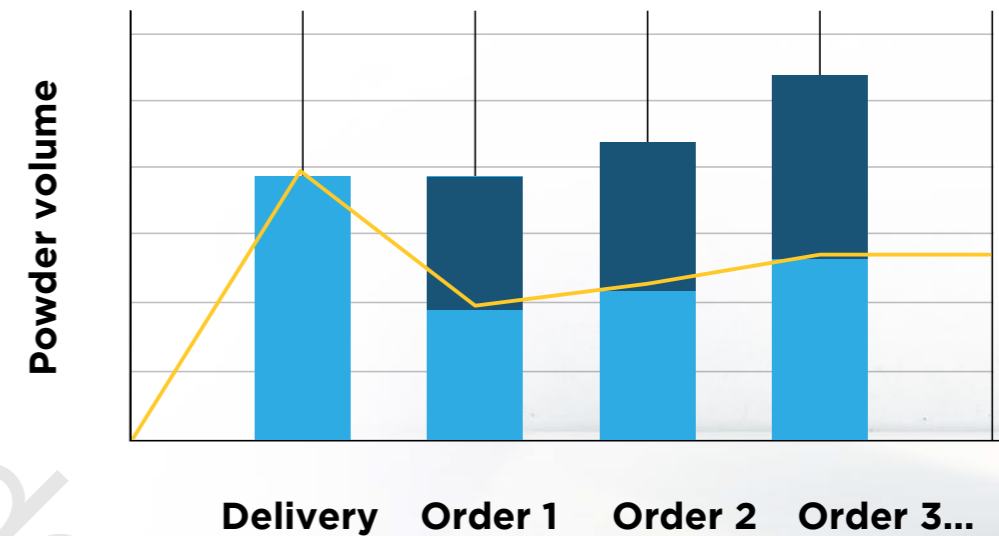
All of the **used powder** is sent to Wematter's office for recycling.

After each print job, the remaining **powder is collected** with an Inertia vacuum unit.

# You give us your used powder; we give you a discounted price

Material recycling at Wematter benefits the environment as well as your budget. After having sent back used powder, we mix it with new material, and you only pay for the amount of new material in your next order.

■ New powder ■ Used powder ■ Invoiced powder



# 100%



up to one hundred percent of the used powder can be recycled depending on the material and how many times it has been reused.

## Example prints for medical technology and healthcare



Wematter has replaced traditional orthopedic plaster with a bio-based 3D-printed orthosis that adopts the IMA (Innovative Materials Arena) framework. This innovation is the first of its kind in Sweden.



Wematter can create surgical models generated by modern software based on CT data. The prints are made of biodegradable plastic and have been used to prepare for real surgeries.



Wematter has printed several different prosthetic parts in different materials that can be used by patients in need of tailor-made sustainable prints.

Request 3D-printed samples at [www.wematter3d.com](http://www.wematter3d.com)

# Example prints for industrial and commercial applications

Moving parts for flying drone arm



**Left:** moving grappling claw  
**Below:** industrial components



**Above:** functional screws and springs **Below:** Medals for a sporting competition



Request 3D-printed samples at [wematter3d.com](http://wematter3d.com)

# Gravity SLS 3D-printer

## Technical data & specifications

<b>Build Volume</b>	up to 300 x 300 x300 mm
<b>Precision</b>	0,1 mm
<b>Footprint</b>	less than 1 square meter
<b>Machine Dimensions</b>	170 x 75 x 60 cm
<b>Print Technology</b>	Powder Bed Fusion > Selective Laser Sintering
<b>Speed</b>	12 mm per hour
<b>Weight</b>	310 kg
<b>Connections</b>	Power 230 V, 50-60 Hz / Ethernet 1 Gigabit

### 1. WeMote panel

13,3 inch touch screen with see-through camera window to view print jobs

### 2. Clean air

HEPA active coal filtering system ensuring clean and safe air quality.

### 3. Powder refill inlet

Patented leak-free automatic powder refill system.

### 4. Safe & sound

Robust double-shielded metal construction eliminating radiation and other hazards.

### 5. Slim & agile

No wider than a fridge, which makes Gravity easy to move around at your office.

### 6. Connections

Unique machine only requiring one power outlet and one ethernet connection.



## Why choose Wematter?

### Let's ask our customers!



"Finally: an SLS that we can have here, ourselves. We have been waiting a long time for this to come, and now Wematter is here."

**Fredrik Karlsson**, Systems Engineer



"Wematter has thought of the entire ecosystem, from uploading the files at your computer to washing the powder with their Density water blaster. It's a very flexible solution where you can monitor and start print jobs from your computer without even being at the Gravity machine."

**Glenn Torsténi**, Systems Engineer



"Wematter's prints were clearly above expectations, and it feels good that a Swedish company dares to invest in developing its own machines and succeeds this well. Good job!"

**Anders Lundgren**, Design Engineer

"Wematter's prints were above expectations; they are both within tolerance and have a surface finish so good that we don't have to post process, which is not a matter of course in additive manufacturing."

**Mats Åhlin**, Materials Specialist



# About **Wematter**

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Wematter manufactures advanced office-sized selective laser sintering 3D printers. The company exists to accelerate the move towards additive manufacturing by lowering barriers to entry. Its innovative 3D-printing SLS technology lets companies quickly prototype ideas, which increases overall design and engineering efficiency.

Wematter's Nordic roots suffuse the company's creative cycle. The team focuses on balancing user experience, ease of use, sustainability, and performance in all of its activities. The resulting quality and reliability are testaments to not just a client focus but to corporate responsibility in the face of a changing environment and industrial landscape.

## Do you need help **deciding?** Book a meeting with us today!

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