3D PRINTING SOFTWARE

―

Print better.

So that you can concentrate fully on the elaboration of your components: We develop the digital support that makes additive manufacturing easier for you – from data preparation to quality control.

WE ARE
CADS ADDITIVE

With CADS Additive software solutions, you spend less time on data preparation. So you have more time for what matters in your business. Developing your metal 3D printer parts is complex. We want you to be able to concentrate fully on it. With our software solutions, we ensure that your product designs produce exactly the results you envision. We have the right software for every manufacturing scenario – from integrative individual modules to complete solutions for the entire process. Always at your side: our international team of experts. We are there for you – at every step of data preparation from the idea to the series product.

Software from CADS Additive...

... is understandable for everyone, as it can be operated intuitively

... fits your processes, because every step is aligned with it

... saves time due to shortened calculation times

... takes work off your hands because it is automated

... reduces misprints with the help of simulation and data analysis

... has a high return on investment thanks to low start-up costs

# THE BEST SOLUTION

1

Select Hardware

The first step is the selection of the hardware: With software from **CADS Additive,** you have access to detailed product knowledge of numerous printer manufacturers. Thus, all relevant data of your 3D printer and your post-processing – including **Hirtisation©** and **AM-LOCK** – are taken into account in all steps of data preparation.

2

Orientation

The cornerstone for the perfect result: During the orientation, the ideal rotation for your component is defined. Thanks to the easy-to-understand representation in **OrientationMaps,** the user retains an overview at all times.

Palletizing System AM-LOCK
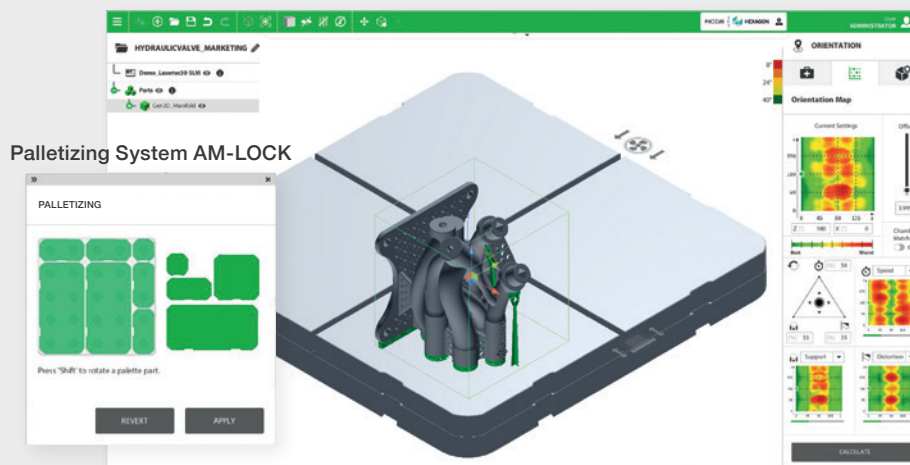
ORIENTATION MODULE
Additive.Optimo

Create the perfect manufacturing basis for your products. With the orientation module **Additive.Optimo** you lay the foundation for your additive manufacturing. The software determines the ideal position and rotation with which your product is created exactly as you imagine it. And it does so in a particularly user-friendly display in **OrientationMaps,** which provides an optimal overview at all times. In the process, the software fully automatically takes into account and improves all the special features that prevail in 3D printing:

Construction time
How long is the build time and what does that mean for the printing process?

Shadowing
Where is there a risk of shadows being cast when printing?

Support volume
How does the support structure affect the material required?

Step error
At which points can step defects occur on the component?

**Warpage tendency**
Is a delay to be expected during production?

Exactly the right Support Geometry: Tailored to all further steps and the structure of your product, our software solutions provide two special support structures in addition to three common ones.

The prepared data is duplicated: The individual instances fill the build plate of your 3D printer, making use of it in a cost-efficient way. At the same time, the parameters of your product remain identical for all versions. Changes are thus only necessary on one instance and are automatically applied.
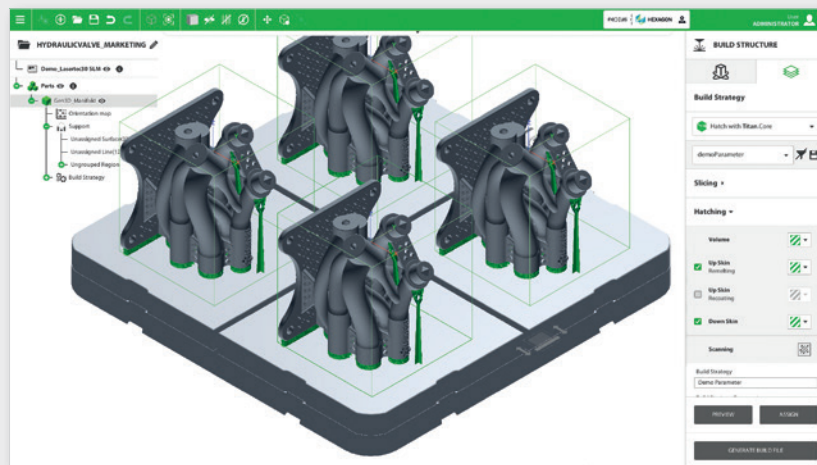
SUPPORT MODULE
Additive. Support

Support ensures that your component is created in exactly the condition you need for your application. To enable you to reliably map even the most complex geometries, our support module **Additive.Support** not only makes use of the three common structures, but also brings along two innovative structure types developed close to the process. In addition to the improved component support, optimal material usage as well as shortened construction time are made possible for you. With the same stability, of course.

Block Support
Massive and fast standard structure.

Adaptive Cell Support
Special material-saving structure, which is also suitable for **Hirtisation©**.

Line Support
Standard structure for thin-walled areas and complex lines.

Tree Support
Special material-saving structure for hard-to-reach areas and free-form surfaces.

Rod Support
Combinable standard structure with increased flexural strength for thin-walled areas.

The heart of data preparation: The printing of your component is precisely planned, defined and even simulated with the complete **AM-Studio** solution. This ensures first-time-right printing results. And thanks to the particularly high-performance software from **CADS Additive,** even with a standard notebook.

The last step before printing: You check all parameters once again and ensure that your component is manufactured according to your product design. **CADS Additive's** software displays all the important details in a particularly clear manner, so that no in-depth specialist knowledge is required.
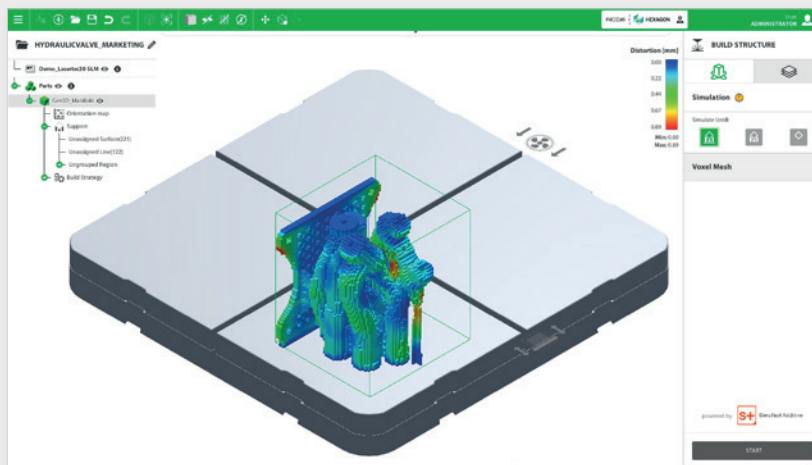
TECHNOLOGY
Titan.Core

The turbo for the calculation of your metal 3D printings. The calculation of laser paths for printing generates huge amounts of data. For your everyday work, this usually means you have to schedule a lot of time and provide high-performance hardware. Or you can use software solutions from **CADS Additive** with innovative **Titan.Core.** With this technology you can calculate your data up to 30 times faster – without any special demands on your hardware. You can use **Titan.Core** on a standard PC or notebook and benefit from significantly reduced calculation times.

Up to 30 times faster
Thanks to **Titan.Core,** your software solution from **CADS Additive** is particularly performant.

Changes allowed
The modular architecture allows changes even in running or validated process environments.

Conserving resources
The novel neutral format requires so little free capacity that it delivers optimal results on almost all standard workstations.

Flexible
You take advantage of it on almost all operating systems and with machines from all manufacturers – thanks to **Titan.Core** or API connection.

COOPERATION WITH
MACHINE MANUFACTURERS

To ensure that you get the most out of all the benefits of software and machine, we are cooperating with more and more machine manufacturers. This way, you call up the data of your 3D printer directly after setting up the software – just like the plug-and-play principle. All steps of data preparation are based on your machine data, thus increasing the probability of producing your component „first-time-right". For you, this means: You start directly with the production of optimal components.

Machines from these manufacturers are already integrated in our software solutions:

Your manufacturer is not included? You need an independent neutral version? Or you would like to get more information about software solutions from **CADS Additive? Contact us!**

**All software components combined – also for Creo®
AM-Studio** and **AM-Studio for Creo®** are the complete solutions for your additive manufacturing. Learn more about our products!

CADS Additive GmbH Technologiepark 17, 4320 Perg, Austria
T +43 7262 20540 // office@cads-additive.com // www.cads-additive.com