

.NEW

TruServices

Consulting and
Training for Additive
Manufacturing



AM Consulting along the entire supply chain

Whether it's about getting started with the technology, identifying and developing suitable parts or optimizing your production - at TRUMPF Additive Manufacturing, you can always count on competent support along the entire AM process chain. Our comprehensive portfolio of training and consulting services, enables you to quickly learn and apply new methods and thus enter the additive manufacturing of your part optimally prepared. Become more economical, more efficient and of higher quality- we support you!

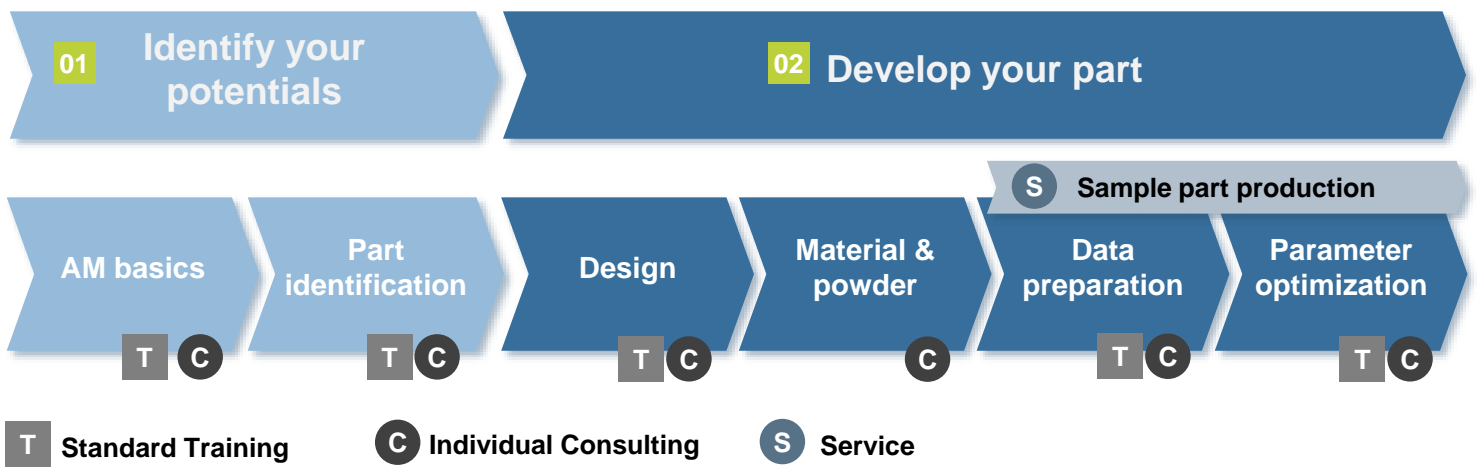
Your AM Journey

Identify your
potentials

Develop your
part

Produce your
part

Establish and
improve your
process




01 Identify your potentials

Learn about the Laser Metal Fusion (LMF) technology - also known as Powder Bed Fusion (PBF) – and implement additive manufacturing knowledge in your company.

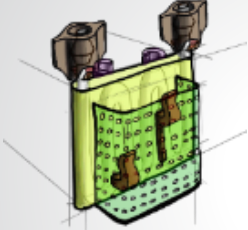
Identify initial applications to understand the potentials of AM parts and create a business case for cost-effective production.

02 Develop your part


AM compatible design is mandatory to fully realize the potentials of the technology. Therefore, it is important to know design methods for AM parts and thus to generate AM-compatible solutions. In addition, we provide support for material and powder selection and preparation of build job data. This includes generating the right support structures and, if necessary, the optimization of parameter settings.



Before
Original design



Concept
Rethink and redesign



After
Optimized 3D printing design

AM design advantages:

- integrated flexure joint
- 75 % less parts
- 62 % lower volume
- 10 % lower costs

The right support for each of your development phases

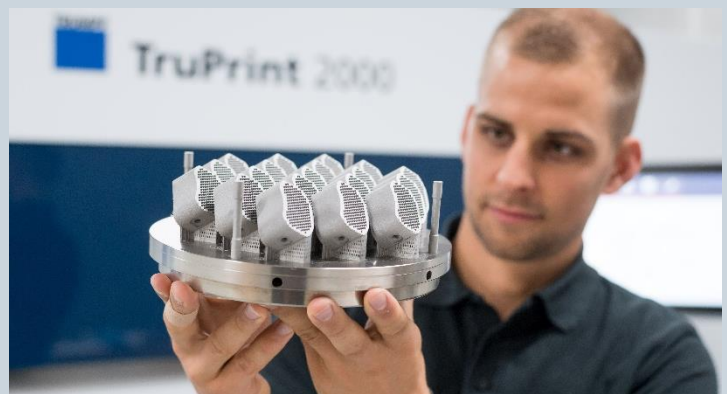
Individual Consulting

Safe time and money with expert support

We support you individually in your entry into additive manufacturing. The focus is always on your company and your application. The goal is to provide you with know-how and implement your parts as quickly and efficiently as possible. We manufacture your individual AM part for you to better assess the quality and advantages of the LMF process for your application. The duration and scope of the project will depend on your requirements and will be agreed with you individually. Regardless of whether you want to set up your own production or outsource your production to a service provider – our experts are there for you.

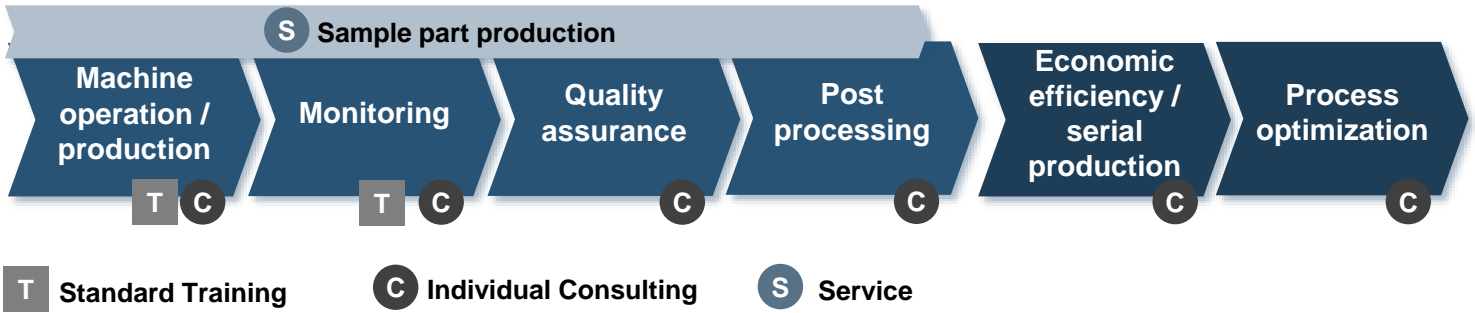
Sample Part Production

Get first impressions of your AM part



03 Produce your part

04 Establish & improve your process



03 Produce your part

We support you in the production of your first sample part in our AM application laboratory, the prototype production up to production on your own machine. Learn about the application and the benefit of the monitoring systems and find out which quality assurance steps are possible to ensure the material properties in additive manufacturing. It is also important to know the correct further post-processing of your part, starting with the appropriate heat treatment, removal of the support structure, up to surface treatment.

04 Establish and improve your process

Optimize your manufacturing process, together with us. Benefit from the continuous development of machine functions, software, materials and parameters. Learn about the main factors influencing part costs and increase the profitability of your AM production. This is how you successfully produce AM parts in series.

The image shows a comparison of part quality before and after optimization. On the left, a photograph of a part with red arrows pointing to surface defects is labeled 'Before' with the text 'Overheating leads to poor surface quality and process defects'. In the middle, a cross-sectional diagram of a part is labeled 'Parameter optimization' with the text 'Development and testing'. On the right, a photograph of a smoother part is labeled 'After' with the text 'Optimized part with high quality'. To the right of these images is a box titled 'Advantages due to process optimization:' with three bullet points: '→ Better surface quality', '→ Improved overhang buildability', and '→ Increased build rate'.

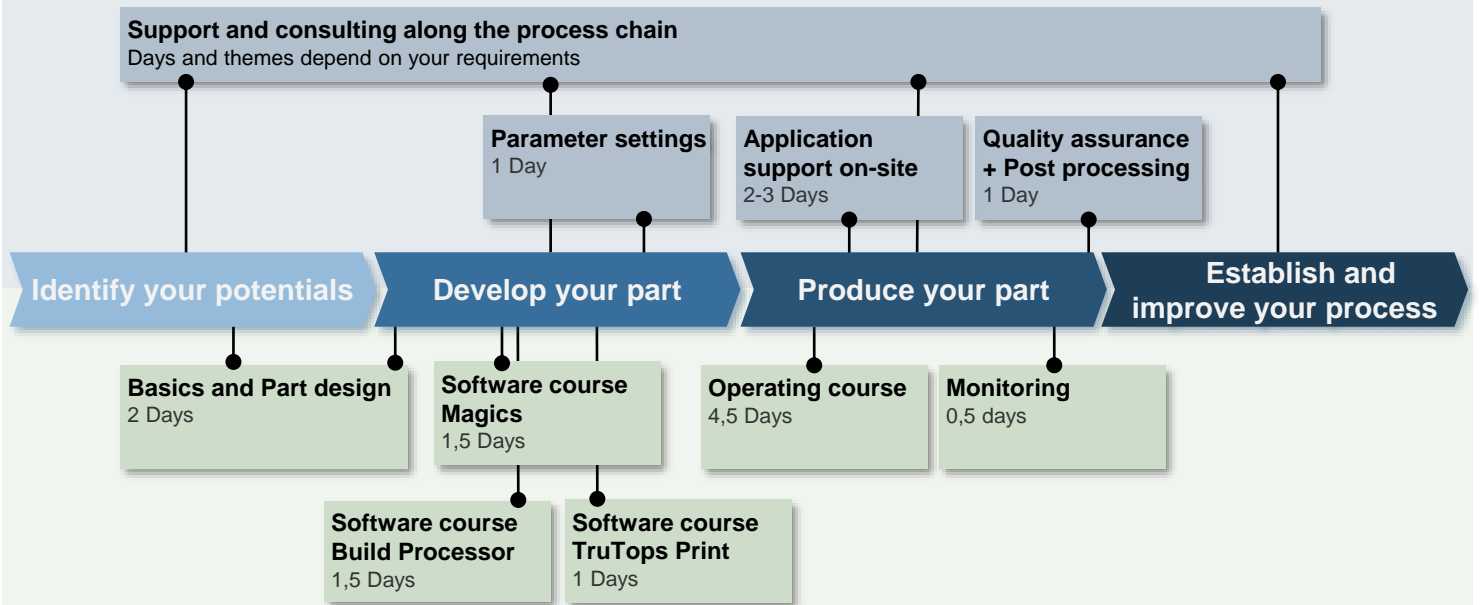
Standardized Training

Deepen your knowledge with our training offers

Our training offers help you to further educate yourself in certain areas. The training courses provide you with the necessary knowledge about LMF technology and is then consolidated by practical applications. We offer training on various topics along the process chain such as part design, data preparation, system operation, monitoring and quality assurance. The training courses take place in our training center in Ditzingen or, if required, online or on-site.



Individual Consulting



Standardized Training

Satisfied Customers



“TRUMPF AM-Consulting is the perfect partner for us when it comes to identifying parts for additive manufacturing and jointly developing new solutions for our applications.”

RI Research Instruments GmbH



“Due to high process reliability of our TRUMPF machines, we were able to optimize the construction parameters for our requirements very quickly together with the TRUMPF experts and thus achieve the required part quality.”

ANDREAS STIHL AG & Co. KG



“The advantage of TRUMPF Consulting is the holistic way of thinking. Even at the identification stage, the complete process chain is considered, ensuring that all relevant factors for economical production are taken into account.”

Bosch Rexroth AG



Contact us: Consulting.AM@TRUMPF.com

For more information, please visit our website: www.trumpf.com/s/am-consulting