



All courses  
are online  
available!



TruServices

# TRUMPF Laser Trainings 2021



# Continued learning - making progress

The world is changing. And it is not just machines that are having ever higher expectations placed on them: you too, as a user, have to continually develop yourself in order to progress in the modern world. This is why TRUMPF Laser, as the international market leader, holds regular trainings. In our modern Training Center, we offer you a wide range of training opportunities directed at participants with the most diverse degrees of prior knowledge and areas of application. These trainings will make working with TRUMPF lasers even easier and more efficient, something both you as an employee and your company will benefit from. Find out about our course program now.

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# At TRUMPF, learning means experiencing

Demanding subjects must be conveyed appropriately. For this reason, we at TRUMPF Laser set up our trainings in such a way that there is room for both practical experience and fun. Whether it is training at the computer or directly on a laser device: modern methods and training rooms equipped to a high standard ensure a varied learning environment which turns a day at TRUMPF Laser into a real experience.

But you won't just find out more about our products during a training day: Shared breaks provide the ideal opportunity to come into contact with other participants or the trainers.

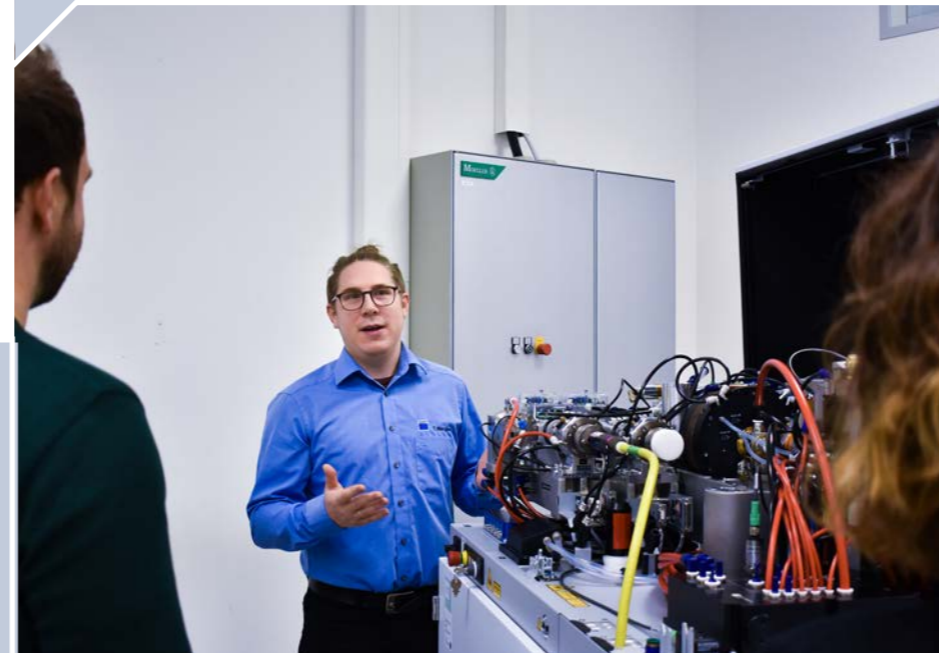
Discover interesting facts about our Training Center and our range of courses.



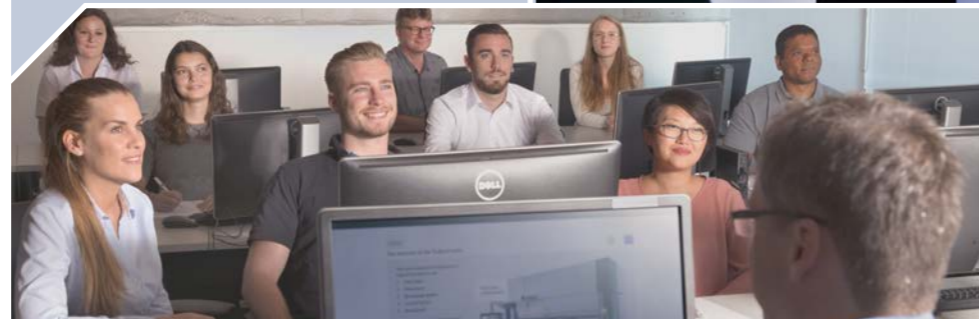
Each year, more than **400** courses take place



**10** training rooms are available



More than **100** course types



**2000** participants have taken part in our trainings in the last year



International participants from **32** countries



# Always on the right course

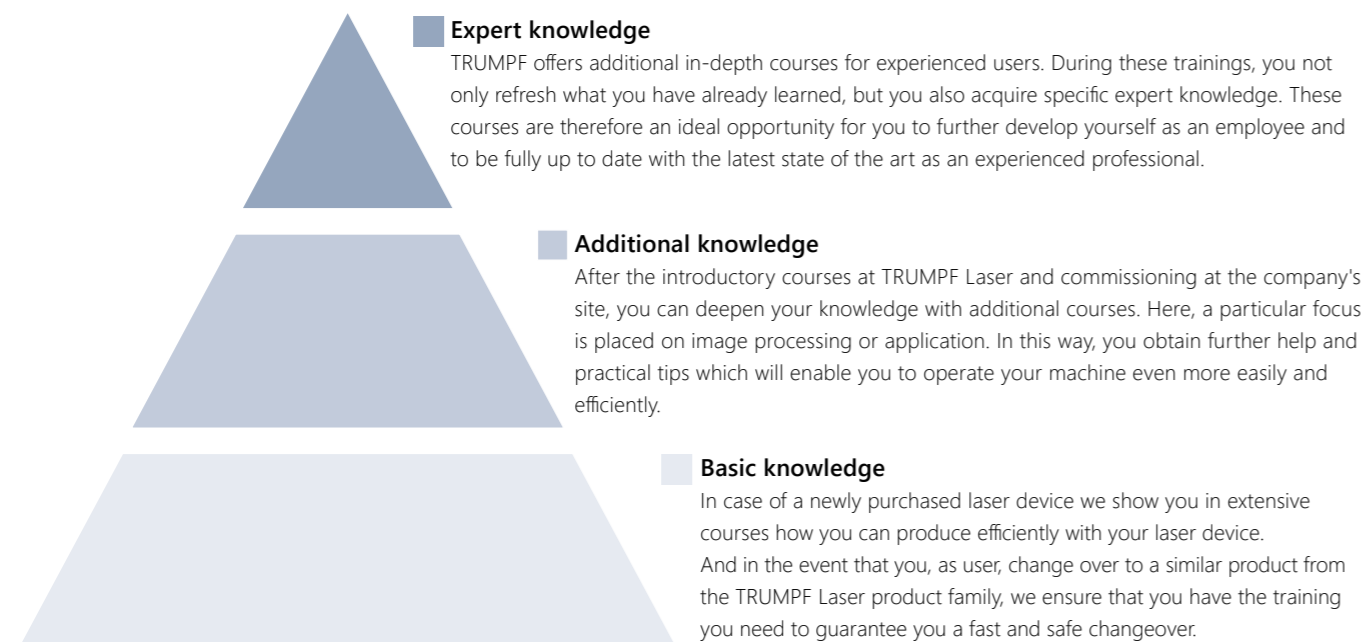
Many companies are already working for many years with laser devices manufactured by TRUMPF Laser. However, changing markets or technical developments are always producing new areas of use for our products. The result is a continually growing training requirement, individually tailored to suit different types of users, their previous experience and requirements.

We see it as one of our most important tasks to support you personally with a wide range of training opportunities – so that you can continue to work safely and efficiently in the future too.

Discover what TRUMPF Laser is offering to support your individual requirements.

## Competence levels

Even the old Egyptians knew that a good foundation is the base for maximum performance. Therefore, with our basic training we create a foundation for advanced or expert training:



**.NEW**

# Online Trainings

Online learning means that you participate in a training in a virtual environment. This kind of training is especially suitable for individual persons or groups that cannot participate in on-site events or that prefer online training.

All courses are available online (with the exception of application training) and equivalent in content to the on-site events.

## Prerequisites

- Hardware: a computer with stable internet connection, microphone and speakers
- Software: Microsoft Skype for Business
- Additional recommendation: a webcam
- If available: access to the laser unit (not necessary)

## Your advantages at a glance

- ⊕ Location-independent learning
- ⊕ Time saving
- ⊕ More flexibility

## Contact us

Please contact us, if you are interested.

We are looking forward to welcoming you virtually soon.

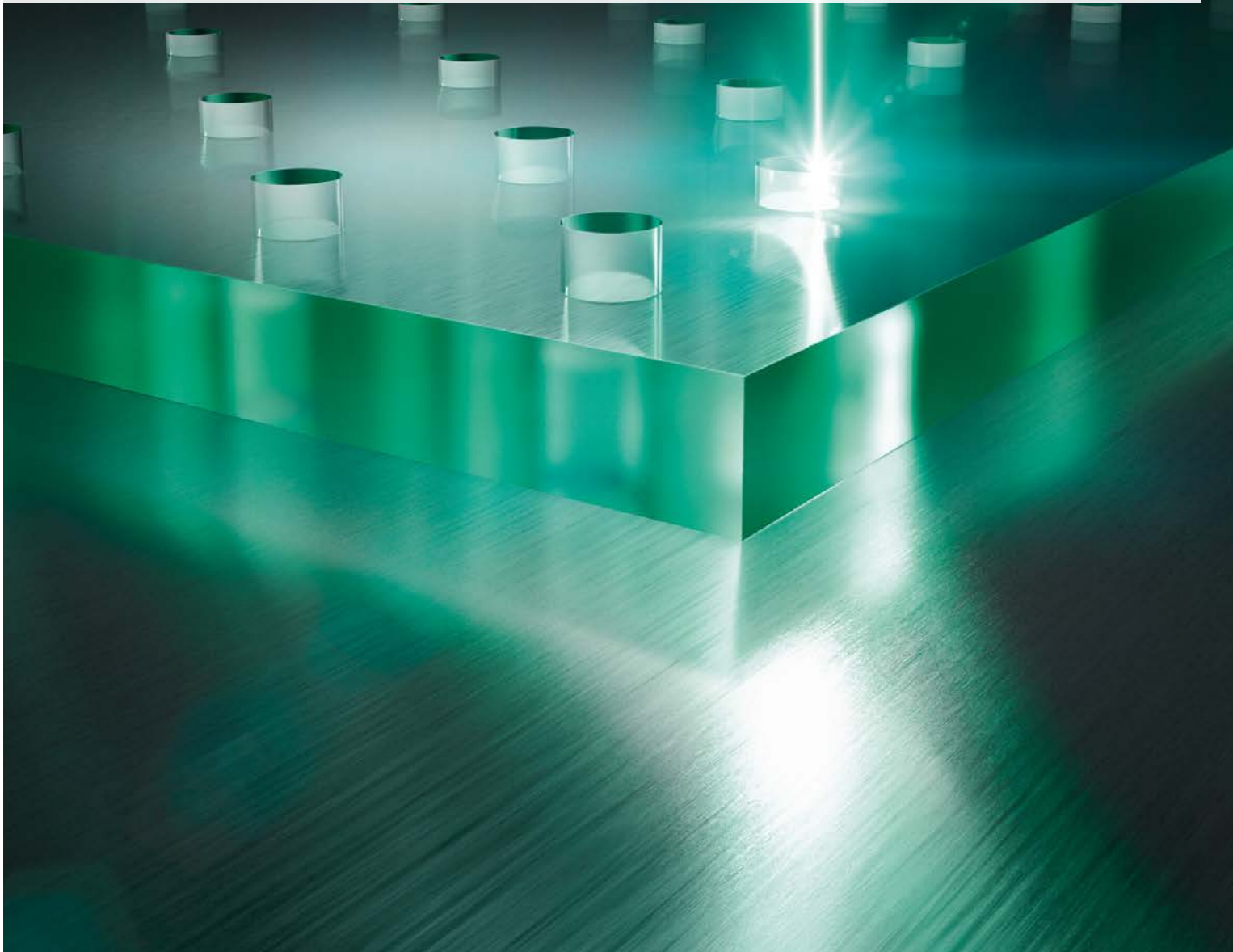
# Product overview

With your TRUMPF laser, you have acquired an exceptional high-tech system. Whether you are welding, cutting, marking or using the laser tool for other tasks: the specific machining processes always require that all parameters involved in the process are adhered to.

By training at our Training Center in Schramberg, you will get to know your laser device and its functions in detail. The training provides you with safety during your day-to-day work and ensures that you are able to fully benefit from your laser's potential.

## Technologies

TruDisk | TruMicro | TruPulse | TruDiode | TruFiber | TruLaser Station | Optics | Process sensor system



## Laser devices and their use

<b>TruDisk</b> Operation & Maintenance	<b>PFO</b> Operation
<b>TruMicro</b> Operation & Maintenance	
<b>TruPulse</b> Operation & Maintenance	
<b>TruDiode</b> Operation & Maintenance	
<b>TruFiber</b> Operation & Maintenance	
<b>TruLaser Station</b> Operation	

## Optics and the process sensor system

<b>Prerequisites</b> Operator or maintenance course for a laser device	<b>I-PFO</b> Operation	<b>TruTops I-PFO</b> Programming
	<b>PFO</b> Operation	
	<b>VisionLine Detect - PFO</b> Programming	
	<b>TruTops PFO</b> Programming	
	<b>BEO D50 TPC (plastic)</b> Operation	
	<b>Welding depth monitoring (SE20)</b> Operation	
	<b>QDS 2 (Quality Data Store)</b> Programming	
	<b>PFO 20-2 PO (plastic)</b> Operation	<b>SeamLine OCT</b> Operation
	<b>SeamLine Remote</b> Operation	

We are using TRUMPF examples in our trainings.

Basic knowledge
  Additional knowledge
  Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.

## TruDisk courses

**TruDisk Operation**

**Objectives**  
You will be able to operate the laser device correctly, make changes to laser programs and create new programs.

**Learning content**

- Basics of laser technology, laser safety
- Structure and function of the TruDisk solid-state laser, generations 4C, 6C and FD27
- Structure of the laser control
- Operation of the laser using TruControl 1000

**.OPTIONAL**  
Subsequent application training possible (see p. 22 -23)

**TruDisk Maintenance**

**Objectives**  
You will become confident in operating the laser device correctly, performing maintenance work on the laser, replacing assemblies and control components, rectifying malfunctions and performing fault diagnosis.

**Learning content**

- Basics of laser technology, laser safety
- Structure and function of the TruDisk solid-state lasers of the respective generations
- Structure of the laser control
- Operation of the laser using TruControl 1000
- Electrical and mechanical maintenance
- Diagnostics and practical troubleshooting
- Electrical repair work

**.OPTIONAL**  
Subsequent application training possible (see p. 22 -23)


**PFO Operation**

**Objectives**  
You will know how to operate the programmable focusing optics (PFO) and become familiar with their structure. You will also be able to create, integrate and call up PFO programs.

**Learning content**

- Structure and function of the programmable focusing optics
- Interfaces between the optics and the laser device
- Operation and programming in TruControl 1000
- Setting up the PFO Editor including teaching in the optics

**Prerequisites**  
Operator or maintenance course for a laser device



**Do you have a PFO?**

## Operator course TruDisk 1 - 16 kW

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruDisk 1 - 16 kW	3 days	DE	3	19.01.2021	21.01.2021
PFO operator course*	1 day	DE	3	22.01.2021	22.01.2021
TruDisk 1 - 16 kW	3 days	DE	9	02.03.2021	04.03.2021
PFO operator course*	1 day	DE	9	05.03.2021	05.03.2021
TruDisk 1 - 16 kW	3 days	DE	13	29.03.2021	31.03.2021
PFO operator course*	1 day	DE	13	01.04.2021	01.04.2021
TruDisk 1 - 16 kW	3 days	DE	21	25.05.2021	27.05.2021
PFO operator course*	1 day	DE	21	28.05.2021	28.05.2021
TruDisk 1 - 16 kW	3 days	DE	28	13.07.2021	15.07.2021
PFO operator course*	1 day	DE	28	16.07.2021	16.07.2021
<b>English</b>					
TruDisk 1 - 16 kW	3 days	EN	17	27.04.2021	29.04.2021
PFO operator course*	1 day	EN	17	30.04.2021	30.04.2021
TruDisk 1 - 16 kW	3 days	EN	26	29.06.2021	01.07.2021
PFO operator course*	1 day	EN	26	02.07.2021	02.07.2021
TruDisk 1 - 16 kW	3 days	EN	40	05.10.2021	07.10.2021
PFO operator course*	1 day	EN	40	08.10.2021	08.10.2021

## Maintenance course TruDisk 1 - 2 kW (6C)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruDisk 1 - 2 kW (6C)	4 days	DE	16	19.04.2021	22.04.2021
PFO operator course*	1 day	DE	16	23.04.2021	23.04.2021
<b>English</b>					
TruDisk 1-2 kW (6C)	4 days	EN	43	25.10.2021	28.10.2021
PFO operator course*	1 day	DE	43	29.10.2021	29.10.2021

## Maintenance course TruDisk 3 - 12 kW (6C)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruDisk 3 - 12 kW (6C)	4 days	DE	6	08.02.2021	11.02.2021
PFO operator course*	1 day	DE	6	12.02.2021	12.02.2021
TruDisk 3 - 12 kW (6C)	4 days	DE	38	20.09.2021	23.09.2021
PFO operator course*	1 day	DE	38	24.09.2021	24.09.2021
<b>English</b>					
TruDisk 3 - 12 kW (6C)	4 days	EN	25	21.06.2021	24.06.2021
PFO operator course*	1 day	EN	25	25.06.2021	25.06.2021
TruDisk 3 - 12 kW (6C)	4 days	EN	46	15.11.2021	18.11.2021
PFO operator course*	1 day	EN	46	19.11.2021	19.11.2021

## Maintenance course TruDisk 1 - 8 kW (FD27)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruDisk 1 - 6 kW (FD27)	4 days	DE	4	25.01.2021	28.01.2021
PFO operator course*	1 day	DE	4	29.01.2021	29.01.2021
TruDisk 1 - 6 kW (FD27)	4 days	DE	49	06.12.2021	09.12.2021
PFO operator course*	1 day	DE	49	10.12.2021	10.12.2021
<b>English</b>					
TruDisk 1 - 6 kW (FD27)	4 days	EN	15	12.04.2021	15.04.2021
PFO operator course*	1 day	EN	15	16.04.2021	16.04.2021
TruDisk 1 - 6 kW (FD27)	4 days	EN	32	09.08.2021	12.08.2021
PFO operator course*	1 day	EN	32	13.08.2021	13.08.2021
TruDisk 1 - 6 kW (FD27)	4 days	EN	41	11.10.2021	14.10.2021
PFO operator course*	1 day	EN	41	15.10.2021	15.10.2021

## Maintenance course TruDisk (with compressor cooler maintenance)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruDisk (with compressor cooler)	5 days	DE/EN		On request	

\* Our follow-on courses round off your competence portfolio perfectly. We provide you with the opportunity to plan a follow-on course for your PFO directly in connection with your laser course. Please contact us!

Basic knowledge
  Additional knowledge
  Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.

## Operator course TruDisk Green

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruDisk Green	2 days	DE/EN		On request	
PFO operator course*	1 day	DE/EN		On request	

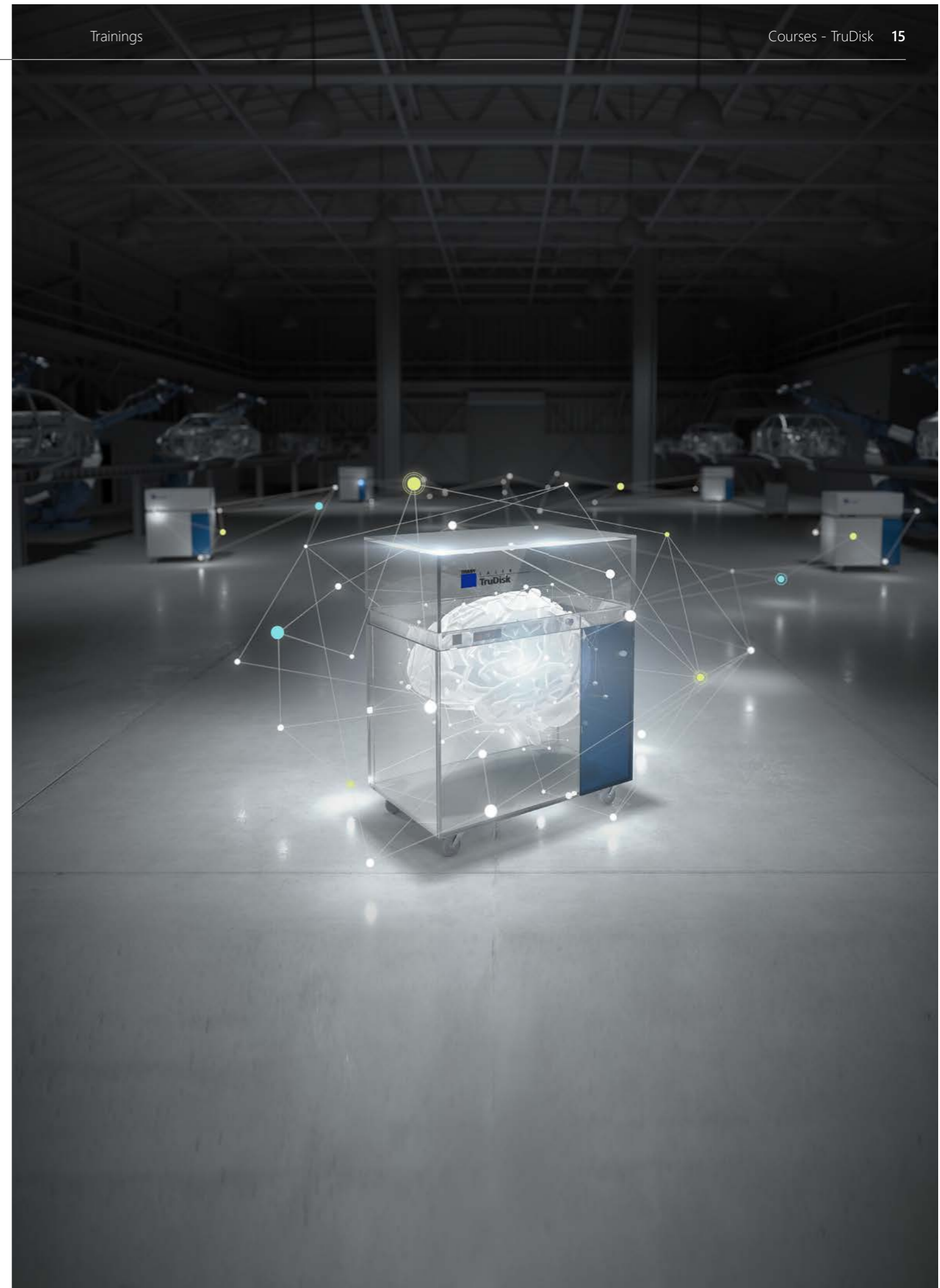
## Maintenance course TruDisk Green

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruDisk Green	3 days	DE/EN		On request	
PFO operator course*	1 day	DE/EN		On request	

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Basic knowledge
  Additional knowledge
  Expert knowledge

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## TruMicro courses

**TruMicro**  
Operation & Maintenance

**Objectives**  
You will acquire the knowledge how to perform maintenance work on the laser, replace assemblies and control components, rectify malfunctions and perform fault diagnosis.

**Learning content**

- Basics of laser technology, laser safety
- Structure and function of the laser head and the supply unit
- Structure of the laser control
- Operation of the laser using TruControl 1000
- Maintenance work (if applicable, electrical and mechanical)
- Diagnostics and practical troubleshooting
- Electrical repair work

**PFO**  
Operation

**Objectives**  
You will know how to operate the programmable focusing optics (PFO) and become familiar with their structure. You will also be able to create, integrate and call up PFO programs.

**Learning content**

- Structure and function of the programmable focusing optics
- Interfaces between the optics and the laser device
- Operation and programming in TruControl 1000
- Setting up the PFO Editor including teaching in the optics

**Prerequisites**  
Operator or maintenance course for a laser device

## Operator & Maintenance course TruMicro 2000

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruMicro 2000	4 days	DE	17	27.04.2021	29.04.2021
<b>English</b>					
TruMicro 2000	4 days	EN	32	10.08.2021	12.08.2021

## Operator & Maintenance course TruMicro 5000 (FU02/FU04)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruMicro 5000 (FU02/FU04)	3 days	DE	21	25.05.2021	27.05.2021
TruMicro 5000 (FU02/FU04)	3 days	DE	49	07.12.2021	09.12.2021
<b>English</b>					
TruMicro 5000 (FU02/FU04)	3 days	EN	40	05.10.2021	07.10.2021

## Operator & Maintenance course TruMicro 5000 (FU06)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruMicro 5000 (FU06)	3 days	DE	23	08.06.2021	10.06.2021
TruMicro 5000 (FU06)	3 days	DE	38	21.09.2021	23.09.2021
<b>English</b>					
TruMicro 5000 (FU06)	3 days	EN	11	16.03.2021	18.03.2021

## Operator & Maintenance course TruMicro 6000 (FU07)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruMicro 6000 (FU07)	3 days	DE/EN		On request	

## Operator & Maintenance course TruMicro 7050/7060/7240

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruMicro 7050/7060/7240	3 days	DE	13	29.03.2021	31.03.2021
PFO operator course*	1 day	DE	13	01.04.2021	01.04.2021
<b>English</b>					
TruMicro 7050/7060/7240	3 days	EN	43	26.10.2021	28.10.2021
PFO operator course*	1 day	EN	43	29.10.2021	29.10.2021

## Operator & Maintenance course TruMicro 7370/7380/8320/8340

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruMicro 7370/7380/8320/8340	3 days	DE/EN		On request	

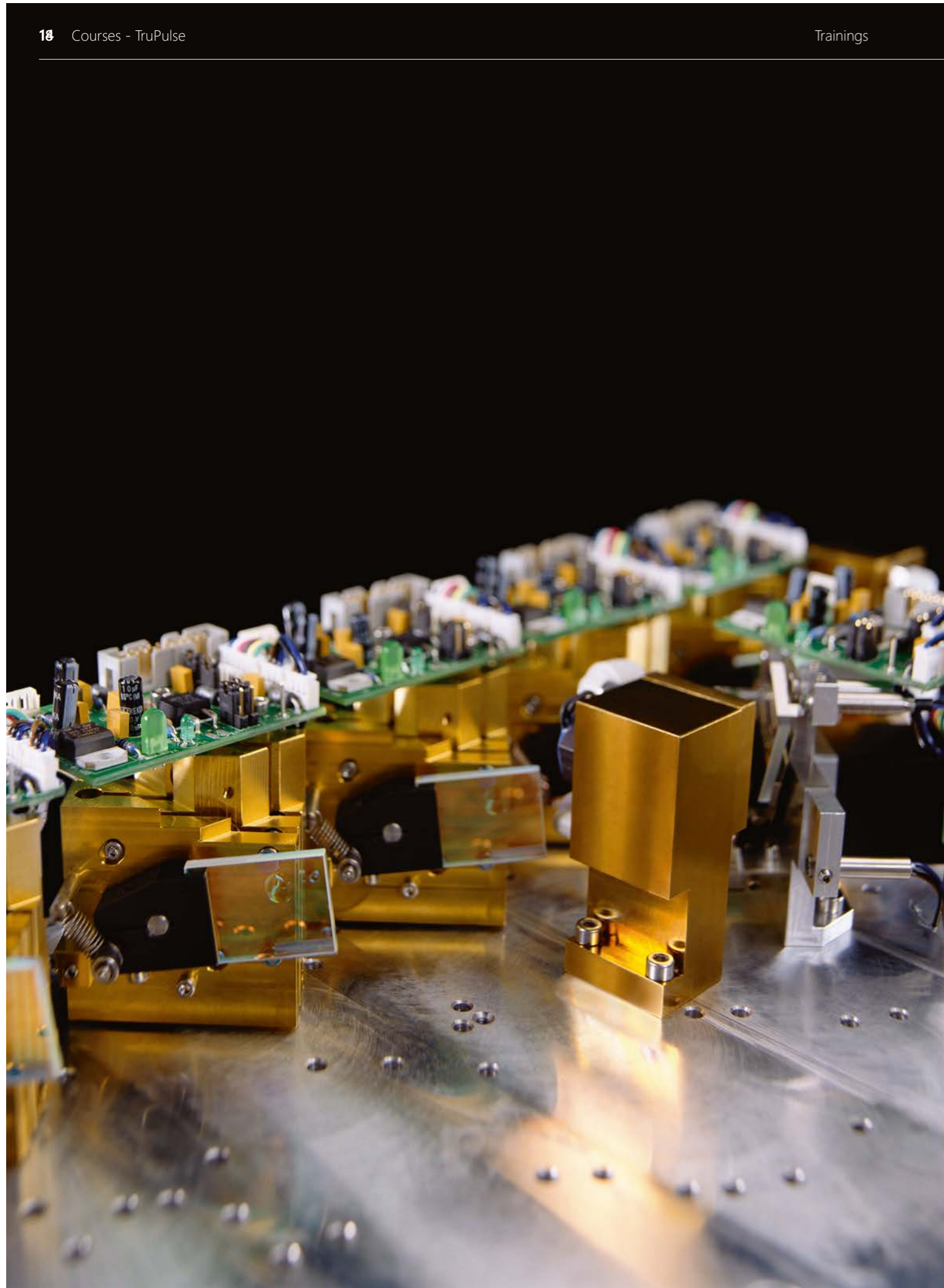
## Operator & Maintenance course TruMicro 7060/7070 (FK06)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruMicro 7060/7070 (FK06)	3 days	DE	16	20.04.2021	22.04.2021
PFO operator course*	1 day	DE	16	23.04.2021	23.04.2021
TruMicro 7060/7070 (FK06)	3 days	DE	28	13.07.2021	15.07.2021
PFO operator course*	1 day	DE	28	16.07.2021	16.07.2021
<b>English</b>					
TruMicro 7060/7070 (FK06)	3 days	EN	41	12.10.2021	14.10.2021
PFO operator course*	1 day	EN	41	15.10.2021	15.10.2021

\* Our follow-on courses round off your competence portfolio perfectly. We provide you with the opportunity to plan a follow-on course for your PFO directly in connection with your laser course. Please contact us!

Basic knowledge      Additional knowledge      Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.



## TruPulse courses

### TruPulse Operation

**Objectives**  
You will be able to deal with the laser, make changes to laser programs and create new programs.

- Learning content**
- Basics of laser technology, laser safety
  - Structure and function of TruPulse
  - Structure of the laser control
  - Operation of the laser using TruControl 1000
  - Mechanical maintenance

**OPTIONAL**  
Subsequent application training possible (see p. 22 -23)

### TruPulse Maintenance

**Objectives**  
You will be able to operate the laser device correctly, perform maintenance work on the laser, replace assemblies and control components, rectify malfunctions and perform error diagnosis.

- Learning content**
- Basics of laser technology, laser safety
  - Structure and function of TruPulse solid-state laser of the respective generations
  - Structure of the laser control
  - Operation of the laser using TruControl 1000
  - Electrical and mechanical maintenance
  - Diagnostics and practical troubleshooting
  - Electrical repair

### PFO Operation

**Objectives**  
You will know how to operate the programmable focusing optics (PFO) and become familiar with their structure. You will also be able to create, integrate and call up PFO programs.

- Learning content**
- Structure and function of the programmable focusing optics
  - Interfaces between the optics and the laser device
  - Operation and programming in TruControl 1000
  - Setting up the PFO Editor including teaching in the optics

**Prerequisites**  
Operator or maintenance course for a laser device



— Dates on demand: Contact us!

## Operator course TruPulse 21 - 556

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruPulse 21 - 556*	2 days	DE	4	27.01.2021	28.01.2021
PFO operator course*	1 day	DE	4	29.01.2021	29.01.2021
TruPulse 21 - 556*	2 days	DE	28	14.07.2021	15.07.2021
PFO operator course*	1 day	DE	28	16.07.2021	16.07.2021
<b>English</b>					
TruPulse 21 - 556*	2 days	EN	15	14.04.2021	15.04.2021
PFO operator course*	1 day	EN	15	16.04.2021	16.04.2021
TruPulse 21 - 556*	2 days	EN	43	27.10.2021	28.10.2021
PFO operator course*	1 day	EN	43	29.10.2021	29.10.2021

## Maintenance course TruPulse 21 - 556

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruPulse 21 - 556	3 days	DE/EN		On request	
PFO operator course*	1 day	DE/EN		On request	

\* Our follow-on courses round off your competence portfolio perfectly. We provide you with the opportunity to plan a follow-on course for your PFO directly in connection with your laser course. Please contact us!

- Basic knowledge
- Additional knowledge
- Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.



## TruDiode courses

**TruDiode**  
Operation & Maintenance

**Objectives**  
You will become confident in operating the laser device correctly, performing maintenance work on the laser, replacing assemblies and control components, rectifying malfunctions and performing fault diagnosis.

**Learning content**

- Basics of laser technology, laser safety
- Structure and function of the laser device and the supply unit
- Structure of the laser control
- Operation of the laser using TruControl 1000
- Electrical and mechanical maintenance
- Diagnostics and practical troubleshooting
- Electrical repair work

**OPTIONALLY**  
Subsequent PFO operation course is possible.

### Operator and maintenance course TruDiode (3006 - 6006)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruDiode (3006 - 6006)	3 days	DE	11	16.03.2021	18.03.2021
PFO operator course*	1 day	DE	11	19.03.2021	19.03.2021
<b>English</b>					
TruDiode (3006 - 6006)	3 days	EN	38	21.09.2021	23.09.2021
PFO operator course*	1 day	EN	38	24.09.2021	24.09.2021

### Operator and maintenance course TruDiode (151 - 903)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruDiode (151 - 903)	3 days	DE/EN			On request

**OPTIONAL**

Do you weld plastic? Then attend the course PFO 20-2 PO (page 26).

\* Our follow-on courses round off your competence portfolio perfectly. We provide you with the opportunity to plan a follow-on course for your PFO directly in connection with your laser course. Please contact us!

- Basic knowledge
- Additional knowledge
- Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.



### TruFiber courses

**TruFiber**  
Operation & Maintenance

**Objectives**  
You will become confident in operating the laser device correctly, make changes to laser programs and create new programs.

**Learning content**

- Basics of laser technology, laser safety
- Structure and function of the laser device and the supply unit
- Structure of the laser control
- Operation of the laser using TruControl 1000
- Maintenance work (if applicable, electrical and mechanical)
- Diagnostics and practical troubleshooting
- Electrical repair work

**OPTIONALLY**  
Subsequent application training possible (see p. 22 -23)

### Operator and maintenance course TruFiber 500 - 2001 (FD34)

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruFiber 500 - 2001 (FD34)	2 days	DE	12	24.03.2021	25.03.2021
<b>English</b>					
TruFiber 500 - 2001 (FD34)	2 days	EN	32	11.08.2021	12.08.2021

### Operator and maintenance course TruFiber 500

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German/English</b>					
TruFiber 500	2 days	DE/EN		On request	

Basic knowledge
  Additional knowledge
  Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.

## TruLaser Station 5005 courses



**TruLaser Station 5005**  
Operation

**Objectives**  
You will be able to operate the machine, be familiar with its functions, and be able to create and edit programs.

**Learning content**

- Machine set up and assembly and overview of machine functions
- Interfaces and safety devices for the laser system
- Handling the user interface and the operating elements
- Programming the system with axis functions, rotation, scaling and reflection, and integration of laser programs
- Maintenance of the machine

**Recommendation**  
Operator or maintenance course for a laser device

**OPTIONAL**  
Subsequent application training possible (see p. 22 -23)

**PFO**  
Operation

Contents see p. 19

or

**VisionLine Detect - PFO**  
Operation

Contents see p. 19

or

**TruTops PFO**  
Programming

Contents see p. 19

— Dates on demand: Contact us!

## Operator course TruLaser Station 5005

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruLaser Station 5005	3 days	DE	9	01.03.2021	03.03.2021
TruLaser Station 5005	3 days	DE	38	22.09.2021	24.09.2021
<b>English</b>					
TruLaser Station 5005	3 days	EN	25	21.06.2021	23.06.2021
TruLaser Station 5005	3 days	EN	50	15.12.2021	17.12.2021

! This course takes place on a machine with processing optics (BEO).  
 ■ For further options please check our course offer on p. 19-21.

Basic knowledge      Additional knowledge      Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.

## Process sensor system courses

**Quality Data Store (QDS 2)**  
Programming

**Objectives**  
You will know how to install the software product and adjust and configure QDS-2 at its' arrangement.  
You will know how to make the necessary adjustments in the TruControl and the sensoric UI.

**Learning content**

- Use of the installation
- Procedure at setting

**Prerequisites**  
Windows knowledge

**I-PFO**  
Operation

**Objectives**  
You will become familiar with the structure of the I-PFO system, be able to operate it together with the robot and teach it on components.

**Learning content**

- Structure and function of the I-PFO
- Review of basic knowledge PFO and TruTops PFO
- Interfaces between the laser device and the I-PFO system
- Operation and programming of the I-PFO editor
- Setting up, teaching function and communication with the robot

**Prerequisites**  
Operator or maintenance course for a laser device

**PFO**  
Operation

**Objectives**  
You will know how to operate the programmable focusing optics (PFO) and become familiar with their structure. You will also be able to create, integrate and call up PFO programs.

**Learning content**

- Structure and function of the programmable focusing optics
- Interfaces between the optics and the laser device
- Operation and programming in TruControl 1000
- Setting up the PFO Editor including teaching in the optics
- Introduction to TruTops PFO programming system

**Prerequisites**  
Operator or maintenance course for a laser device

**VisionLine Detect - PFO**  
Operation

**Objectives**  
You will gain the knowledge to detect contours using VisionLine Detect programming and to implement a complete application using self-created PFO programs.

**Learning content**

- Complete learning content of the PFO operator course
- Basics of the image processing software VisionLine Detect with PFO
- Calibration of VisionLine Detect with PFO
- Creating programs for VisionLine Detect PFO

**Prerequisites**  
Operator or maintenance course for a laser device

**TruTops PFO**  
Programming

**Objectives**  
You will become adept at creating simple 2D CAD drawings, converting and integrating them in a laser program and implementing a complete application.

**Learning content**

- Complete learning content of the PFO operator course
- Introduction to the TruTops PFO software
- Creation of 2D CAD programs
- Conversion in TruTops PFO, integration and execution in TruControl 100

**Prerequisites**  
Operator or maintenance course for a laser device

**BEO D50 TPC**  
Operation

**Objectives**  
You will be able to create working processes by means of different editors and to optimize them.

**Learning content**

- Structure and function and programming of the BEO TPC
- Operating and programming of the different editors
- Use of the software for temperature control

**Prerequisites**  
Operator or maintenance course for a laser device

— Dates on demand: Contact us!

## Process sensor system courses

**Welding depth monitoring (SE20)**  
Operation

**Objectives**  
You will be able to parametrize a welding depth measurement with the sensor operating interface during laser processing.

**Learning content**

- Structure and function of the sensor arrangement
- Adjustment of the sensor at the processing optics
- Use of operating interface

**Prerequisites**  
Operator or maintenance course for a laser device

**TruTops I-PFO**  
Programming

**Objectives**  
You will acquire the skills to operate TruTops I-PFO and the know-how to create, adapt and optimize programs.

**Learning content**

- Structure and function of the I-PFO
- Creation of robot programs (working and teaching programs)
- Theoretical and practical declaration of variables
- Practical application and improvement of I-PFO programs

**Prerequisites**  
Operator course I-PFO

**PFO 20-2 PO**  
Operation

**Objectives**  
You will be able to create processes by means of different editors and to optimize them.

**Learning content**

- Structure and function of the PFO 20-2 PO with temperature control
- Operating and programming of the different editors
- Use of the software for temperature control

**Prerequisites**  
Operator or maintenance course for a laser device and knowledge in operating a PFO

**Seam position control**  
Operation

**Objectives**  
You will be able to operate the SeamLine Remote OCT system and to create, adapt and optimize programs.

**Learning content**

- Structure and function of the SeamLine Remote OCT
- Operating and programming of programs related to all system components
- Theoretical and practical declaration of variables
- Teaching the complete system
- Adaption of program parameters and program improvement

**Prerequisites**  
Operator or maintenance course for a laser device and knowledge in operating a PFO

**SeamLine Remote**  
Operation

**Objectives**  
You will understand how to operate the SeamLine Remote system and learn how to create, adapt and optimize programs.

**Learning content**

- Structure and function of SeamLine Remote
- Operation and creation of programs, taking into account all components of the system
- Theoretical and practical declaration of variables
- Teaching of the entire system
- Adaptation of the program parameters and program optimization

**Prerequisites**  
Operator or maintenance course for a laser device and knowledge in operating a PFO

## VisionLine Detect programming course

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
VisionLine Detect - PFO	3 days	DE	5	03.02.2021	05.02.2021
VisionLine Detect - PFO	3 days	DE	17	26.04.2021	28.04.2021
VisionLine Detect - PFO	3 days	DE	33	16.08.2021	18.08.2021
VisionLine Detect - PFO	3 days	DE	39	29.09.2021	01.10.2021
<b>English</b>					
VisionLine Detect - PFO	3 days	EN	11	15.03.2021	17.03.2021
VisionLine Detect - PFO	3 days	EN	27	07.07.2021	09.07.2021
VisionLine Detect - PFO	3 days	EN	42	20.10.2021	22.10.2021
VisionLine Detect - PFO	3 days	EN	49	06.12.2021	08.12.2021

## TruTops PFO programming course

COURSE DATES	DURATION	LANGUAGE	WEEK	FROM	TO
<b>German</b>					
TruTops PFO	3 days	DE	8	24.02.2021	25.02.2021
TruTops PFO	3 days	DE	23	09.06.2021	10.06.2021
TruTops PFO	3 days	DE	28	14.07.2021	15.07.2021
TruTops PFO	3 days	DE	48	29.11.2021	30.11.2021
<b>English</b>					
TruTops PFO	3 days	EN	13	30.03.2021	31.03.2021
TruTops PFO	3 days	EN	41	13.10.2021	14.10.2021

## I-PFO operator course

COURSE DATES	DURATION	LANGUAGE	FROM	TO
<b>German/English</b>				
I-PFO	3 days	DE/EN	On request	

## I-PFO programming course

COURSE DATES	DURATION	LANGUAGE	FROM	TO
<b>German/English</b>				
TruTops I-PFO	2 days	DE/EN	On request	

## SeamLine Remote operator course

COURSE DATES	DURATION	LANGUAGE	FROM	TO
<b>German/English</b>				
SeamLine Remote	2 days	DE/EN	On request	

Basic knowledge      Additional knowledge      Expert knowledge

Our courses are subdivided into three knowledge levels which build on one another.

— Dates on demand: Contact us!

# Application training

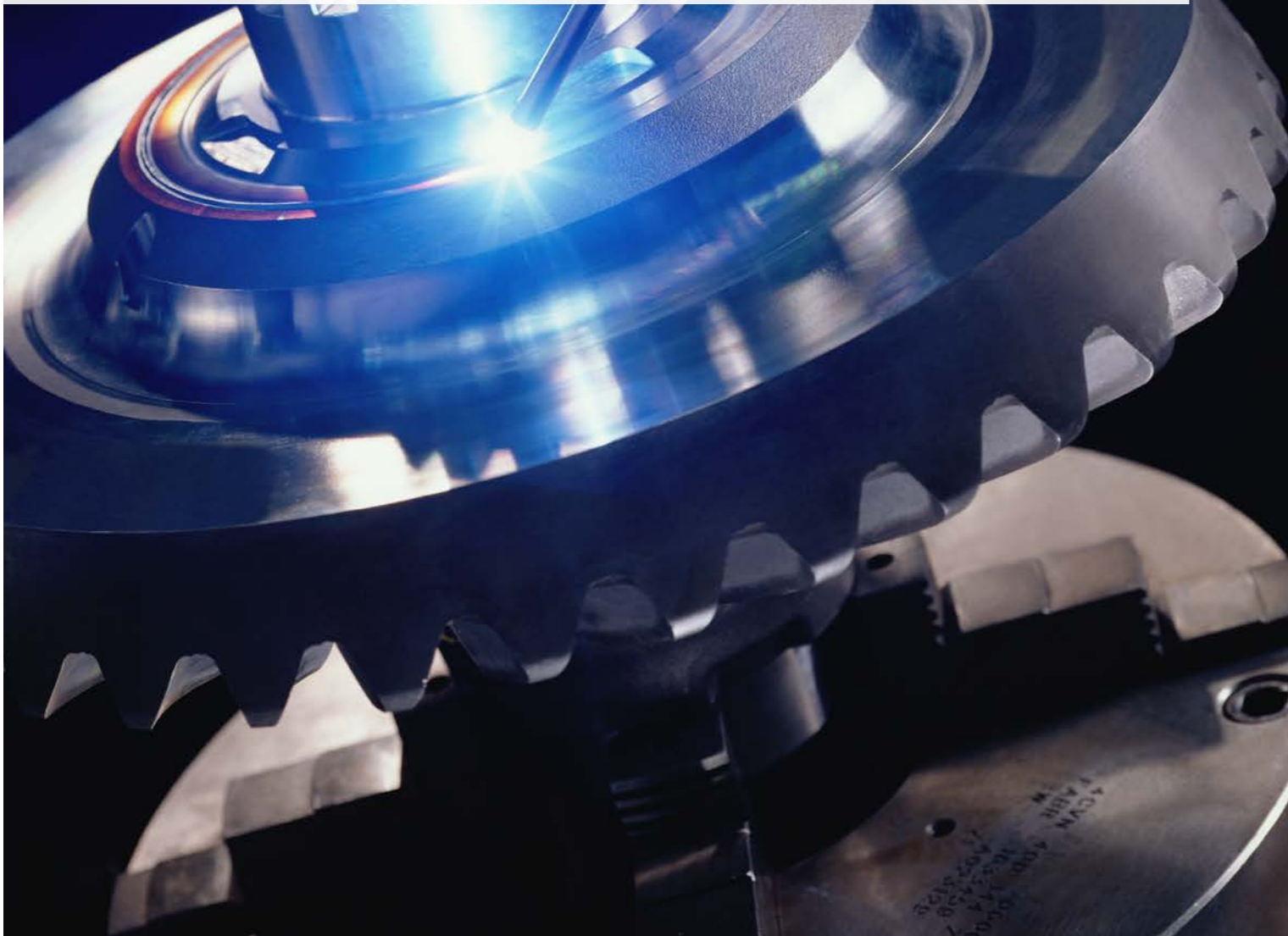
No matter if you separate, join or process most different metals – with TRUMPF lasers everything is possible. In the practical application training, you can work practically with your own parts. Due to the individually configured training contents and small training groups (consisting of your employees) we offer a training that is perfectly adapted to your needs.

Thus, this course enables a targeted extension of your application know-how.

## Technologies

TruDisk | TruPulse | TruDisk Green | TruFiber

**Important:**  
Only available as on-site course.



## Application courses

**Application Technology**

Individual content

**Objectives**  
You will gain an overview of laser welding and cutting by using the solid-state laser, and will be able to assess different welding results and optimize parameters.

**Learning content**

- Basic knowledge of laser welding and cutting
- Material properties of selected metals
- Influence of the welding parameters on the welding result
- Overview of BrightLine Weld

**Prerequisites**  
We recommend visiting a laser training (i.e. TruDisk or TruPulse laser) in advance.

— Dates on demand: Contact us!

## Your way to the application professional:

- 1

You will have a personal consultation in which we discuss your requirements and check the feasibility.
- 2

In advance you will learn the basics via e-learning – time and place independent.  
**DURATION: 0.5 DAYS**
- .OPTIONALLY

3

On the first day you will learn the basics of laser and laser control.  
**DURATION: 1 DAY**
- 4

During the on-site learning you will learn the basics of laser welding or cutting and you will work directly at the laser device.  
**DURATION: 2 DAYS**
- .OPTIONALLY

5

For special applications (i.e. BrightLine Weld, Crossjet...) – we will go into it.  
**DURATION: 1 DAY**

## Technology course application

COURSE DATES	DURATION	LANGUAGE	FROM	TO
German/English				
Application	2 – 4 days	DE/EN		On request

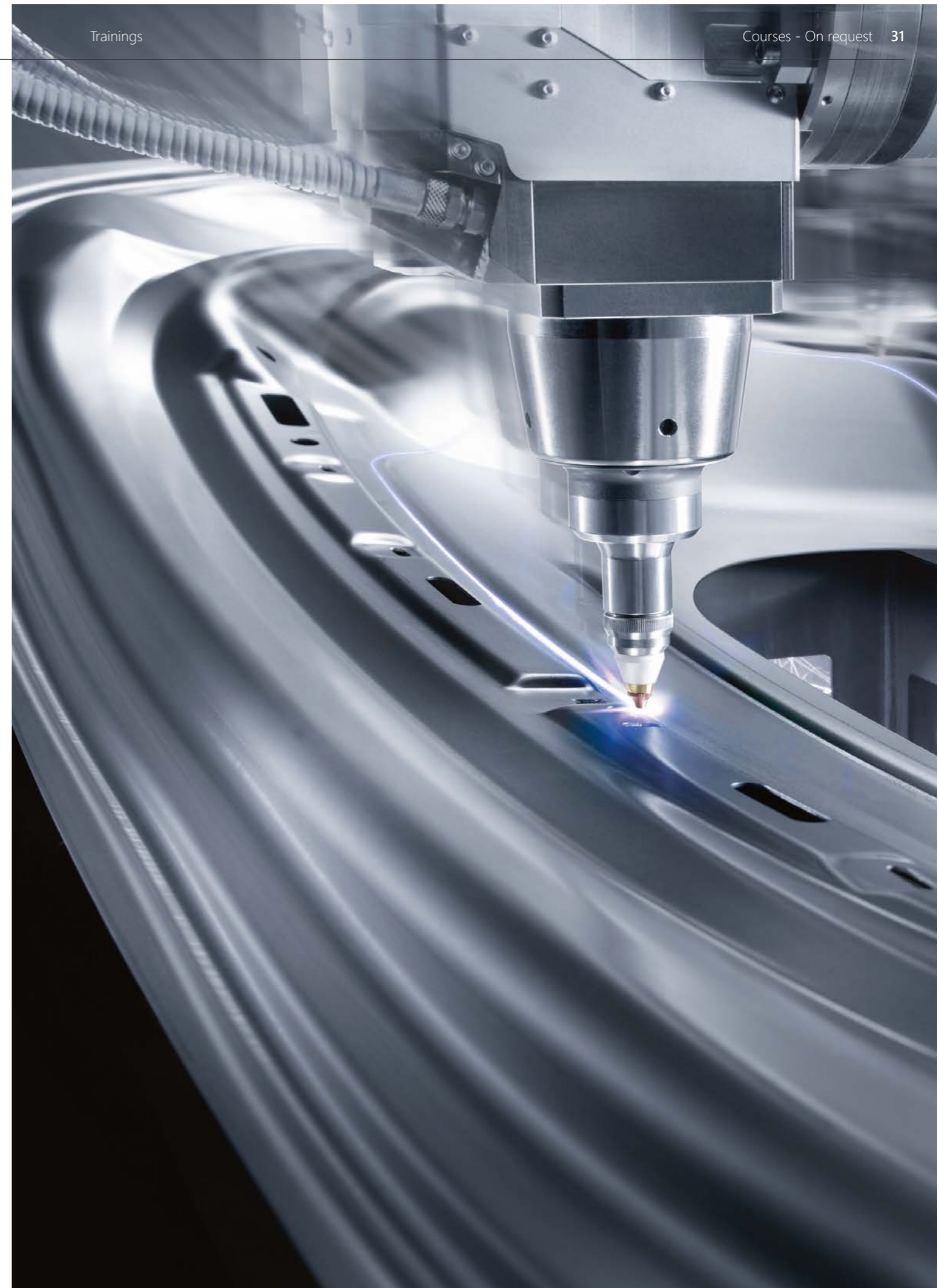
# Courses on request

In addition to our catalog courses, we offer individual special courses, just for you! The course content will be created in close collaboration with you.

Special courses can be planned depending on the availability of rooms and trainers. We offer dates for these courses on request. Please contact us. We will need to know your desired date and the number of participants.

Please contact us as soon as possible if you require any further information on these. Contact us. We will be happy to put together an individual plan to meet your requirements.

**Individual  
content**





# Your path to knowledge

This training catalog provides you with a first impression of the variety and content of TRUMPF courses. We hope that classification according to technologies and competence levels has enabled you to find a course which meets your personal requirements, learning objectives and prior experience. We look forward to the opportunity to welcome you and train you soon at the TRUMPF Laser Training Center.



## Course registration

Please contact us by telephone or by email. We will develop a non-binding offer for you.

Since the number of places available for each training course is limited, we recommend that you gather the information you require at your earliest convenience and analyze the requirement at your company.

## Further information

You can find further information regarding the varied course program in the training portal at [www.trumpf.com](http://www.trumpf.com).

TRUMPF has the right offer to meet all your requirements and suit your personal situation.

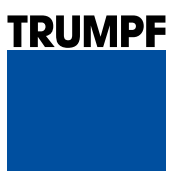
## Contact the TRUMPF Laser Training Center

Should you have any questions about the trainings we offer, would like to request an individual course or have any other suggestions for us – the TRUMPF Laser Training Center team will be happy to help. Please call us directly or send us an email.

TRUMPF Laser Training Center  
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78655 Dunningen/Germany

Telephone  
+49 (0)7422 515-590  
Email: [training.tls@trumpf.com](mailto:training.tls@trumpf.com)

TRUMPF is certified to ISO 9001  
(Find out more: [www.trumpf.com/s/quality](http://www.trumpf.com/s/quality))



TRUMPF Laser- und Systemtechnik GmbH  
[www.trumpf.com](http://www.trumpf.com)