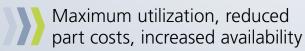


# Beam guidance

- Integrated in the compact laser housing
- Depending on the laser type, up to 6 laser outputs possible
- Operation of multiple machines in the TRUMPF LaserNetwork using just one laser
- Individually customized configuration of laser outputs:
  - 100% laser power with time sharing
  - 50% or 33% laser power with energy sharing
- Innovative beam guidance components:
  Low-spatter welding with BrightLine Weld for top-quality weld seams





### Laser light cables and focusing optics

- Easy change of the laser light cable (LLK) with plug and play
- Layout of the LLK can be optimally modified to the system concept
- Convenient cooling of the focusing optics and LLK plugs via the laser, no separate chiller required
- Interface for intelligent TRUMPF focusing optics: Programming and supply managed using the laser control

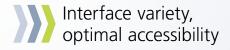






Quick change and flexible layout of the laser light cables





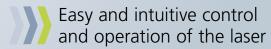
### **Control**

- Interface variety for the control of the laser:
  - Fieldbus with copper wiring: Profibus, DeviceNet, EtherCAT, Interbus, ProfiNet, EtherNet/IP
  - Fieldbus with fiber-optic cable (FOC): EtherCAT FOC, Interbus FOC, ProfiNet FOC, Interbus OPC FOC
  - Real-time interface, parallel I/O interface or SYNC I/O interface
- Easy and ergonomic access to the user interfaces
- Clear assignment and layout of cable bundles consisting of LLK, cooling hoses and control cables to the machine

#### **Software TruControl 1000**

- Simple control and operation of the laser using an operating panel or TruControl Remote software
- User-friendly programming of ramps and pulse shapes
- Management, control and visualization of the interface layout
- Diagnostics: Display and monitoring of operating statuses, issue of warning and fault messages
- Adjustable energy-saving modes and timer functions
- Optional TruControl modules: Modulated welding, Quality Data Storage, CutAssist, live power display





## Flexible cooling concept

- Optimal robustness and service life with the use of an internal cooling water circuit to cool the optical components
- Direct connection of the laser to the mains water possible:
  - Use of an integrated heat exchanger (standard), cooling water temperature range of 5°C to 28°C
  - Use of an integrated compressor chiller (optional in power range 3 to 6 kW), cooling water temperature range of 5°C to 38°C, no external chiller required, complete monitoring in TruControl for maximum availability



