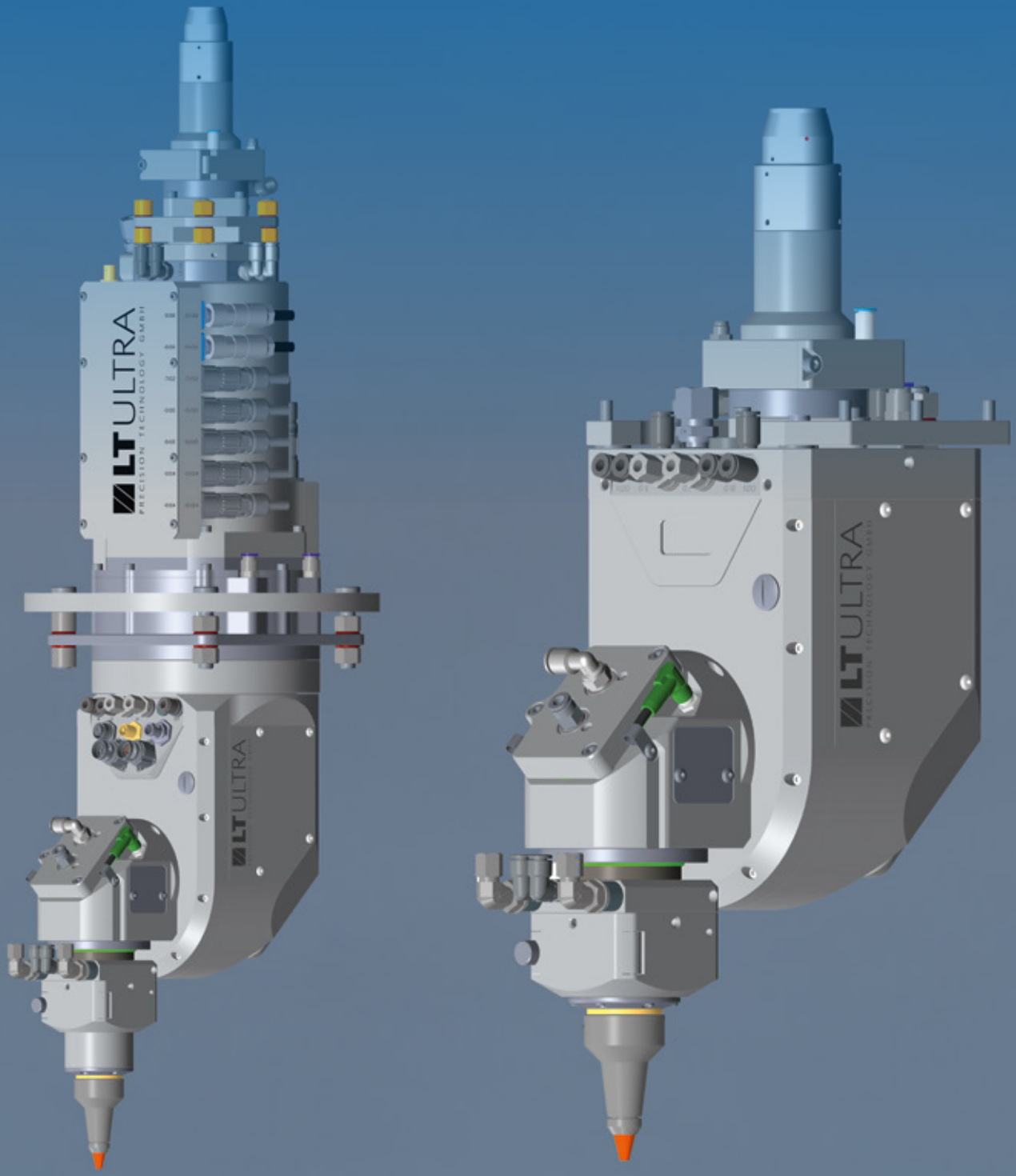
3D LASER PROCESSING HEADS



LT ULTRA
OUR PROFESSION IS PRECISION

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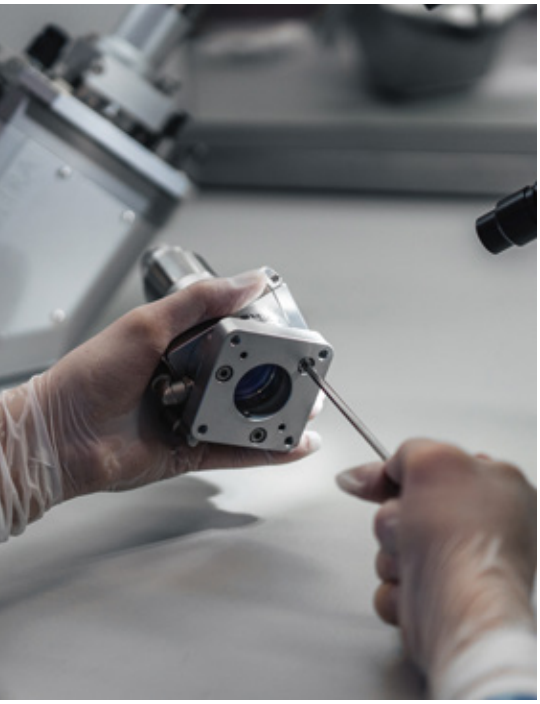
Our 3D laser processing heads are a special product area within our production for ultra-precision components. This is where ultra-precise & highly dynamic optics and mechanics meet the requirement to withstand harsh environments.

From the combination of an endlessly rotating rotary axis, a swivel axis and a linear axis for short & fast compensation movements, laser processing heads can be assembled **in single-axis, two-axis or three-axis versions** to suit the respective laser processing machine.

For **two decades**, we have been continuously developing our laser processing heads so that they can withstand the sometimes extreme working environments and offer maximum precision. We can proudly say that even laser heads from the first generations are still in continuous use today.



Our current series offers you:

- Water-cooled direct drives and optics, stainless steel cooling circuits and an optimized, compact design enable high dynamics and performance with high stability and durability.
- Good availability of spare parts.
- Easy to upgrade or replace, as we have created a modular and standardized system.
- Up to 3 axes in various combinations
  - Endlessly rotating rotation axis
  - Swivel axis +/135°
  - Linear axis +/- 10mm

This results in the following designations for heads from this series:

- **SH35T** – **S**wivel **H**ead
- **LH35T** – **L**inear **H**ead
- **RSH35T** – **R**otary **S**wivel **H**ead
- **RSLH35T** – **R**otary **S**wivel **L**inear **H**ead

- Manufactured in Germany, high level of vertical integration, strict quality assurance
- Shifting the focus position using adaptive optics
- Integrated collision protection clutch
- Interface for distance sensors

Technical details under:

We also offer **customized solutions** and supply many well-known manufacturers worldwide with:

- Individual variants and designs, e.g. inclusion of other tools such as scanners, integration of interchangeable interfaces, CO2 applications, etc.
- Sub-components, such as
  - individual motorized axes
  - optomechanical assemblies
  - ultra-precise mechanical components
  - (adaptive) optics

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