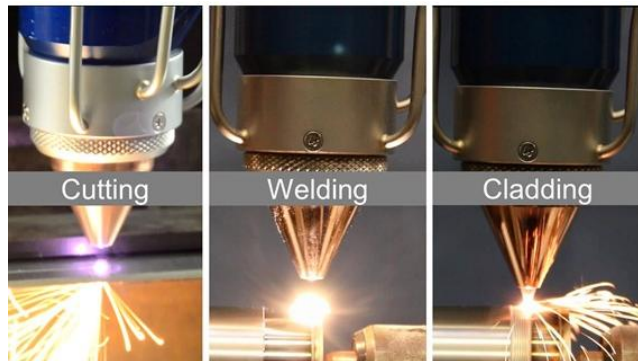


## Portfolio

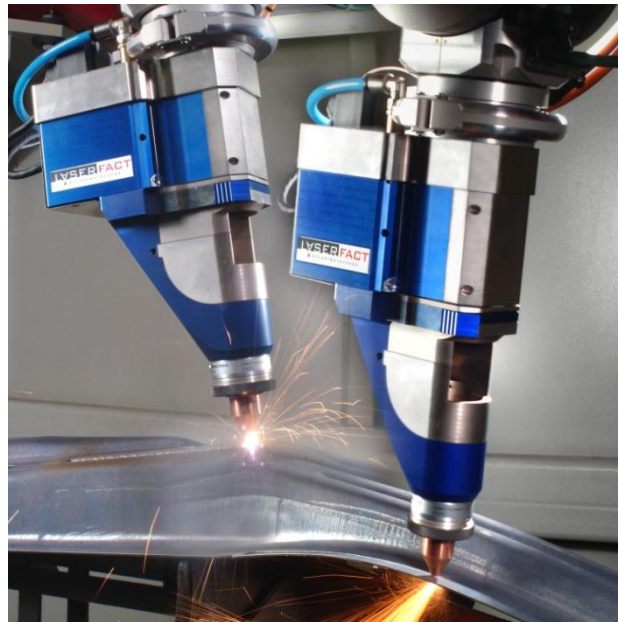
Laserfact GmbH develops, produces and delivers beam tools for flexible manufacturing with lasers.

The aim of Laserfact is the provision of laser processing heads which perform extremely reliably, efficiently and flexibly in industrial laser applications.

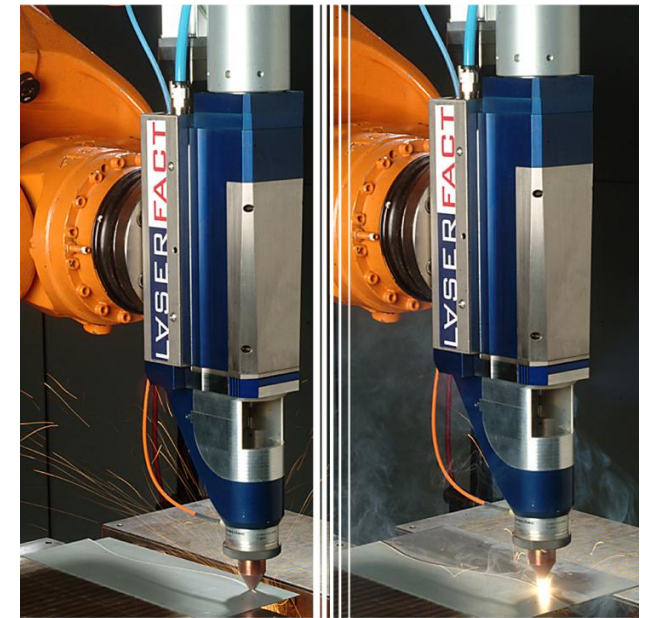
By using sophisticated optics and nozzle design combined with solid engineering the products of Laserfact achieve optimum performance with striking simplicity in construction, operation and application.



Laser cutting and welding application



## Laser processing heads for combined applications by the inventor of the combination process



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**1 Laser**

**1 Machine**

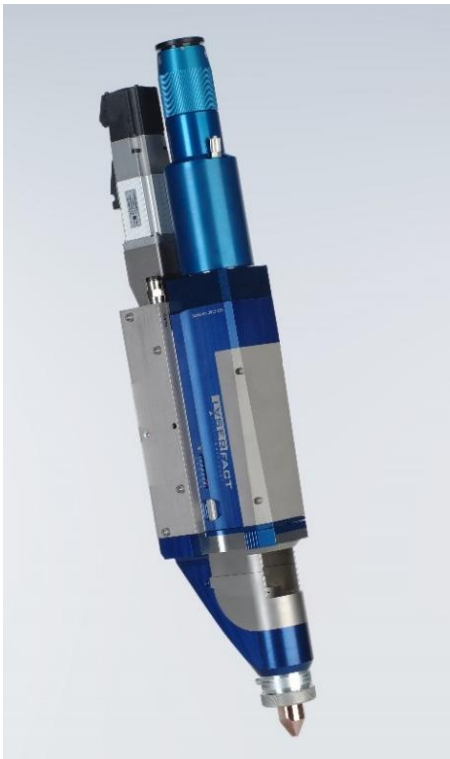
**1 Tool**

**7 Applications**

- ▷ Laser cutting
- ▷ Laser welding
- ▷ Laser cladding
- ▷ Laser soldering
- ▷ Laser hardening
- ▷ Laser marking
- ▷ Laser alloying / dispersing

## F2-Y-CombiCut

Laser cutting and welding with one tool



- ▷ Software-controlled process change on demand.
- ▷ High manufacturing accuracy due to constant Tool-Center-Point (TCP)
- ▷ Slender design for 3-D accessibility
- ▷ Autonomous nozzle (Patent Fraunhofer ILT)
- ▷ Effective Crossjet
- ▷ Focal length 200-300 mm
- ▷ Reliable adjustments (x, y, z)
- ▷ Capacitive height control
- ▷ Fast response z-axis drive

## F2-Y CombiClad

Laser welding and cladding with one tool



- ▷ Additive manufacturing integrated in the process chain.
- ▷ Cladding and build-up of metallic structures.
- ▷ Provision of filler material for demanding welding tasks.
- ▷ Automated and fast change between the two laser applications using Rapid powder switch (<200 ms).
- ▷ Slender design for 3-D accessibility
- ▷ Autonomous nozzle (Patent Fraunhofer ILT)
- ▷ Effective Crossjet
- ▷ Focal length 200-300 mm
- ▷ Reliable adjustments (x, y, z)
- ▷ Fast response z-axis drive

## F2-Y Combi Cut&Clad

Laser cutting, welding and cladding with one tool



- ▷ 1 Laser - 1 Machine - 1 Tool – 3 Applications
- ▷ No retooling, repositioning or reclamping during process changeover between cutting, welding and cladding operations.
- ▷ Maximum system utilisation, easy reconfiguration.
- ▷ Significant cost reduction regarding investment, floor space, organisation and operation.