FINECUTTER

The FineCutter with integrated camera monitoring and coaxial illumination is used for high-precision applications where laser power of up to 500 W are required. A outstanding beam quality of the beam source and the high imaging quality of the optical components are a prerequisite for the manufacture of parts which are becoming ever-smaller and which possess very complex geometry. Clearance widths of 10 µm are state-of-the-art for Precitec. The Finecutter for Flat Bed Systems, on the other hand, is a compact solution for the cutting of different materials in the thin metal sheet sector. Prototypes and smaller production runs can be produced quickly with a high degree of accuracy, at a reasonable cost and with short setup times.

DISTANCE MEASUREMENT

- constant distance to work piece
- compensation of material tolerances
- constant cutting quality

MONITORING WITH CAMERA

- Online monitoring of cutting process via camera
- Recording and saving of camera data
- Integrated, adjustable illumination for solid-state laser applications

EFFICIENT

- burr-free cutting, even in the case of complex 2D and 3D components
- fast and precise working
- high cutting speeds with integrated distance sensors
- integrated vertical adjustment
- qualified for ultrashort pulse lasers

FLEXIBLE

- slim line head – modular system
- FineCutter for plug & play system
- optical components customized for your system
- customer-specific beam guiding systems

USER FRIENDLY & SAFE

- simple laser beam adjustment
- lens adjusts under pressure
- fast change of the protective window
- high-quality optics
- different connecting adaptors for lasers available

FineCutter

FineCutter for flat bed systems

MEASURE CONTROL PROCESS MONITOR

PRECITEC THE SMART WAY TO LASER

TECHNICAL SPECIFICATIONS OF THE FINECUTTER

	FineCutter incl. illumination	FineCutter for flat bed systems
max. laser power	500 W	
wave lengths	1,064 nm	
focal lengths	50, 80, 125 mm	
max. free aperture	16 mm	
axial length	415 mm (f=50 mm), 437 (f=80 mm), 482 mm (f=125 mm)	107 mm (f=50 mm), 129 mm (f=80 mm), 174 mm (f=125 mm)
weight	3.5 – 3.9 kg	1.1 – 1.4 kg
head diameter	63.5 mm	
vertical adjustment	+0.5 / -2.5 mm	

1 focusing adjustment / monitoring camera

2 illumination, light intensity adjustable

3 mirror beam bender with connector for collimator / beam entrance

4 upper part
X/Y adjustment of the lens, adjustment of the focal position with integrated lens position

5 lower part
with integrated protective glass with nozzle for cutting gas connection

Fig.: FineCutter f = 50 mm, without distance sensor, crosshairs software is available

1 fiber socket

2 adjustable collimation as compensation for fiber plug tolerances (±2 mm)

3 upper part
X/Y adjustment of the lens, adjustment of the focal position with integrated lens system

4 lower part
with integrated protective glass with nozzle for cutting gas connection

Fig.: FineCutter f = 80 mm, with distance sensors

The PRECITEC GROUP provides intelligent and reliable solutions for material processing with lasers and optical measuring technology. We are not just a system and component supplier, but also your professional partner for smooth processing.

PRECITEC GmbH & Co. KG | Draisstr. 1 | 76571 Gaggenau | Germany
phone: +49 (0)7225 684 0 | fax: +49 (0)7225 684 900 | mail: precitec@precitec.de | web: www.precitec.com

08/Bg/02.05.2018