

LASER CUTTING HEAD HP SSL

The HP SSL cutting head is designed for use in flat bed systems and pipe-cutting machines with fiber-coupled lasers.

DISTANCE MEASUREMENT

- constant distance to work piece at any operating temperature
- compensation of material tolerances
- constant cutting quality

PIERCING MONITORING

- measure of piercing times
- working with actual piercing times
- huge cycle time savings

CUT INTERRUPTION

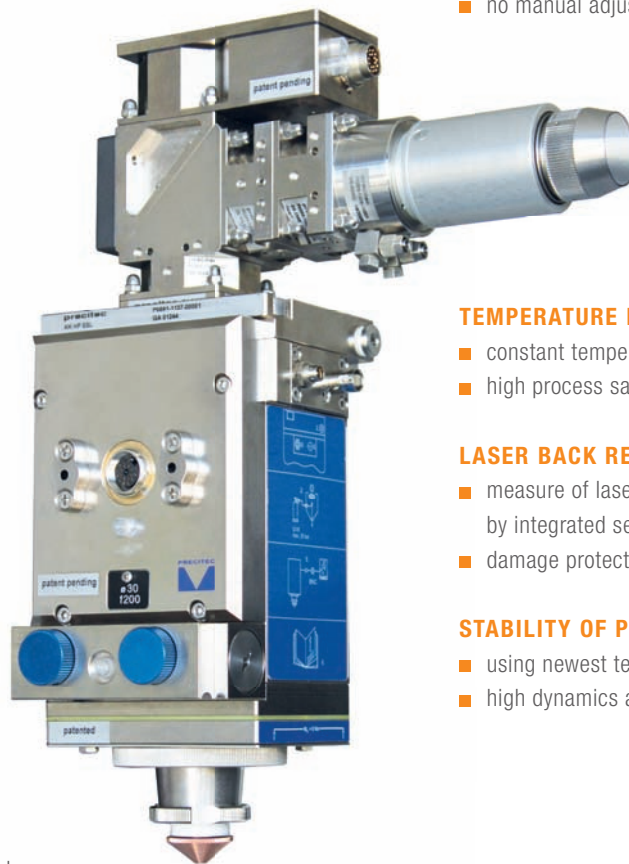
- sensorics recognizes cut interruptions
- signal to CNC

PROCESS RADIATION

- measure of process radiation
- provide data over user interface
- identification of focal position

PROTECTIVE GLASS MONITORING

- detection of larger amounts of spatter and damages to the focusing lens
- online monitoring of pollution degree
- fast change of protective glass cartridge
- attendance check of protective glass cartridge



CARTRIDGE MONITORING

- attendance of cartridge
- identification of focal lengths (cartridge)
- no loss of time

MOTORIZED FOCAL POSITION ADJUSTMENT

- cutting of different material thicknesses in the same cycle
- dynamic piercing
- no manual adjustment of focal position

TEMPERATURE MONITORING

- constant temperature monitoring of sensor insert
- high process safety

LASER BACK REFLECTION RADIATION

- measure of laser back reflection radiation by integrated sensorics
- damage protection of fiber

STABILITY OF PROCESS

- using newest technologies and materials
- high dynamics at constant process stability

SKÄRNING XIGARA SNIJDEN CORTE KES
切斷 DÉCOUPE CUTTING SCHNEIDEN PE
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MEASURE

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CONTROL

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PROCESS

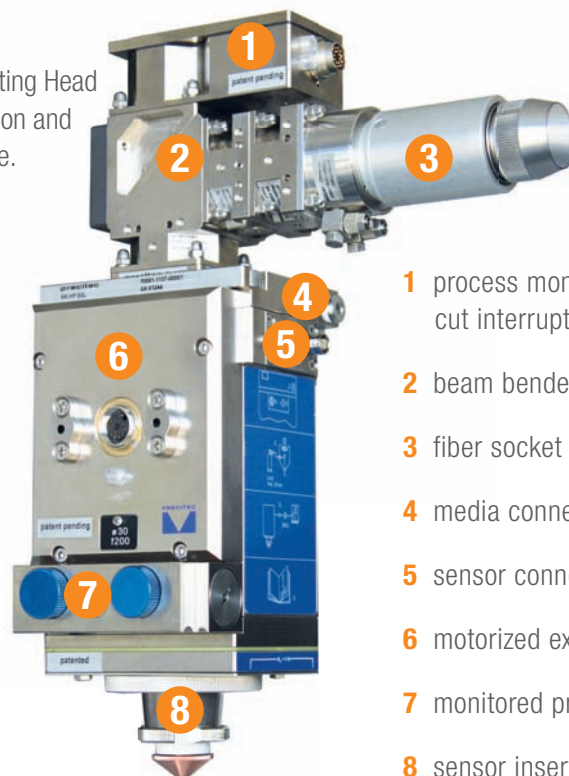
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MONITOR

TECHNICAL SPECIFICATIONS OF HP SSL CUTTING HEAD

max. laser power	6 kW (with wave lengths of 900 to 1080 nm)
electronics	Lasermatic®
focal lengths collimation	75 mm, 100 mm
focal lengths focusing	125 mm, 200 mm, 250 mm (250 mm with extension adapter)
lens diameter	30 mm
max. free aperture	26 mm
weight	4.5 kg (manual version with collimation F100 mm, focusing F125 mm)
vertical adjustment range	-10 to +10 mm (motorized version, focusing F125 mm / F150 mm)
	-15 to +5 mm (motorized version, focusing F200 mm / F250 mm)
dimensions (W x T x H)	103 x 89 x 349 mm (incl. collimation 75 mm, fiber connection QBH)

On the right side the HP SSL Cutting Head is displayed with angled collimation and motorized exchangeable cartridge.



- 1 process monitoring (process radiation, cut interruption, piercing monitoring)
- 2 beam bender
- 3 fiber socket
- 4 media connections for air cooling
- 5 sensor connection
- 6 motorized exchangeable cartridge (focusing lens)
- 7 monitored protective glass cartridge
- 8 sensor insert with ceramic part and nozzle

The given data was generated for a typical application and may be different given other circumstances. Furthermore misprints, changes and/or innovations may lead to differences in the listed measurements, technical data and features. Therefore all information is non-binding and technical data, measurements as well as features are not guaranteed by information in this product information.

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