

Perfectly Focused on Highest Productivity

Highyag laser cutting head BIMO-FSC

Highyag has developed industry-leading tools for laser material processing including processing heads for cutting, welding, and brazing with 1 micron lasers for twenty years. Thousands of processing heads have been delivered worldwide. In 2012, Highyag has set a benchmark in laser cutting technology by offering a fully-automated, machine controlled adjustment of focus diameter and focus position. The increasingly demanding requirements from the flat sheet cutting machine industry has driven that development. Different sheet thicknesses and different materials must be processed without manual interaction in order to boost productivity. Highyag's laser cutting head BIMO-FSC has met this need as the first in the market and hence offers the highest productivity in manufacturing.

In its new version, the BIMO-FSC with machine controlled adjustment of focus position and focus diameter is rated for a laser power of up to 6 kW. Therefore, productivity can be increased even more. The BIMO-FSC is also available with machine controlled

adjustment of focus position only. This variant is rated, in its latest version, for a laser power of up to 8 kW.

In addition to productivity, the excellent cut quality is a competitive advantage of the BIMO-FSC. Its optical design enables a minimization of the laser-power induced focus shift and a diffraction-limited imaging quality. The cutting results from MicroStep, a Bratislava-based machine builder, demonstrate the impressive cutting-edge capabilities of the BIMO-FSC. MicroStep has used it in their machines for approximately two years.

Matthias Korn, Managing Director at MicroStep Photonics GmbH, MicroStep's subsidiary in Germany, emphasizes that he is very satisfied with the capabilities and the cut quality of the BIMO-FSC: "The machine controlled adjustment of focus position and focus diameter allows higher productivity for our customers and hence gives a competitive advantage. And the cut quality is excellent – the cutting samples speak for themselves."

Other important criteria for flat sheet cutting machine operators are lifetime and maintenance of the components. A long lifetime of the BIMO-FSC is ensured by an advanced mechanical sealing which prevents contamination of the optics. The cover slide under the focusing lens is fitted with a special drawer which enables user-friendly replacement.

With the laser cutting head BIMO-FSC, Highyag reinforces its leading position in the laser material processing industry and makes it the first choice for flat sheet cutting machines with 1 micron laser sources including fiber lasers, disc lasers, and diode lasers.

About Highyag

Highyag Lasertechnologie GmbH (short "Highyag"), a subsidiary of II-VI Incorporated, is one of the world's leading suppliers in the laser material processing industry. Its innovative laser processing heads and beam delivery systems enable the efficient use of the laser beam for the most demanding advanced manufacturing applications



Highyag laser cutting head BIMO-FSC
(Source: Highyag Lasertechnologie)

such as laser cutting, laser welding and laser brazing. Highyag is represented internationally with headquarters and production located near Berlin and worldwide sales offices.

HIGHYAG Lasertechnologie GmbH

Hermann-von-Helmholtz-Straße 2
14532 Kleinmachnow Germany
Telefon: +49 33203 883-0
Telefax: +49 33203 883-22
E-Mail: highyag.info@ii-vi.com
www.highyag.com

BLECHEXPO, HALL 1, BOOTH 1304



Cutting samples of the BIMO-FSC with machine controlled adjustment of focus position and diameter; provided by MicroStep: 6 mm stainless steel, 1.5 mm copper, 3 mm brass, 15 mm aluminum, 25 mm mild steel (bottom to top).

New Multi-Kilowatt Fiber Laser Platform

Manufacturer: Coherent.

Product: All new Laser platform "Highlight FL" capable of delivering output powers to 4 kW and beyond. The series employs Coherent's unique modular architecture, which allows OEM customers and system integrators alike the choice of systems with turn-key operation, or modules to build their own custom fiber laser systems.

Features: The modular architecture combined with Coherent's factory service training and qualification program enables OEM customers the ability to benefit from the worldwide support infrastructure and the option to directly provide service to their end customers. The new lasers at all power levels are available with a range of output delivery fiber options optimized for cutting and welding of a broad spectrum of metals and alloys. The platform is covered by an industry first "BRIGHT" warranty. This Back Reflection Immunity Guarantee provides assurance of Higher Throughput and lower cost.

Coherent is a vertically integrated manufacturer, incorporating its own laser diode pumps and active fibers for the highest performance, reliability and quality at a low cost of operation. The modular design simplifies service, and ensures high system uptime. The worldwide logistics, applications development, and field integration team ensure help is rapidly available in many regions around the globe.

Coherent (Deutschland) GmbH

Dieselstr. 5b
64807 Dieburg, Germany
Phone: +49 (0)6071 968-0
Fax: +49 (0)6071 968-499
E-mail: sales.germany@coherent.com
Website: www.coherent.de
www.coherent.com

BLECHEXPO, HALL 3, BOOTH 3218

Certified Laser Safety Curtain

Manufacturer: Spetec.

Product: New laser safety curtain "LP 12", available in different sizes and designs to meet customer requirements.

Features: The material used for the laser safety curtains is manufactured using a sandwich technique. In other words, a non-flammable, light-proof material is applied to an inelastic substrate fabric that gives the curtain its mechanical stability. The laser safety curtain has been tested and certified by DIN Certco. The protection classes are tested according to EN 12254 and certified at different wavelengths: 180–315 nm (D AB 8, IR AB4, M AB6); >315–1050 nm (DIR AB5, M AB7); >1050–1400 nm (D AB5, IR AB9, M AB8); >1400–11000 nm (DI AB3). Large sheets are used and Velcro tape is sewn on. The curtain is hung using the Velcro tape and additionally secured with screws. This allows the laser safety curtain to be adapted to fit optical tables and other housings.

The curtains can be made to any length or width required. The ready-to-fit curtains are mounted on a metal profile that is secured to the ceiling. Another option is to fit the laser safety curtain in a metal profile frame. When fitted with casters, this forms a mobile laser safety screen.

Spetec GmbH

Berghamer Str. 2
85435 Erding, Germany
Phone: +49 (0)8122 99533
Fax: +49 (0)8122 10397
E-mail: spetec@spetec.de
Website: www.spetec.de
