



**HFL RANGE**

**Fiber Laser Cutting**

# HACO Fiber lasers

## The Power of Specialization with a Unique HACO Touch

At HACO, we work closely with specialized partner companies to produce fiber lasers that perfectly match the diverse needs of our customers across various industries. Through these strategic collaborations, we provide solutions that not only meet the highest quality standards but also align seamlessly with the HACO Group's vision of innovation and customer focus.

Based on the customer's specific requirements regarding technology, delivery time, and price, we select the most suitable manufacturer. A laser with the HACO logo and in the familiar HACO colors truly represents added value. Our experienced team of specialists plays an active role in development and production improvement, ensuring a seamless implementation. Our proactive HACO approach starts early in the project phase at the customer's site and continues through to delivery—and beyond.

HACO employees are present at the factory during various stages of each machine's production process. This allows us to personally monitor quality and ensure that every machine leaving the factory fully meets the agreed specifications. And even after installation, we remain your trusted partner with our comprehensive service and support.

By choosing a HACO fiber laser, you are not only selecting a high-quality machine but also benefiting from the expertise and commitment you have come to expect from HACO.

### SERVICE & SUPPORT

Whether you need service for your metalworking machines, obtaining **essential tooling** and **spare parts**, performing **maintenance** or providing **training**; we are here for you. With a dedicated team and in-depth experience in metalworking, we guarantee expert support to ensure your machines perform at their best.

#### HACO Service promises:

- Craftmanship and expertise
- Speed of response
- Dedicated customer support

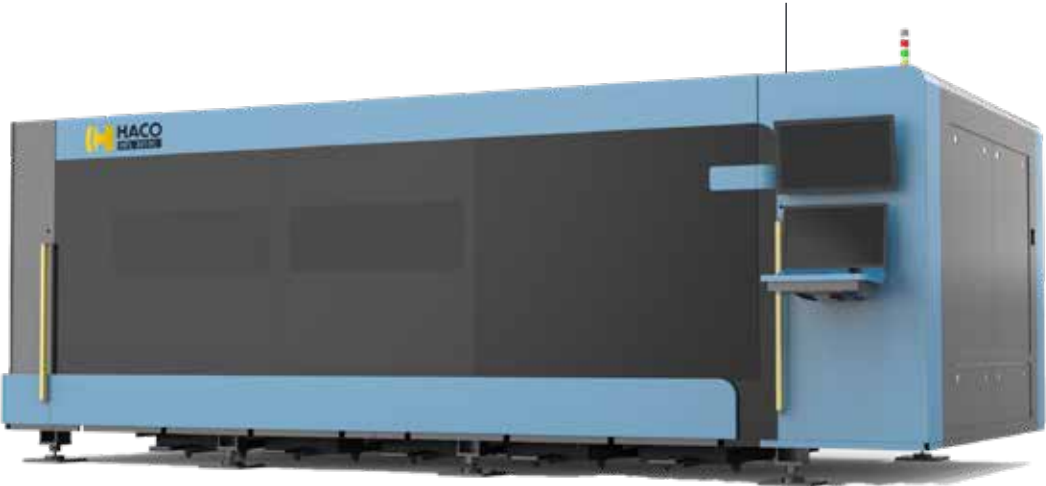
#### Reach out to us!



# HFL – C standard range

The HFL 1510 C and HFL 3015 C are among HACO's most space-efficient fiber laser cutting machines. Their single-table design significantly reduces the installation area needed. With a motorized door and sliding table, these models ensure effortless loading from the front, so the machine can be placed conveniently in a corner or with its back against the wall.

HFL 3015 C



#### Advantages:

- Particularly compact machine equipped with a single table to save space.
- Motorized door for easy loading and unloading.
- Attractively priced, perfect for schools or prototypers.

	Power [kw ]	X axis travel [mm ]	Y axis travel [mm ]	Z axis travel [mm ]	Max simultaneous speed[m/min ]	Max acceleration [g ]	Positioning accuracy [mm/m ]	Precision in repetition [mm/m ]	Length [mm ]	Width [mm ]	Height [mm ]	Maximum table weight tons ]
HFL 1510 C	3, 6	1500	1000	95	100	1.0	+/- 0.05	+/- 0.03	2.000	2.400	2.300	0.5
HFL 3015 C	3, 6	3000	1500	95	100	1.0	+/- 0.05	+/- 0.03	5.100	2.400	2.300	1

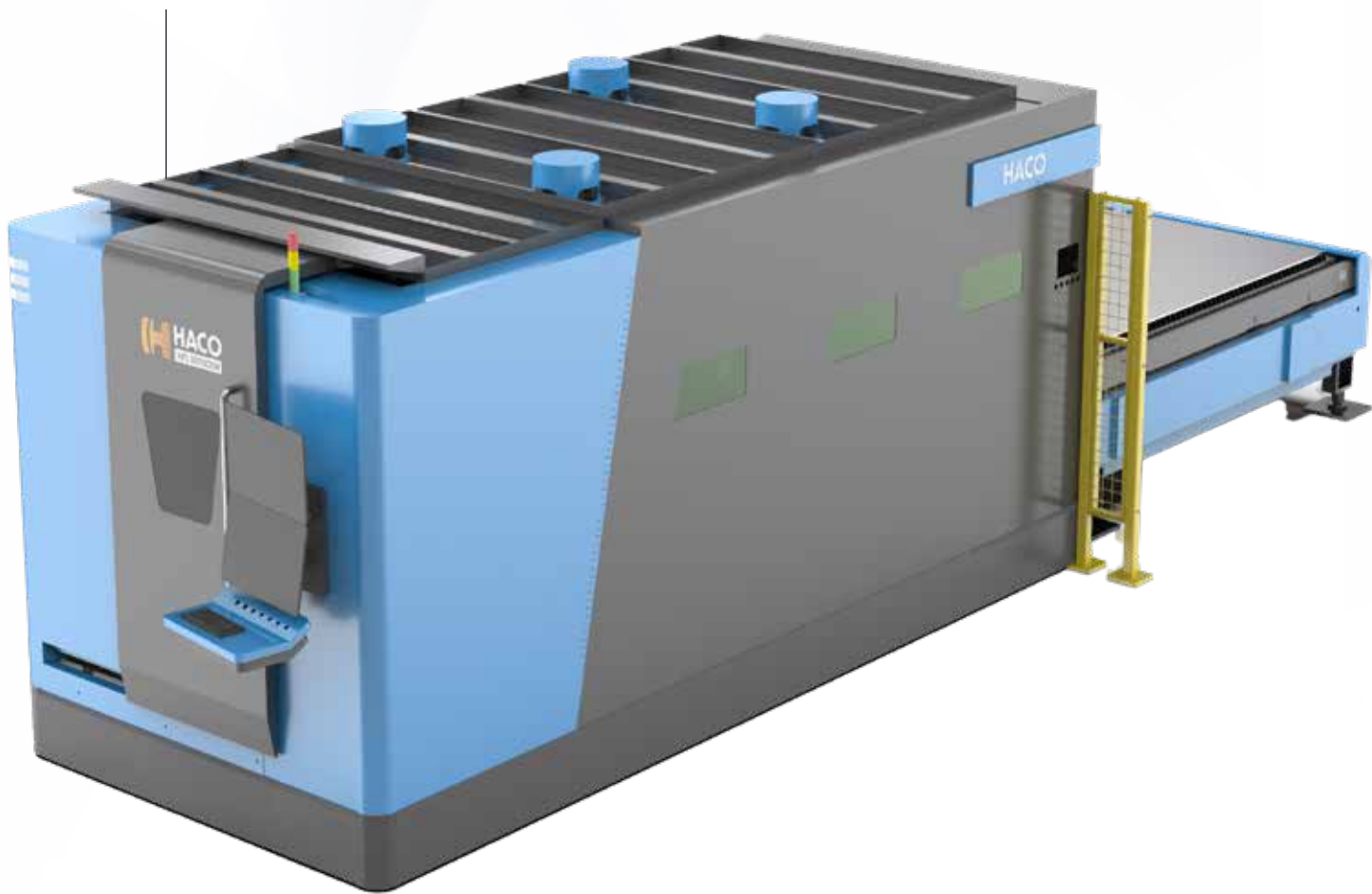
# HFL-CE & CEW standard range

The HFL 3015 CE and CEW are advanced fiber laser cutting machines equipped with dual interchangeable tables. They are available with 3kW, 6kW, and 12kW power sources. Featuring a sleek, modern design and a fully enclosed cutting area, these machines ensure maximum safety for operators by providing complete protection against radiation exposure.

## Standard equipment

- Robust, welded, tubular and annealed table base
- Y-axis beam in extruded aluminium
- Multi-compartment structure with CNC-controlled doors, designed to enhance suction efficiency by precisely targeting the cutting areas.
- Integrated camera and display system for real-time monitoring of the cutting process
- An air-conditioned cabin designed to store the source in optimal operating conditions, keeping it isolated from the workshop environment
- Safety device around the table with light curtain and pneumatic door.
- Proportional vavle system for precise regulation of Oxygen, Nitrogen and Air gas pressures

HFL 3015 CE



	Power [kW]	X axis travel [mm]	Y axis travel [mm]	Z axis travel [mm]	Max simultaneous speed [m/min]	Max acceleration [G]	Positioning accuracy [mm/m]	Precision in repetition [mm/m]	Length [mm]	Width [mm]	Height [mm]	Maximum table weight [tons]
HFL 3015 CEW	3, 6, 12	3010	1505	290	170	2.8	+/- 0.05	+/- 0.03	9.100	2.320	2.460	1.40
HFL 3015 CE	3, 6, 12	3050	1550	290	170	2.8	+/- 0.05	+/- 0.03	9.100	3.120	2.200	1.40
HFL 4020 CE	3, 6, 12	4050	2050	290	170	2.8	+/- 0.05	+/- 0.03	11.200	3.620	2.200	2.50
HFL 6020 CE	3, 6, 12	6050	2050	290	170	2.8	+/- 0.05	+/- 0.03	16.560	3.620	2.200	3.70
HFL 6025 CE	3, 6, 12	6050	2550	290	170	2.8	+/- 0.05	+/- 0.03	16.560	4.120	2.200	4.70



## Optional equipment

- BTL 642 cutting head with FSCUT 8000 CNC for a wide range of additional applications
- CypNest or HacoSoft Laser nesting software
- Workshop scheduling module integrated into HacoSoft Laser software to enhance internal organization, optimize material usage, and manage off-cuts efficiently
- Automatic programming module for assemblies or sub-assemblies to save programming time
- QR code reader to open cutting programs directly on your machine
- Increased dust storage capacity for fume filtration system for SIDEROS fume extractor
- ATEX Fume extraction system



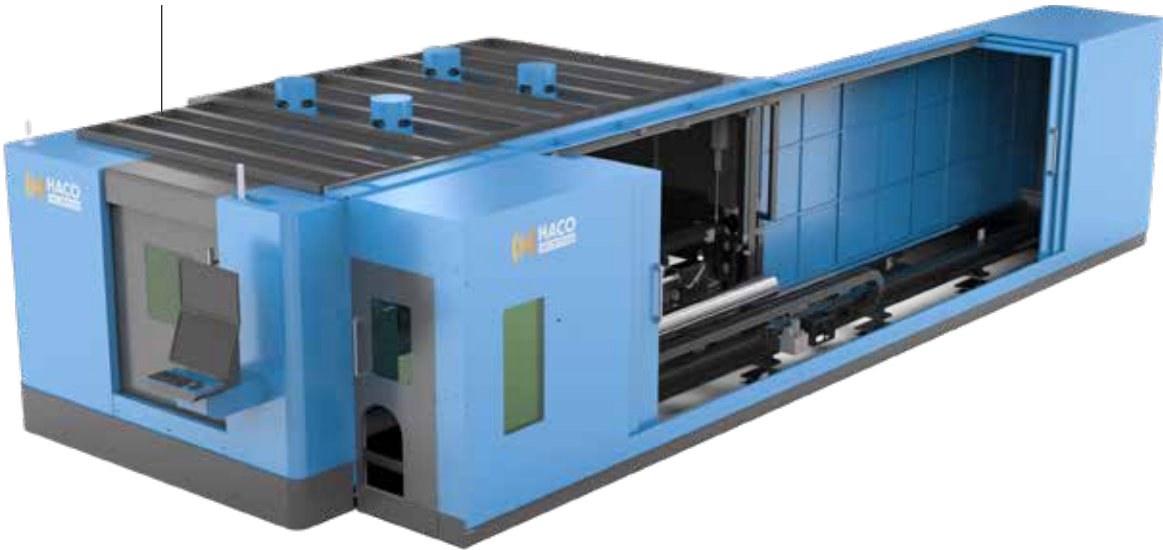
# HFL CEG standard range

The HFL CEG range offers all the benefits of the HFL-CE model, with the additional advantage of two chucks positioned on the right side of the machine. These dual mandrels allow efficient handling and cutting of tubes. The HFL CEG is extremely versatile, allowing you to modernize your cutting processes on both sheet metal and tubes.

### Advantages:

- Enhance versatility by efficiently managing both sheet metal and tubing cutting requirements with a single solution.
- Expands part design possibilities, allowing for greater flexibility and creativity in part production.
- Innovative sliding door design for flexible side or top tube loading.

### HFL 3015 CEG



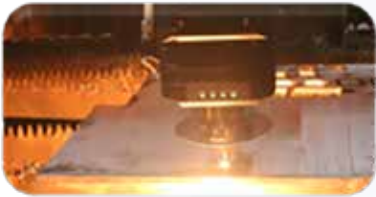
	Power [kW]	X axis travel [mm]	Y axis travel [mm]	Z axis travel [mm]	Max simultaneous speed[m/min]	Max acceleration SHEET [g]	Max acceleration TUBE [g]	Positioning accuracy [mm/m]	Precision in repetition [mm/m]	Length [mm]	Width [mm]	Height [mm]	Maximum table weight [tons]	Tube length [mm]	Max tube weight [kg]	Max tube size [ø or mm]
HFL 3015 CEG	3, 6, 12	3030	1520	290	150	2.0	1.5	+/- 0.05	+/- 0.03	10.000	4.000	2.200	1.40	6.000	200	200
HFL 4020 CEG	3, 6, 12	4030	2020	290	150	2.0	1.5	+/- 0.05	+/- 0.03	11.200	4.500	2.200	2.50	6.000	200	200
HFL 6020 CEG	3, 6, 12	6030	2020	290	170	2.0	1.5	+/- 0.05	+/- 0.03	16.560	4.500	2.200	3.70	6.000	200	200

# CNC Control

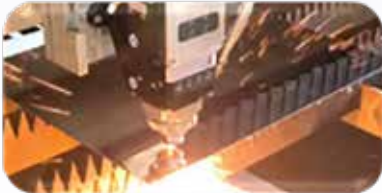
The BLT series cutting head and the FSCUT numerical control system are both developed by the same manufacturer Bochu, offering numerous benefits. This integration ensures smooth coordination between the head control and feedback systems. Depending on the power rating and options selected, 4 configurations are available:

- FSCUT2000 with CypCut E, (1,5-3 kW)
- FSCUT4000 with CypCut E, (6 kW)
- FSCUT6000 with CypCut PRO, (12-15 kW)
- FSCUT8000A-B or C with HypCut. (option)

Drawing and nesting is possible directly from the machine console. Some of the features of our numerical controls :



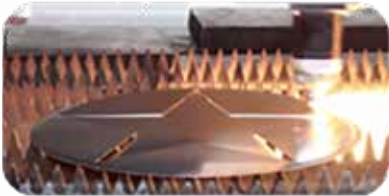
When the machine stops, it is possible to resume cutting at the point where it stopped.



Significantly shortens machining time for parts with a lot of holes.



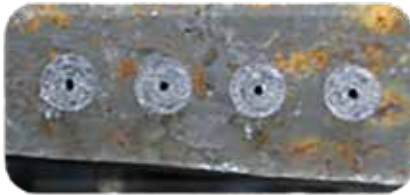
Frame Border Contour: ensure parts on non-rectangular plates are within the plates for safe production.



Allows you to search for the centre position of the round sheet metal in order to cut a part in a circular scrap.



\*Microjoints are replaced by nanojoints. The joint is not made through the entire thickness of the sheet, thus reducing edge marking and facilitating part removal.



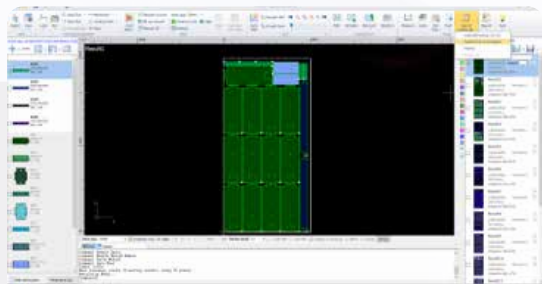
\*Deslag: remove slags after piercing and improve the piercing quality of thick plates.

# Nesting software

## CypNest Pro software

Like the cutting head and the numerical control, the software is developed by Bochu, enabling 100% machine utilization. The software allows you to process 2D files from your drawing software or HACO BEND PRO bending software.

The control allows efficient nesting of your parts to minimize material consumption. CypNest optimizes head movements to reduce cutting times. The software includes all cutting parameter functions, such as microjoints management, lead position, reports etc...



**Benefits:**

- Programs created on CypNest Pro can be directly executed or modified on the machine's control panel.
- Easy to use with no loss of efficiency.

## HacoSoft Laser software

HacoSoft Laser software is developed by HACO. It controls all HACO cutting machines. Several modules can be added to the system to facilitate programming of your machines. Basic functions include : Nesting, microjoints, management, price and time report lead positions etc...

Several modules can be added, such as : Haco Order management for cutting files, material and scrap management. Haco Assemblies for rapid machine programming from 3D files of assemblies or subassemblies

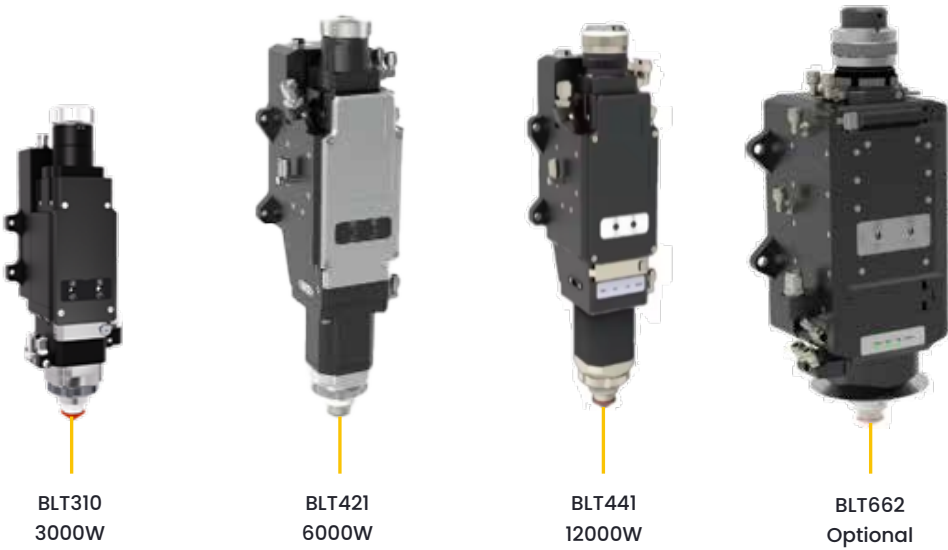


**Benefits:**

- The nesting software can communicate with other software to improve the upstream cutting process.
- Ability to create full cost reports.

# Cutting head

The FSCUT head and the numerical control system are both developed by the same manufacturer, BOCHU, offering several benefits. This integration ensures seamless control and smooth feedback operations.



The cutting head automatically adjusts its focal point according to the thickness of the material. This significantly reduces head adjustment time.

In case the head fails to detect an obstacle, a ceramic component is placed above the nozzle for added protection. If a collision happens higher up, fusible screws are used to safeguard both the head and the machine



The double window improves lens protection during maintenance and cutting.

The protective window's contamination is continuously monitored, providing real-time updates on its condition. This enables timely cleaning before any deterioration occurs, reducing consumable waste and enhancing cutting quality



Gas pressure is continuously monitored to ensure the required pressure set by the NC is maintained throughout the cutting process. The system features an integrated height control amplifier, eliminating the need for external, fragile coaxial cables



# Fiber laser source

RAYCUS is a leading manufacturer of fiber laser sources for cutting machines, known for their efficiency, which ensures high-quality cutting and extended service life.

Fiber laser technology has revolutionized laser cutting by significantly lowering operating and maintenance costs. With 3kW, 6kW, and 12kW models available, we can meet a wide range of requirements for both thickness and cutting speed.



# Fume extraction and suction

SIDEROS suction and filtration systems are designed to minimize fumes and dust generated during cutting. These systems help protect both the optical equipment and the operator, ensuring a cleaner and safer working environment.

The fume extractor is dimensioned to the machine size and power of the laser. It includes a 50L drip tray, a filter cleaning system to extend the filter's cartridges lifespan, and a spark arrestor filter to minimize the risk of fire.



## Optional equipment

- Lime dispenser
- High Storage capacity to minimize the frequency of bin emptying
- Extra sound insulation
- Special cladding for outdoor installation



# Product range

With decades of experience and leading technologies, we are known for our high-quality customized solutions for sheet metal fabrication and machining. Whether laser cutting, bending or shearing, at HACO we offer precision, quality and innovation.

## The HACO press brake range:

- SynchroMaster
- PressMaster
- EuroMaster-S



## The HACO shears range:

- TS(X)
- GSX
- HSLX HD

# FLEX BEND and robot projects



At HACO, we specialize in delivering robotic projects that combine automation and efficiency. Our HACO **FLEX BEND robot bending cell** is a compact solution that automates the bending of small to medium-sized parts quickly, cost-effectively, and with top precision, without requiring robot teaching at the machine thanks to offline programming.

## The HACO range of rollers

HBR rollers are available in 3 and 4 roller versions. Their rollers are made of top-quality hardened steel, making them particularly robust.





## ADVANCED TECHNOLOGIES, SINCE 1965



Bending



Robotics



Cutting



Shearing

With decades of experience and leading technologies, we are known for our high-quality customized solutions for sheet metal fabrication and machining. Whether laser cutting, bending or shearing, at HACO we offer precision, quality and innovation.



Customized solutions



Made in EU



Global reach



Local focus

Find out how we can take your bending projects to the next level and view our extensive portfolio of success stories.



## Machinery Masterminds

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