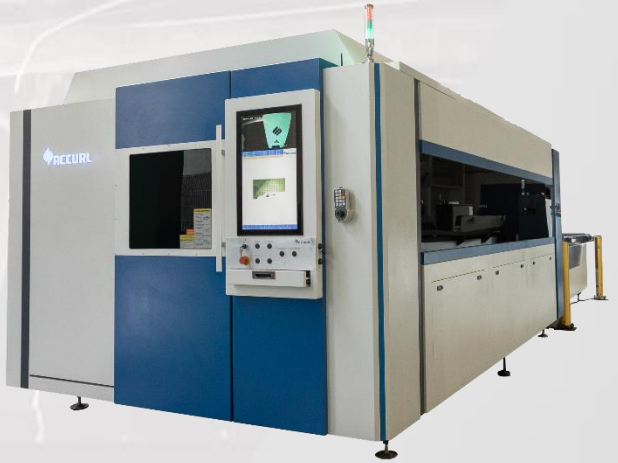
ACCURL®

Shaping your future

THE LASER

Next Level...

... The power to change everything.



[Performance and technology for perfect sheet metal laser cutting]

ACCURL® Based on machinery design technology optimized through strict structural analysis, ACCURL has been manufacturing ultralight and high-precision industrial high energy laser cutting machines.In addition, we provide total solution for sheet metal working that customers want such as bending, welding, deburring, and loading automation.

WHY ACCURL LASER CUTTING?

Innovative Modular Design:
< Our machines can also be combined with automation modules to create a complete system for the whole working process
<Customized solutions at a reasonable price, from basic to high end machine.

Experience
<33 years of experience and more than 12,000 installed machines.
<An expert R&D team committed to research the most competitive technology for our customers.

More Varied Solutions for Cutting:
<Sustainability and social responsibility are characteristics of modern companies and add to competitiveness.
<Comprehensive range of basic tools in stock and modified solutions according to customer needs.

ACCURL High Quality Equipment:
<The critical parts of the Accurl laser machine are manufactured in Germany.
<We rely on our quality and therefore give our laser cutting machine a 3-year warranty.
<The IPG Fiber resonator. Power from 1Kw To 30kW.

After-Sales Service:
<Original ACCURL spare parts to guarantee full performance and prolonged durability.
<Wide range of consultation services on machine operation,programming and maintenance.
.

ACCURL®

Laser Technology

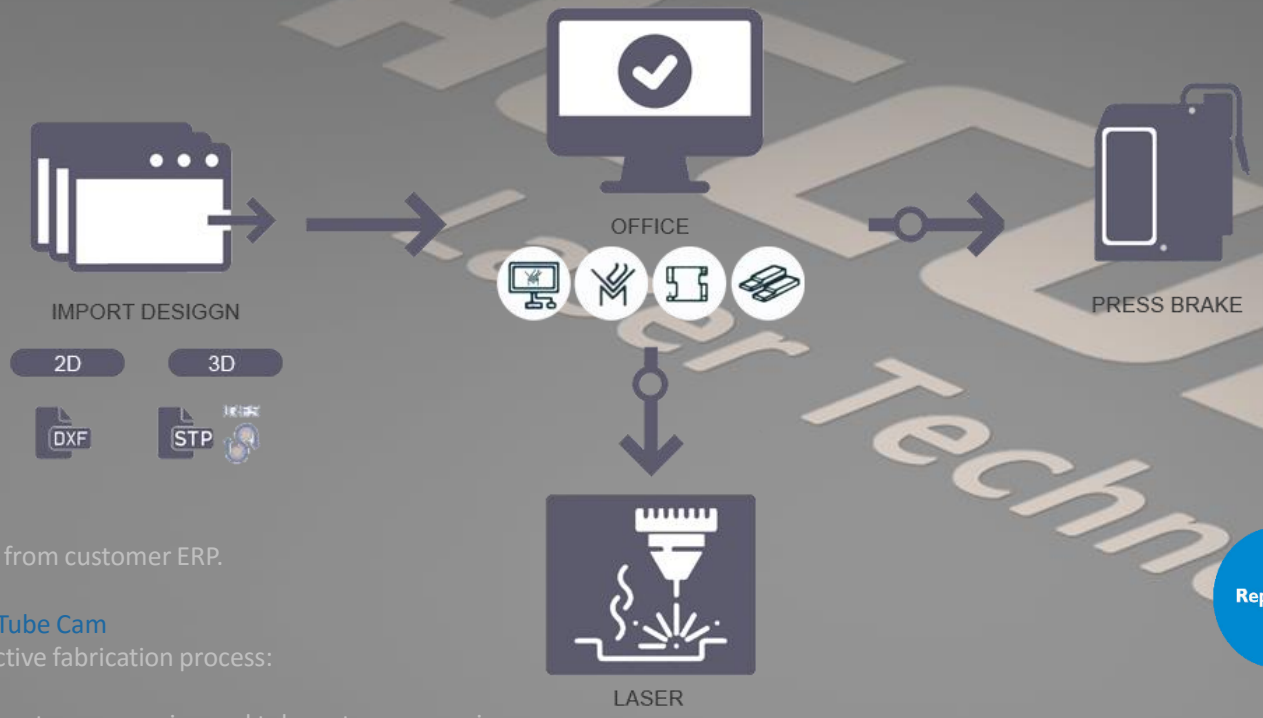
SINCE 1988

Sheet metal working machines

SOFTWARE AND CNC:USER-FRIENDLY AND EFFCIE ™.

ACCURL® offer our customers advanced software solutions to connect, manage and monitor the whole cycle of operations involved during the production.The software provides the interaction between the various steps of production operation flow..

4.0 INDUSTRY



Customer ERP connection

Importing of production list order from customer ERP.

Cam programming / 2D Cam and Tube Cam

Efficient pogramming for a productive fabrication process:

- Powerful nesting
- Optimized Post Processor for 2D cut programming and tube cut programming
- Powerful simulation

Human Machine Interface

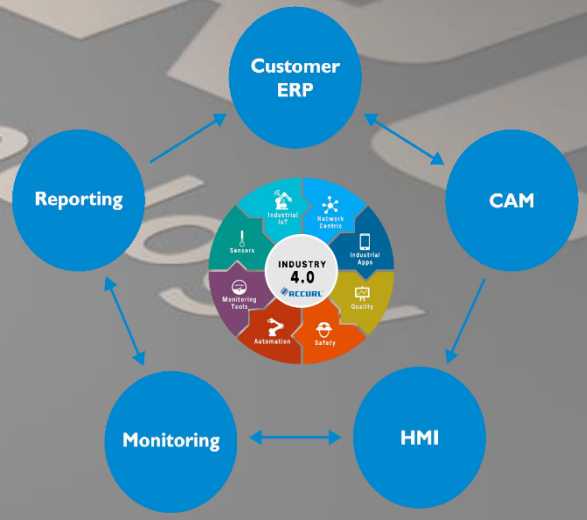
Interacting in an easy and friendly way, through touch screen, with the machine and relevant automation.

Monitoring / Production Control

Monitoring machine statuses and task lists and displaying all the events of all the machines in one view.

Production and Performance data Reporting

Proprietary solution for viewing reports of machine status and analyzing production data.



JOBSHOP 4.0 BY LIBELLULA

The system of performing and integrating software solutions to manage every metal sheet working phase in a productive and efficient way..

[Compact and technological for outstanding performance]

ACCURL® SmartLINE Packed with a host of easy-to-use features, the SmartLINE is the compact, versatile and productive 2D laser cutting machine for undisputed superior quality results.. Suitable for a wide range of materials, including highly-reflectie metals and high thickness mild steel. Also can optional Axis for round, square and rectangular tubes.

ACCURL®

WARRANTY* 3 YEARS ACCURL

IPG PHOTONICS®

FLEXIBLE

Suitable for a wide range of materials, including highly-reflectie metals and high thickness mild steel. Ready for round, square and rectangular tubes.

RELIABIE

Fully-tested and reliable thanks to the 20 years of experience with the MasterLINE platform.

PROFITABIE

Low operating costs thanks to energy efficiencyand reduced maintenance.

USER FRIENDLY

Single focusing lens system with automatic nozzle changer. Easy to use programming software and Prima Power operator interface.

HYPCUT TwinCAT CONTROL UNIT:

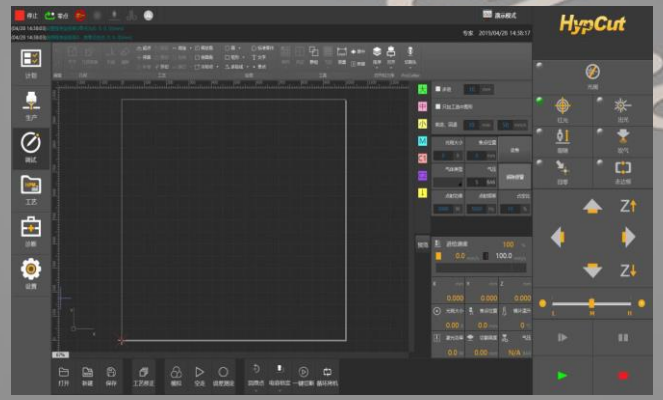
The ACCURL Smartline Fiber Laser is controlled with a HypCut FSCUT 8000 CNC control unit which provides unprecedented control of the cutting process.

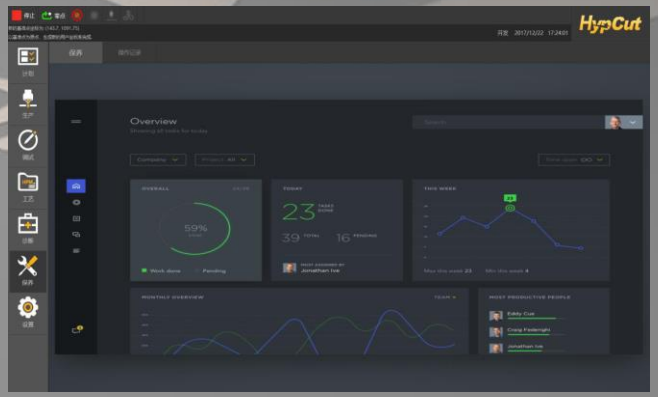
*Advantage:

- 17” high resolution colour TFT
- High-speed EtherCAT communication
- TwinCAT: software for engineering and runtime
- Highly dynamic servo drive technology
- Integrated retention brake control.
- Automatic adaptation of parameters.
- Adjustable error reaction.

INDUSTRY 4.0

FOR CUTTING APPLICATIONS





SUCCESSFULLY CONTROLLING PRECISION

HypCut CNC controllers are used in laser cutting machine.and the TwinCAT NC I/CNC automation software is ideally suited for application-specific functions, including adaptive jet control, reverse travel or path resetting.

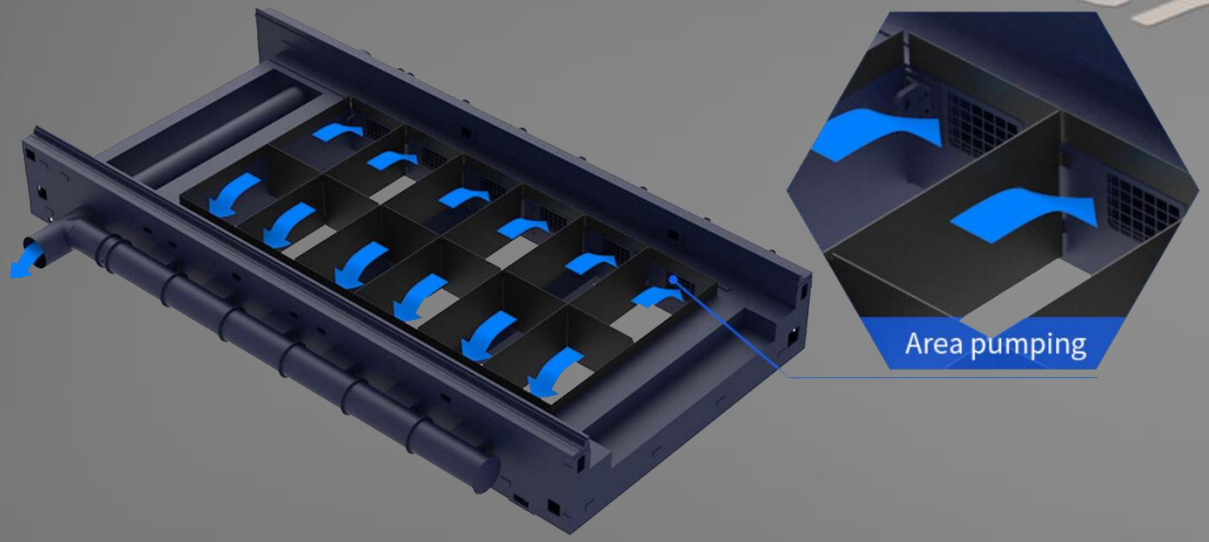
SUCCESSFULLY CONTROLLING PRECISION

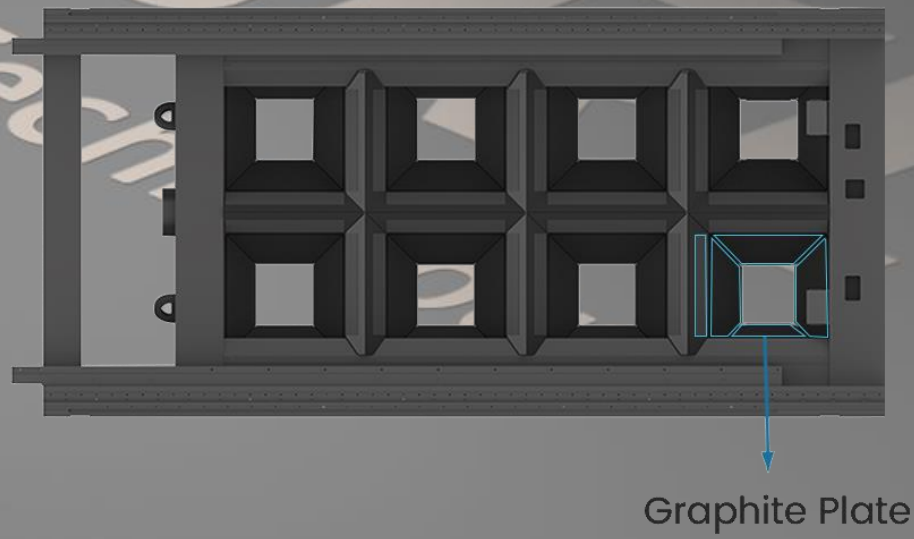
ACCURL® advocated its own new IoT technology as “Intelligent Internet of things factory”, termed the “Smart-Factory”.

ROBUST CONSTRUCTION

ACCURL steel frames undergo annealing at over 600° to relieve stress.and they are built to last years of heavy use without distortion.

*Advantage:
- Very stiff and stable base frame
- Deformation simulation made by CAE
- Stress points analysis
- Electric welding of high precision
- Usage of high-tech boring machines for extreme precision parts.





FULLY ANNEALED FRAME

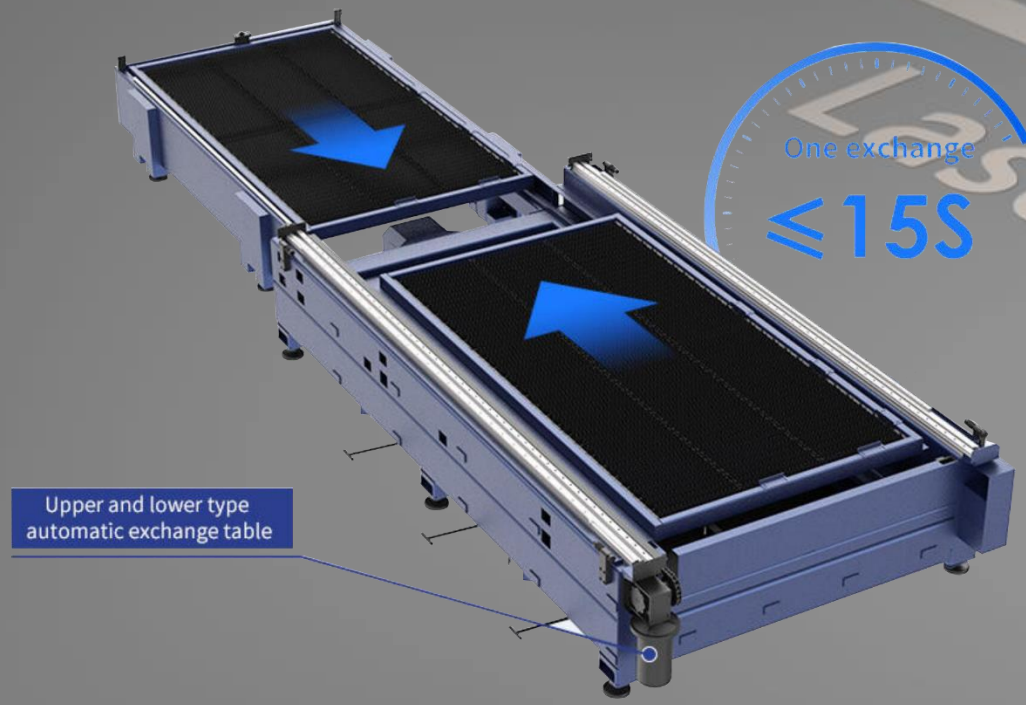
Semi-hollow bed design, small heating area.the rear frame is more stable for better the bearing capacity. To avoid deformation of the bed due to long-term high temperature, it provides a strong guarantee for users to achieve long-term batch and stable cutting of thick plates.

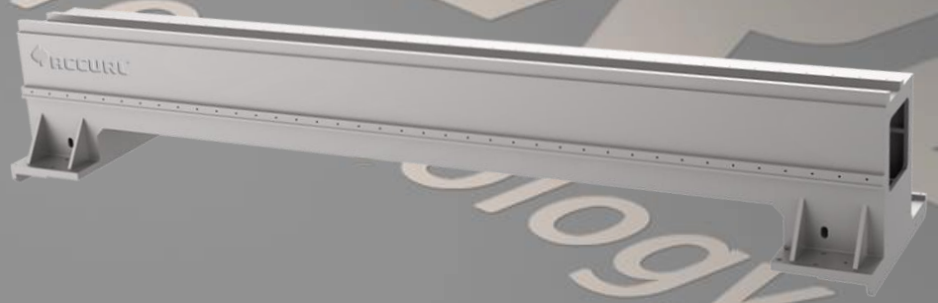
GRAPHITE ANTI-BURN TECHNOLOGY

The area in the entire machine tool where the laser can shoot at isall covered and protected by 20mm thick graphite anti-bruning To insuring the machine bed and working table not be out of shape and burned-out.

ACCURL®UITRA LIGHT-WEIGHT GANTRY STRUCTURE:

ACCURL® Light-weight cutting head assembly (Total weight 130 lbs) is designed for high dynamic movement,lowering the Tool Center Point to keep the cutting head from losing accuracy that is caused by whipping or drifting during high speed accell/decell movement





Motorized-AUTOMATIC EXCHANGE TABLE

Independent developed of high and low exchange table, simple and clever structure design, complete one exchange ≤15 seconds, efficient and save labor costs.The front of the motor is safe and anti-collision.

CAST ALUMINIUM GANTRY

ACCURL® high tech aluminium crossbeam is cast in a specially manufactured 10-tonne steel mould.this allows better rigidity at 50% of the weight of traditional iron gantries, allowing higher acceleration with reduced inertia.

SMARTLINE SERIES LASER:

BEST QUALITY, High accuracy and productivity without compromises on the whole thickness range thanks to the Best inte gration of all machine components.

1.RIGID FRAME & GANTRY

ACCURL Fiber Laser is unrivaled with its rigid body structure, perfect filtration system, compact design, efficiency anuser friendliness.

RIGID FRAME & GANTRY

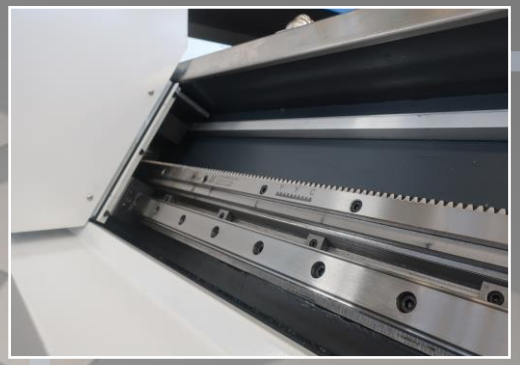
2.REXROTH LINEAR GUIDE DRIVE SYSTEM

The beam is mounted on a pair of precision REXROTH linear guide rails and precision manufacturing have created the highest quality linear systems available today.

REXROTH LINEAR GUIDE DRIVE SYSTEM

3.AXES MOTIONIS ACHIEVED BY RACK

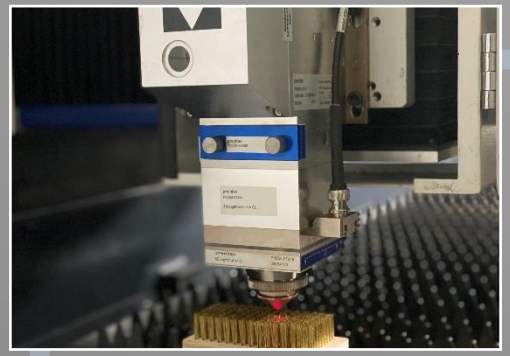
Axes motionis achieved by ALPHA rack & pinion design. there are not any intermediate load transmitting elements between the motor and the pinion which otherwise could cause precision losses.



AXES MOTIONIS ACHIEVED BY RACK

4. PRECITEC CUTTING HEAD

The LightCutter is designed for high laser power. It is completely dust-tight, which guarantees a continuous, clean operation with Automatic Focus



PRECITEC Auto-Focusing Cutting Head

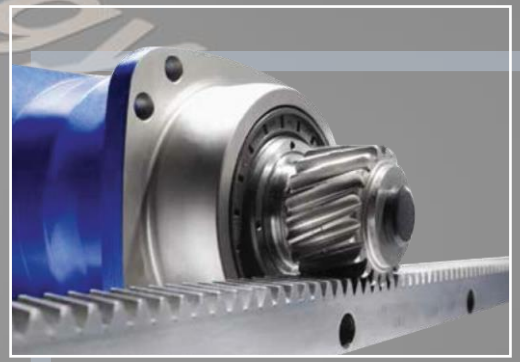
5.SERVO MOTORS & DRIVES SYSTEM

The SmartLINE is equipped with cutting edge Germany designed with High-speed EtherCATservo motors and drives from YASKAWA.

SERVO MOTORS & DRIVES SYSTEM

6.RACK AND PINION MOTION SYSTEM

ACCURL® Laser uses the best German racks and pinions from ALPHA. High precision two-way, hardened helical racks with low running clearance make it possible to achieve very high acceleration and speeds synchronized 170 m/min.



RACK AND PINION MOTION SYSTEM

[Compact and technological for outstanding performance]

ACCURL® MasterLINE is one of the markets' most complete, compact and configurable sheet metal laser cutter, designed to evolve with your needs. No worries about the space required:

MasterLINE has a very compact and configurable layout to fit the available space and processing requirements.

ACCURL®

WARRANTY* 3 YEARS ACCURL

4.0 INDUSTRY

BECKHOFF

IPG PHOTONICS®

FLEXIBLE

Suitable for a wide range of materials, including highly-reflectie metals and high thickness mild steel. Ready for round, square and rectangular tubes.

RELIABIE

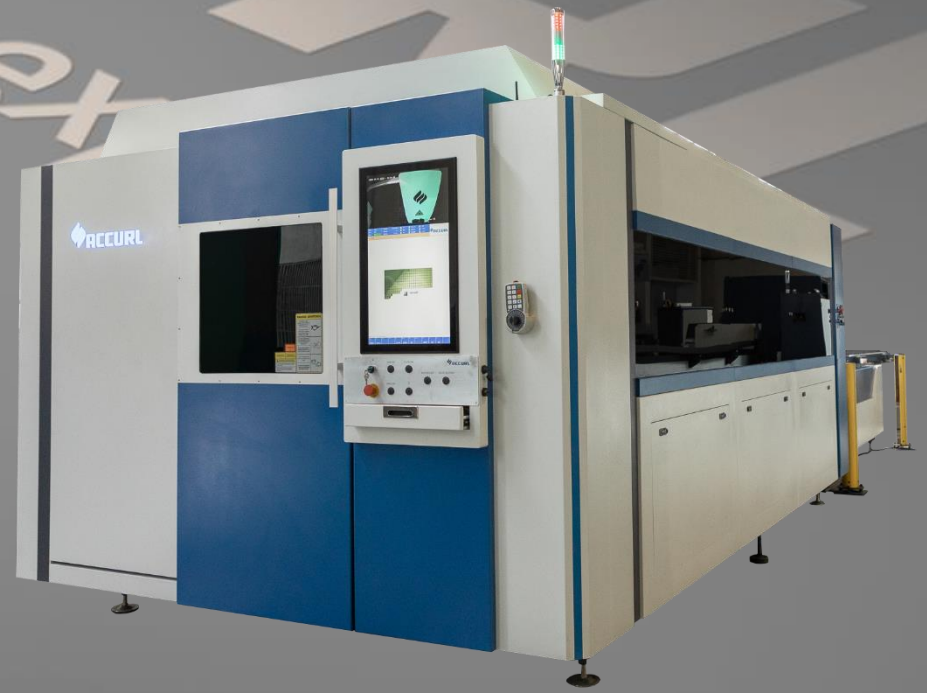
Fully-tested and reliable thanks to the 20 years of experience with the MasterLINE platform.

PROFITABIE

Low operating costs thanks to energy efficiencyand reduced maintenance.

USER FRIENDLY

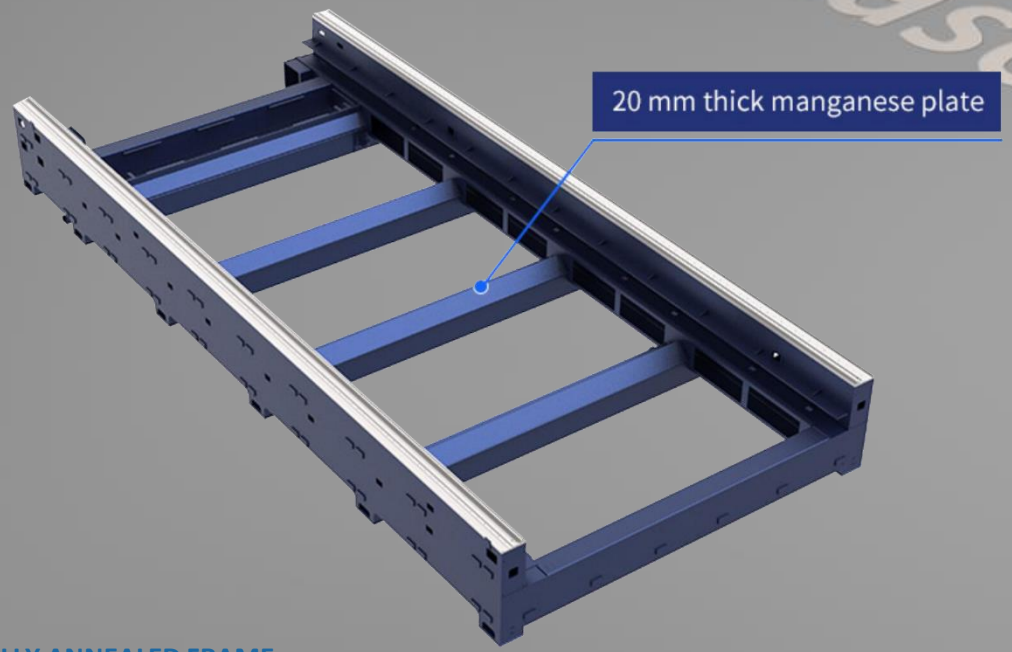
Single focusing lens system with automatic nozzle changer. Easy to use programming software and Prima Power operator interface.



QUALITY STEEL FRAMES

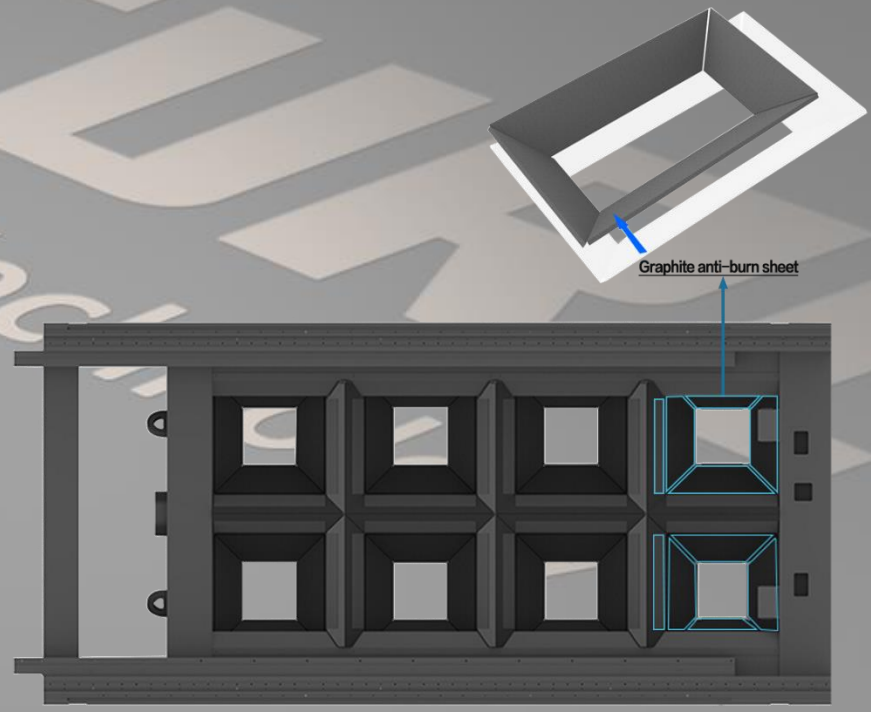
ACCURL steel frames undergo annealing at over 600° to relieve stress.and they are built to last years of heavy use without distortion.

*Advantage:
- Very stiff and stable base frame
- Deformation simulation made by CAE
- Eight(8) zone & ducted exhaust system
- Dual synchronized twin servo motor drive system
- Helical rack & slant pinion drive system enables very smooth Movements.



FULLY ANNEALED FRAME

ACCURL Innovative gravity-wrap ultra-high-power full-hollow bed with no square connection in the middle, no shielding in the cutting area, and the bed is not subject to high-temperature roasting, no burnout, more durable



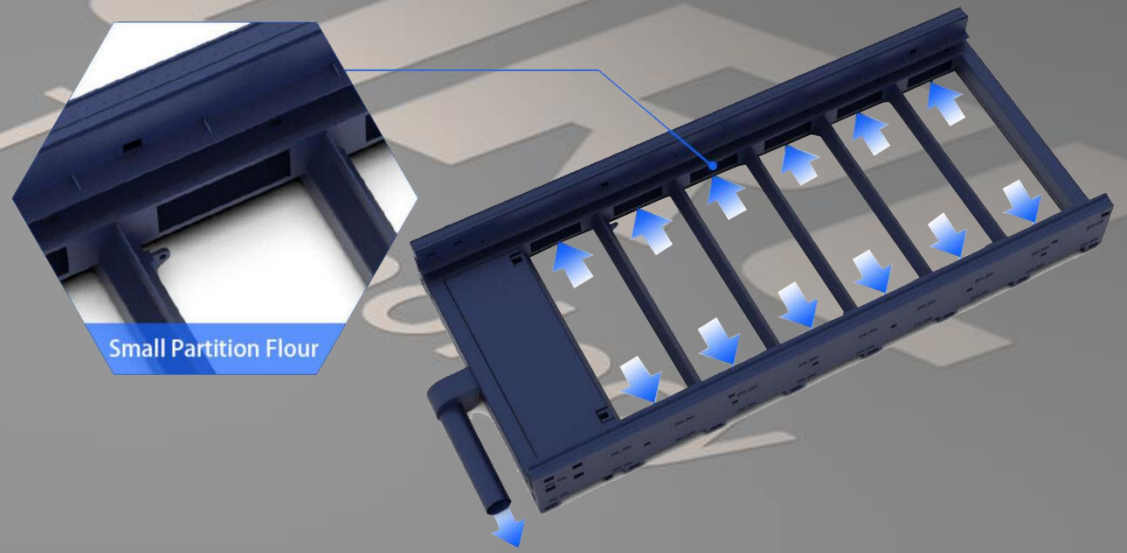
GRAPHITE ANTI-BURN TECHNOLOGY

The area in the entire machine tool where the laser can shoot at isall covered and protected by 20mm thick graphite anti-bruning To insuring the machine bed and working table not be out of shape and burned-out.

ALUMINIUM GANTRY STRUCTURE

The gantry is a monolithic structure made from a single aluminium casting. This technological solution is ideal for structures subjected to high levels of mechanical stress.

With the multi chambers high efficient system ofers the ability to make an equal amount ofsuction during the cutting operation of the whole machine cutting area.



CAST ALUMINIUM GANTRY

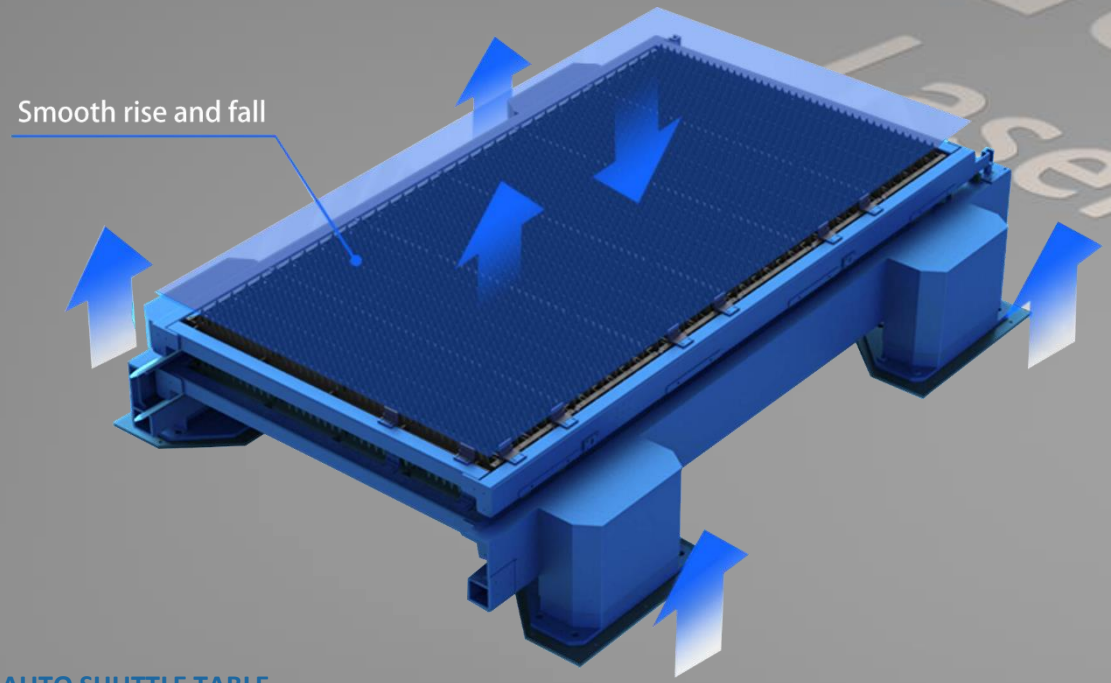
ACCURL® high tech aluminium crossbeam is cast in a specially manufactured 10-tonne steel mould.this allows better rigidity at 50% of the weight of traditional iron gantries, allowing higher acceleration with reduced inertia.

FUME EXTRACTION SYSTEM

Efficient fume extraction by means of shutters which are controlled in accordance with cutting head position results in more efficient use of the filtration system.

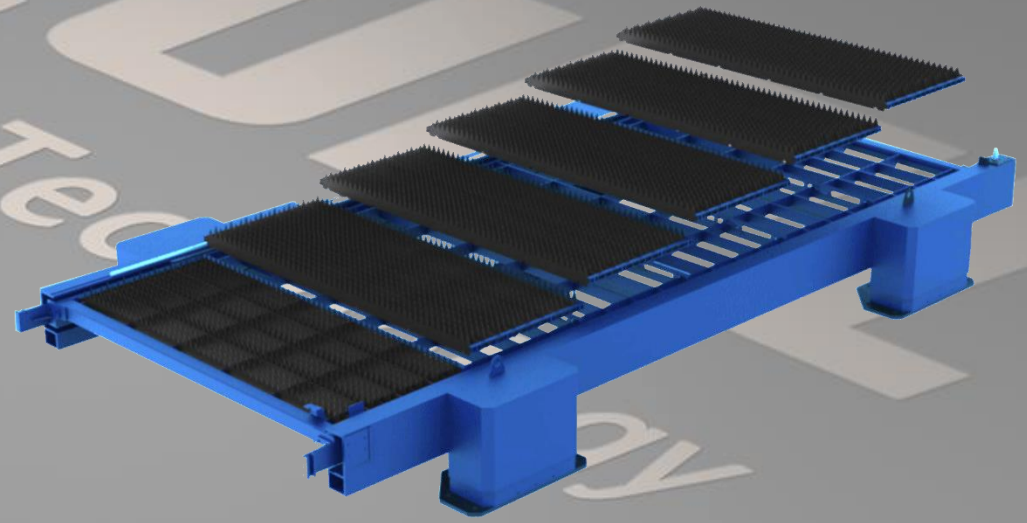
AUTO CHANGING PALLET TABLE SYSTEM

The double pallet changer is designed to increase the productivity and minimize the material preparation time. The pallet changer allows loading of raw material sheets or unloading of finished parts onto one pallet while the other pallet on duty.



AUTO SHUTTLE TABLE

The available shuttle tables on all machine models are fully electric and maintenance free: there are no hydraulic oils to handle and the table changes take place fast, smooth and energy-efficient..



MODULAR WORKBENCH

ACCURL Independent research and development of patented modular workbench, easy to disassemble, without hindering production, efficient and time-saving, safe maintenance.

MASTERLINE SERIES LASER:

BEST QUALITY, High accuracy and productivity without compromises on the whole thickness range thanks to the Best inte gration of all machine components.

1.REXROTH LINEAR GUIDE DRIVE SYSTEM

The beam is mounted on a pair of precision REXROTH linear guide rails and precision manufacturing have created the highest quality linear systems available today.

REXROTH LINEAR GUIDE DRIVE SYSTEM

2.AXES MOTIONIS ACHIEVED BY RACK

Axes motionis achieved by ALPHA rack & pinion design. there are not any intermediate load transmitting elements between the motor and the pinion which otherwise could cause precision losses.

AXES MOTIONIS ACHIEVED BY ALPHA RACK

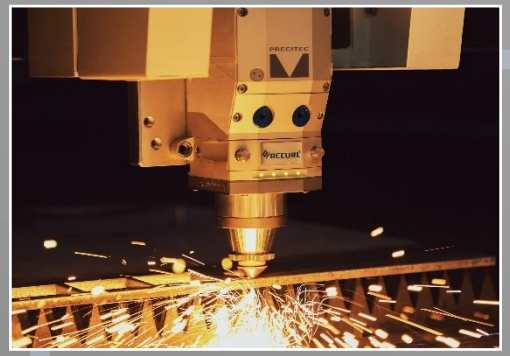
3.AUTOMATIC CLEANING NOZZLES

After a predefined number of contours, the nozzle automatically performs self-cleaning, without need for the intervention of an operator.

AUTOMATIC CLEANING NOZZLES

4. PRECITEC CUTTING HEAD

NEW ProCutter 2.0 generation, the highest cutting speeds can be achieved that were previously unthinkable.



PRECITEC Auto-Focusing Cutting Head

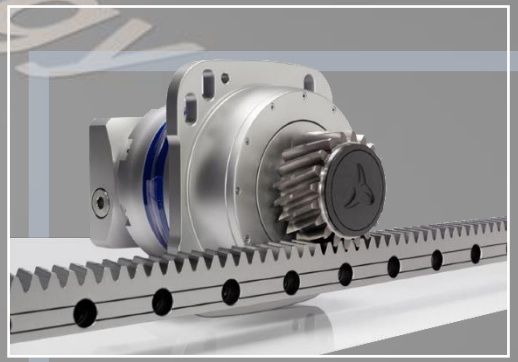
5.SERVO MOTORS & DRIVES SYSTEM

The MasterLINE is equipped with cutting edge Germany designed with High-speed EtherCATservo motors and drives from BECKHOFF.

SERVO MOTORS & DRIVES SYSTEM

6.RACK AND PINION MOTION SYSTEM

ACCURL® Laser uses the best German racks and pinions from ALPHA. High precision two-way, hardened helical racks with low running clearance make it possible to achieve very high acceleration and speeds synchronized 180 m/min.



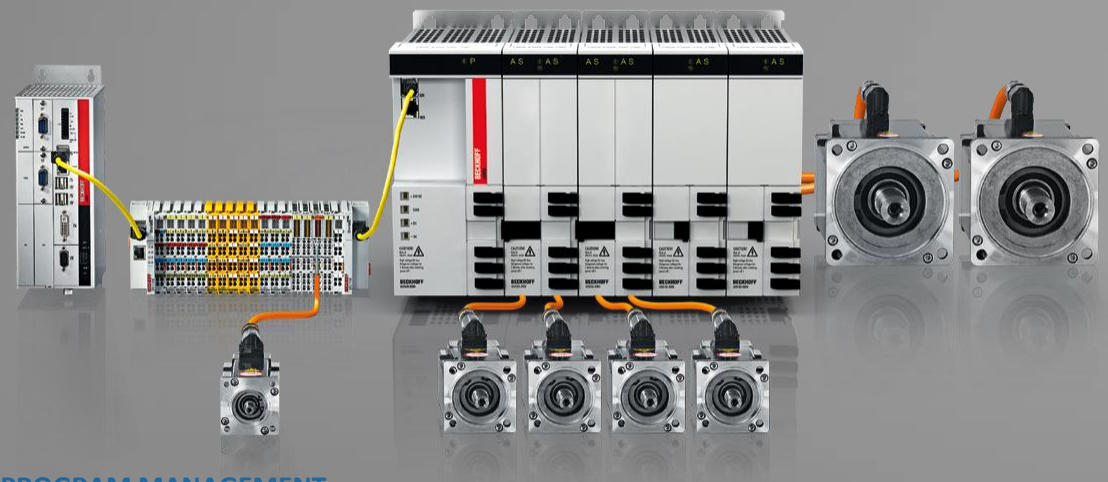
RACK AND PINION MOTION SYSTEM

BECKHOFF CNC CONTROL UNIT:

ACCURL ® MasterLINE fits the most recent BECKHOFF Numerical Control Solution: picking top of the range components means guaranteeing better usability and a higher degree of reliability over time. and the system may be connected to the company LAN to exchange data and allows quick and easy production setup and connects in secure manner to the Internet (VPN) in order to receive remote assistance in case of need.

*Advantage:

- INTEL® Core (TM) i5-6500 processor - 8Gb RAM - CPU 3.20 GHz.
- Display 21” LCD TFT XVGA with anti-glare screen Touch Screen.
- User High-speed EtherCAT communication
- Scratch-resistant keyboard, anti-oil, anti acid with IP65 protection.
- Manual movement of all axes by joystick.
- Dynamic and integrated cutting head height control
- Anti collision system.
- Automatic function for the detection of the sheet metal on the work table..



PROGRAM MANAGEMENT

Quick program selection with exhaustive preview function, available also in real time.

TWINCAT NUMERICAL CONTROL

The Beckhoff controller has a Accurl operator interface and a complete cutting database for all standard cutting applications. The database includes the cutting parameters for standard materials (steel, stainless steel, aluminium) for common thickness ranges.

CAD/CAM SOFTWARE NESTING. LIBELLULA .CUT

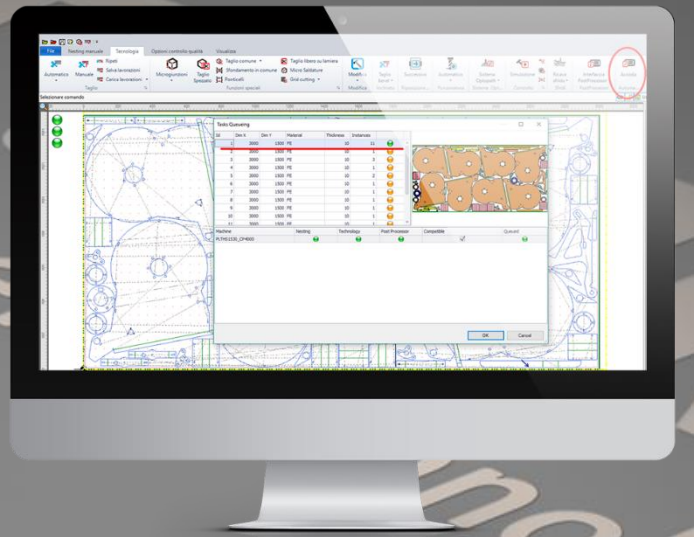
Thanks toits integrated CAD and the exclusive One-Clicktechnology,Libellula.CUTcreates or imports in a moment thegeometricdetails fromany otherplatform of drawing,automaticallyoptimizingprofi les andarranging them in an optimum manner fo subsequent processing.

A winning formula:

+ Automation + Integration + Effi ciency + Productivity

- Learning times and programming = Libellula.CUT

The best of the technological research of Libellula in a powerful and intelligent application, which reduces the processing time.

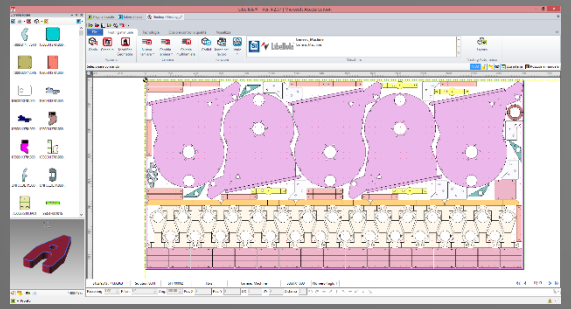


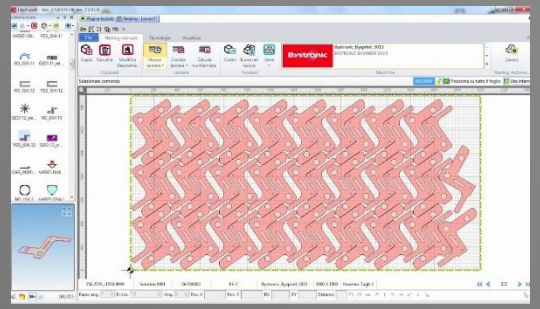
HIGH SAVING OF TIME AND MONEY

MAXIMUM PRODUCTIVITY WITH MINIMUM SCRAP

In Libellula.CUT, the software engineers and analysts have concentrated the best of Libellula technological know-how in theme of sheet cutting:

- Fast and intuitive learning
- Full automation available in every step of the programming process
- Ability to manage all the cutting machines with the same system





OPTIONAL.ORDER MODULE

- Optimized information for the company with “Total Integration” additional Libellula modules

-Order Management with the option mod.ORDER module

-Warehouse management and reusable remnant with the mod.STORAGE option

- Optimization of cutting path and management for specific cutting technologies
- Reduction in the number of piercings
- Quality assurance of the machined parts
- Optimization of nesting with the [ISA] system and less scrap
- Optimized generation of nesting on uneven scraps
- Management of FMS lines and / or of the manual operations:

-Reduction of the cutting number of diff erent nesting

-Automatic Skeleton cutting

-Systems management of loading / unloading and sorting systems

PRECITEC ®LASER CUTTING HEAD

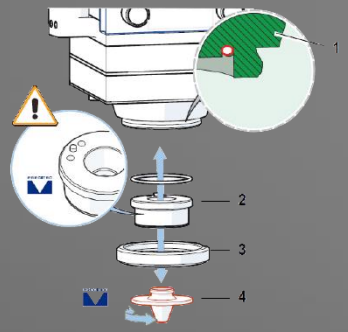
Dynamic laser cutting machines require lightweight, intelligent cutting heads. Even installed in the smallest possible space, the ProCutter offers a fully-integrated sensor system that monitors the cutting process and provides the user with relevant information. The head ensures that each component can be reproducibly manufactured at a high standard of quality.

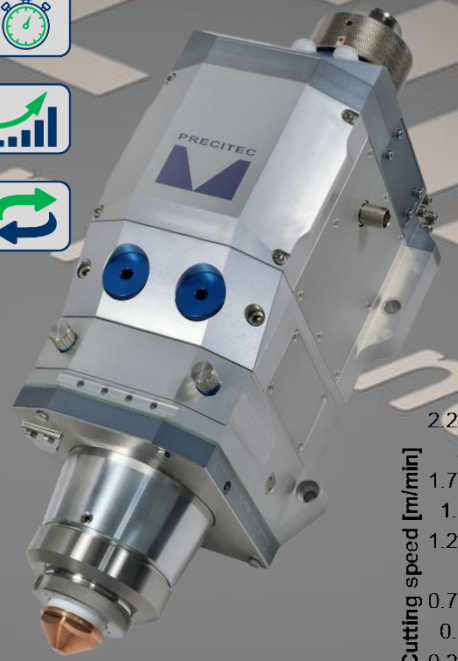
Maximum stamina!
It cuts and cuts and cuts ….

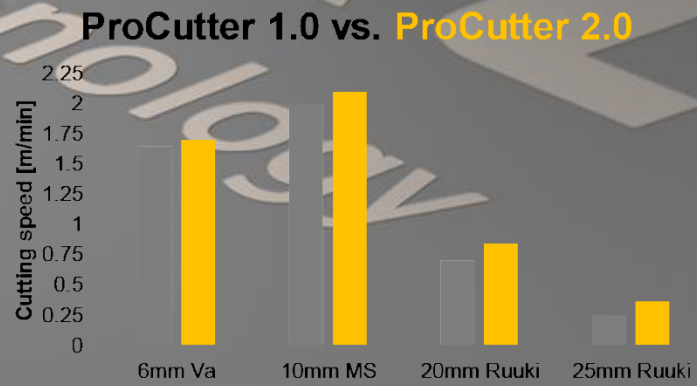
Easy parameter finding!
Quality ↗ Process window ↗

Faster & more efficient!
Speed ↗ Gas efficiency ↗

More laser-on-time!
Save time and costs.







LASER CUTTING IN THE MEDIUM POWER RANGE

The LightCutter is designed for high laser power. It is completely dust-tight, which guarantees a continuous, clean operation. The basis for clean cut edges is provided by the ultra-stable and drift-free sensor technology for a constant distance between component and optics.

CUTTING HEAD PRECITEC PROCUTTER

With the new ProCutter 2.0 generation, the highest cutting speeds can be achieved that were previously unthinkable. The cutting head works trouble-free up to 30 kW laser power thanks to its sophisticated cooling concept and the extended travel paths.

PRECITEC ® ZOOM 2.0 CUTTING HEAD

The cutting head ProCutter Zoom 2.0 provides a maximum and flexible performance in a minimum of space. It generates the perfect beam for all materials in all thicknesses for laser powers up to 12 kW and is therefore the ultimate all-rounder for your flatbed system.

*Advantage:

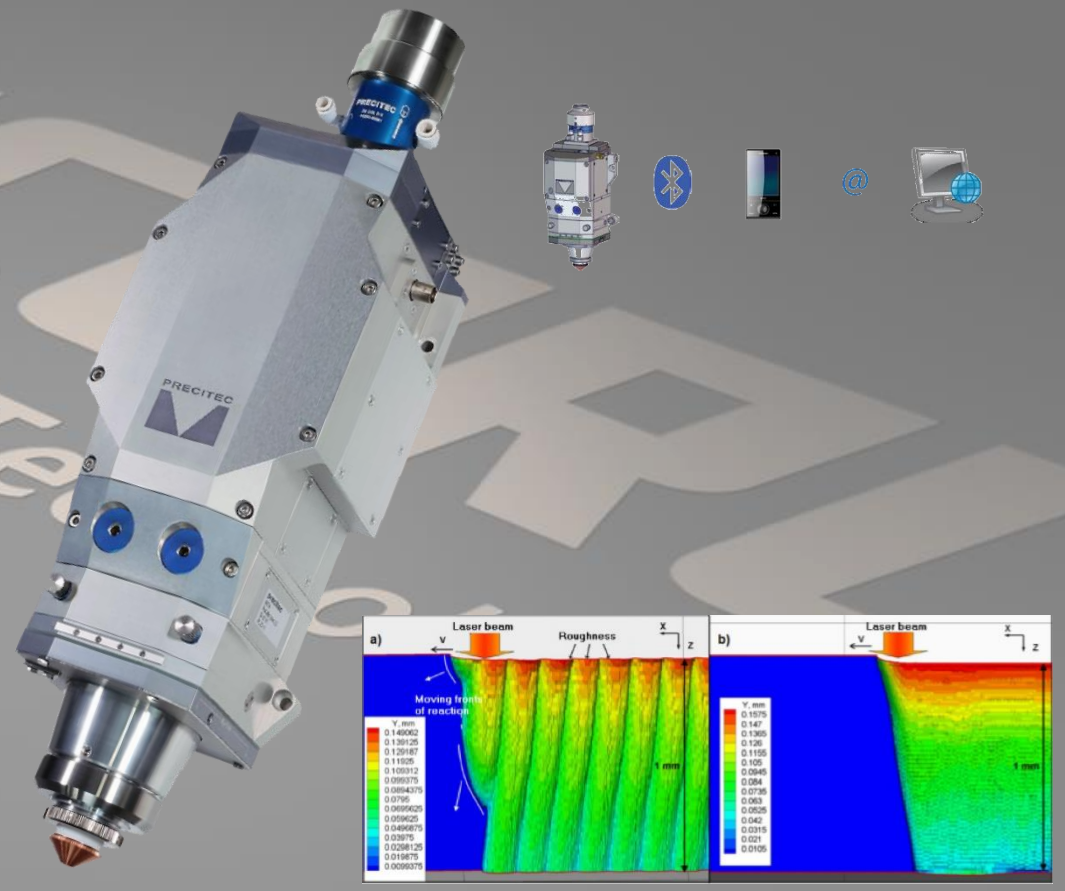
- Motorized focus position adjustment
- Zoom optics for automatic adjustment of the focus diameter
- Drift-free, fast-reacting distance measurement
- Permanent protective window monitoring
- completely dustproof beam path with protective windows
- automated piercing with PierceTec
- water cooling of the sheet metal with CoolTec
- LED operating status display
- Pressure monitoring in the nozzle area (gas cutting) and in the head

Maximum stamina!
It cuts and cuts and cuts ….

Easy parameter finding!
Quality ↗ Process window ↗

Faster & more efficient!
Speed ↗ Gas efficiency ↗

More laser-on-time!
Save time and costs.



LASER CUTTING IN THE MEDIUM POWER RANGE

The ProCutter Zoom 2.0 depend on thickness, it is available to control the beam size and make a exact angle of incidence. widen cutting width, blow out the material melting easily.

CUTTING HEAD PROCUTTER ZOOM 2.0

The Cutting head with automatic laser been adjustment, modiȧed according to material thickness and set cutting speed.

MULTITASKING TO THE EXTREME

Laser-cutting thick materials with new power. Focus management creates geometries that were impossible until now with smooth, well-defined edges. The use of water makes nesting more compact. The use of air guarantees the lowest cost per part ever.

Mild steel (N_2)

2 KW	4 mm .16"
3 KW	5 mm .20"
4 KW	6 mm .24"
5 KW	8 mm .31"
6 KW	8 mm .31"
8 KW	12 mm .47"

Copper

2 KW	3 mm
3 KW	5 mm .20"
4 KW	8 mm .31"
5 KW	10 mm .40"
6 KW	12 mm .47"
8 KW	12 mm .47"

Brass

2 KW	4 mm .16"
3 KW	6 mm .24"
4 KW	8 mm .31"
5 KW	10 mm .40"
6 KW	10 mm .40"
8 KW	10 mm .40"

Mild steel (O_2)

2 KW	12 mm .47"
3 KW	15 mm .59"
4 KW	20 mm .79"
5 KW	25 mm .98"
6 KW	25 mm .98"
8 KW	25 mm .98"

Stainles steel

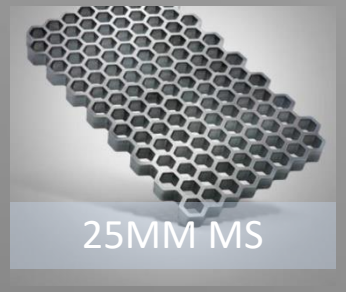
2 KW	6 mm .24"
3 KW	10 mm .40"
4 KW	15 mm .59"
5 KW	20 mm .79"
6 KW	30 mm .1.18"
8 KW	35 mm .1.38"

Aluminium

2 KW	6 mm .24"
3 KW	10 mm .40"
4 KW	15 mm .59"
5 KW	20 mm .79"
6 KW	30 mm .1.18"
8 KW	35 mm .1.38"

THE HORIZONS BROADEN

Steel, stainless steel, iron, copper, brass, aluminium sheets, thin or thick materials - the best cut, always.

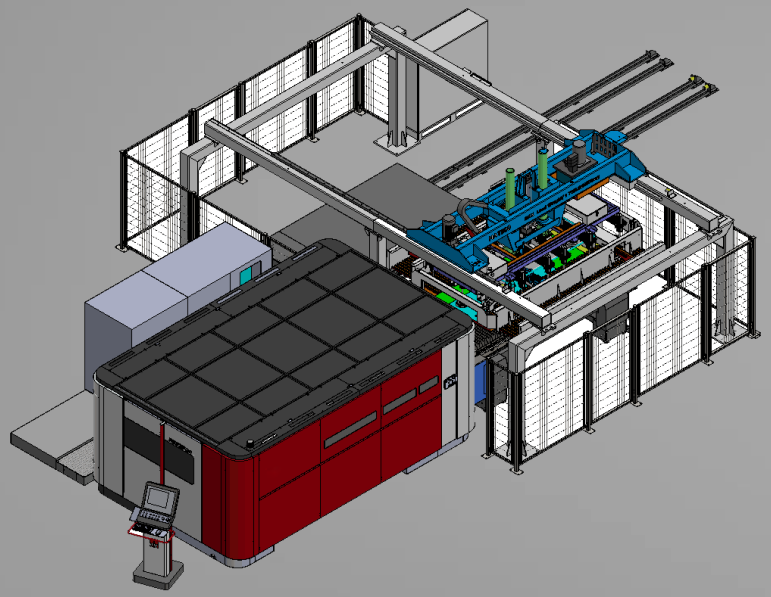


LOADER & UNLOADER BRG SYSTEM 2.0

ACCURL Loader & unloader BRG System 2.0 is the automated solution that best optimizes the flow of material, which improves both the safety at work and the safety of the process. The solutions included range from simple operation to fully automated operation.

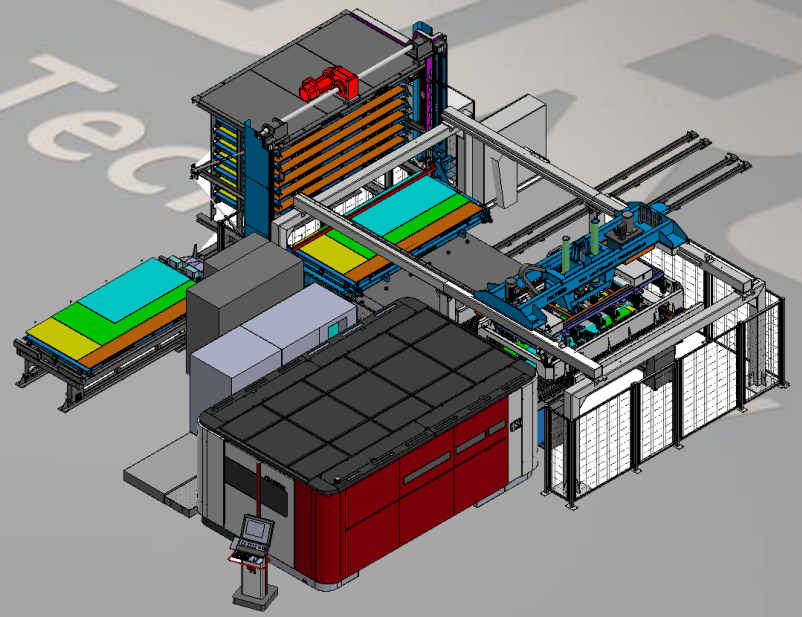
*Advantage:

- Fast processing of the order, since the automatic loading and unloading reduces the preparation times.
- Considerably greater use of machinery with only a slight increase in investment.
- Access to the production of parts with little manual work.



Material Screening and Loading System SMART-TOWER

An expansion option is provided by the sheet loading and processed sheet pallet changer system. The automatic loading and unloading system can be integrated at a later time and is available for all the machine conȯgurations.

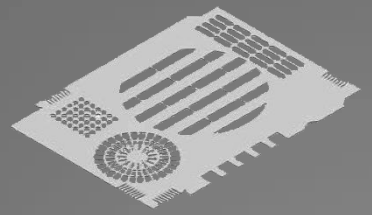


Automatic Loading & Unloading System SMART-LIFTER

Further automation and flexibility can be achieved by adding one or two sheet storage towers on loading and unloading side. This opens the way to full automatic production.

FREEDOM OF CHOICE,WITHOUT COMPLICATIONS.

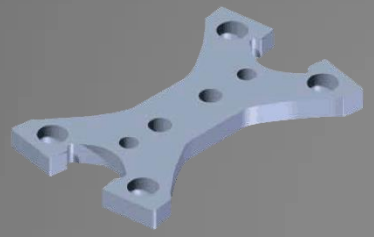
ACCURL® In order to meet our customers' requests, we have created three suites of options to better fitthe different production needs: thin or thick metal sheets working and intensive productions.



SMART CUT

≤ 5 mm

This option suite is the right solution to grant faster processing of thin metal sheets (up to 5 mm) where N2 technology can be applied: this is possible thanks to technological solutions, like Smart Moves and Grid Cutting, able to reduce the downtime due to head positioning time.The result is a reduction of cycle time up to 30%.



MAX CUT

> 5 mm

This option suite has been designed for thick metal sheets processing: we have been able to give the customers an astonishing cycle time reduction up to 40% due to advanced solutions, like Nitrogen Piercing and Hi.Piercing, that increase piercing quality while lowering the time.

NIGHT CUT

For intensive production, Prima Power provides this option suite that maximizes the productivity enhancing the monitoring of the process. This is possible thanks to advanced monitoring devices able to check the status of the process and intervene in case of errors by restarting the operation or informing you remotely; LPM, monitoring piercing operation, Plasma and Tip-Touch Restart, keeping control of the cutting process, E-mail dispatching, alerting the operator in case of machine failures.

MasterLINE

CO2 or fiber: take your pick!

Optimal cutting parameters are set in fully automatic manner according to material and thickness.

FIBER LASER RESONATOR IPG.

IPG offers laser sources that implement fiber laser diodes to create at high brilliance laser light. and the reduced energy consumption and the absence of ordinary maintenance significantly improves the efάciency of the fiber laser as opposed to traditional CO2 laser systems.

Features of the IPG equipment are as follows:

- Direct control of all the fiber laser functions
- Synchronized control of the laser source
- Overall power control
- High speed perforation
- Edge machining function
- Cutting data library
- High speed fiber laser cutting

BEST LASER

CO2 or fiber: take your pick!

FIBER LASER RESONATOR IPG

This advanced technology ensures very competitive operating costs. In accordance with our company ethos to design the most flexible and reliable machines on the market, the ACCURL Fiber machine includes an integrated IPG fiber laser source.

THE LASER | 2D CUTTING LINE

ACCURL TOP CUSTOMISATION fully configurable following the customer's need, and the standard range features models with capacities varying from 1Kw To 30Kw, this versatility goes from sizing to optional equipment.

Explore the Press Brake Showroom.

adira · LVD · Prima Power · salvagnini · TRUMPF · URSVIKEN · ACCURL · ALIKO Press brakes from Finland · AXIAL · CINCINNATI

COASTONE · EUROMAC · HACO · STR · VICLA · Warcom · gade · GIZELIS · Muratec · Schiavi

TWI · Vimercati

Visit the Showroom