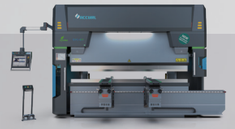
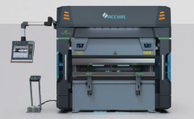
ACCURL PRODUCT RANGE:

EUROMASTER
Medium sizes



EB ULTRA
SMALL sizes

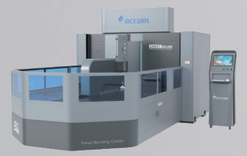


ES NT-30T

MASTERLINE
ALL sizes

TUBELINE
ALL sizes

SMART BEC
Medium sizes



ACCURL MACHINE TOOLS
ANHUI | CHINA

Industrial Park in Bowang Special
Economic Zone Maanshan
Anhui | China

T |+86 0555 2780563
M | +86-188 5555 1088
E | info@accurl.com

ACCURL . com

LOCAL DEALER\

ACCURL®
Shaping your future

MasterLINE
NEXT

Shaping your future

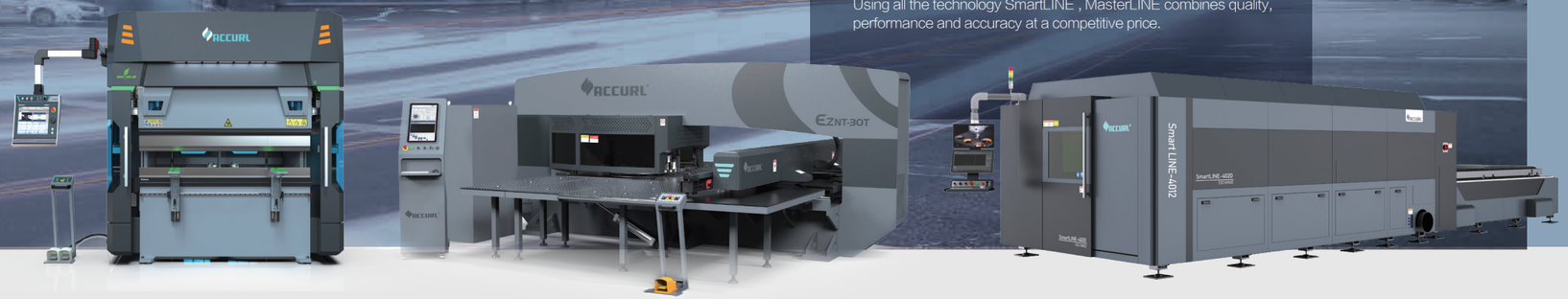
SUSTAINABLE CUTTING SOLUTIONS

Next Level...
... The power to change everything.

MASTERLINE

TECHNOLOGY AND PRECISION MORE ACCESSIBLE

Using all the technology SmartLINE , MasterLINE combines quality, performance and accuracy at a competitive price.



Laser cutting.

The most flexible tool ever

WARRANTY*

3 YEARS

ACCURL

FEXIBLE

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

RELIABLE

Fully-tested and reliable thanks to the 11 years of experience with the MasterLINE platform.

PROFITABLE

Low operating costs thanks to energy efficiency and reduced maintenance.

USERFRIENDLY

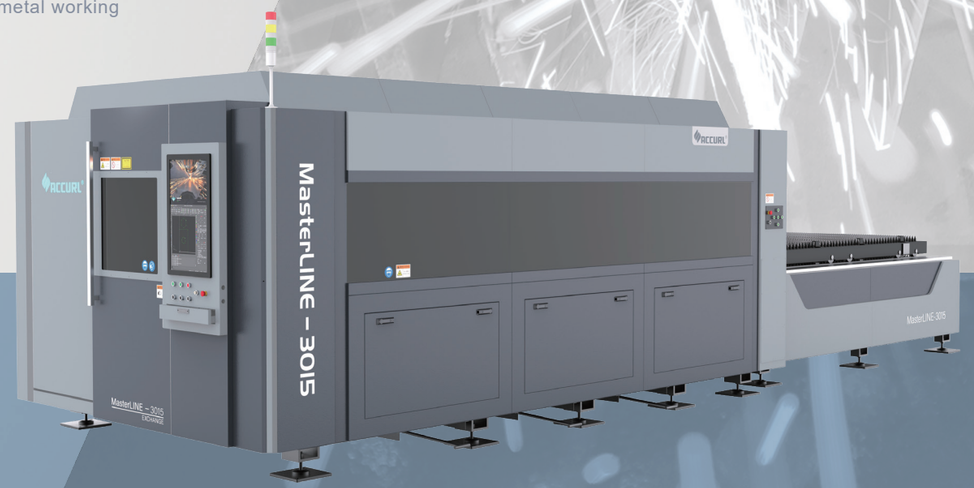
Single focusing lens system with automatic nozzle changer. Easy to use programming software and Prima Power operator interface.

DON'T SETTLE FOR A STANDARD LASER CUTTING, CHOOSE A SUPERCUSTOM!

STANDARD

- > **BECKHOFF®** CNC Control System
- > **PRECITEC®** ProCutter Cutting Head
- > **REXROTH®** Highly Dynamic Servo Drive
- > **ALPHA®** Precision Reducer & RACK System
- > **40 [KW] Max**. Laser Power **IPG/MAX**
- > ACCURL® Dynamic System 4.0: **3[G] Acceleration**
- > Max. Cutting Speed **180 [m/min]**
- > Repeatability **0,03 [m/m]**
- > ACCURL® Fast piercing 2.0: Ultrafast perforation
- > CAD/CAM Software Nesting. Libellula.CUT
- > Class IV safety system and CE marking
- > Automatic Nozzle Cleaning 2.0
- > Graphite Anti-burn Technology
- > **Industry 4.0** for sheet metal working

AVAILABLE FEATURES AND OPTIONS



ELEVATE YOUR PERFORMANCE IN 2D LASER CUTTING

High axes speeds and acceleration paired with a rigid mechanical structure to achieve excellent cutting performance and accuracy.

BEST QUALITY HIGH ACCURACY

CHOOSE THE SAFETY FOR YOUR JOB

Work safely and confidently: MasterLINE is a CE marked Class 1 system. and machines with maximum gain in speed, precision and efficiency.

4.0 INDUSTRY

THE COMPONENTS GUARANTEE PRECISION CUTTING:

Thanks to having the highest quality components such as: IPG laser fiber source, Precitec cutting head or modern body, ACCURL laser cutters can operate continuously 7 days a week, 365 days a year. The top performance of the machine and the low operating costs make the MasterLINE series the most frequently used system for demanding mass production.

MasterLINE NEXT

- Low operating cost and energy consumption
- Globally recognized high performance components
- Preclse cuts and high durability
- High profit margin

The MasterLINE series of laser cutting machines are characterized by high dynamics and top quality They achieve a positioning speed of up to 180m/min and acceleration of 3G Each laser cutter is available with a fiber laser source with power from 3 to 40 kW.

STANDARD CUTTING PARAMETERS

Material (Cutting Capacity)	YLR-3000(3kW)	YLR-4000(4kW)	YLR-6000(6kW)	YLS-10000(10kW)	YLS 12000(12kW)	YLS-15000(15kW)	YLS-20000(20kW)
Mildsteel(s235jr)	16(20) mm	20 (22) mm	25 mm	30 mm	35 (40) mm	40 (50) mm	50 (60) mm
Stainless Steel(1.4301)	8 (10) mm	10(12) mm	15 (20) mm	25(30) mm	30 (40) mm	35 (50) mm	50 (70) mm
Copper	8 (10) mm	12(15) mm	20 (25) mm	25(30) mm	30 (40) mm	40 (60) mm	50 (80) mm
Aluminum (AIMg3)	4mm	6mm	10 mm	15 mm	15 mm	20 mm	35 mm
Brass	6mm	10mm	12 mm	20 mm	20 mm	30 mm	40 mm

* Factors such as rust, shell formation, paint, label, pitch shifts on the surface, rolling defects, rusts on the surfaceof the material, affect the black sheet cutting negatively. The top and bottom surfaces of the material to be cut must be clean. The cutting quality and cutting speeds of sandblasted sheets vary.

LASER CUTTING CNC...

The BECKHOFF control platforms are suitable for PLC, motion and CNC applications as well as customer-specifid applications on Linux embedded basis.High performance,the latest software architecture and the unique BECKHOFF platform design enable perfect control technology mapping of your application

The Laser Experience Make The Difference

The machine automation by BECKHOFF encompasses: drive technology,control systems,HMIl, machine vision as well as seamless integration in TwinCAT Analytics based digital solutions for Industry 4.0

BECKHOFF WISCUT CNC CONTROL UNIT:

BECKHOFF
Eckelmann
○ optional

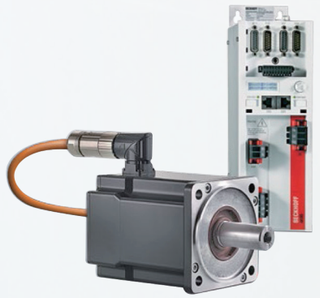
The Beckhoff CNC controllers are used in laser cutting machine and the TwinCAT NC I/CNC automation software is ideally suited for application-specific functions, including adaptive jet control, reverse travel or path resetting.

BECKHOFF SYSTEM FEATURES:

- •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.

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.



ADVANCED

- • User friendly and touch optimized
- • Easy and efficient operation
- • Fly-cut option for significantly shorter cutting times
- • Nesting CAD/CAM software on board
- • Intuitive, step-by-step assistance for machine operators
- • Quick height adjustment for a very high and constant cutting quality
- • Integrated monitoring of peripheral units like laser sources and sensors
- •Quick height adjustment for a very high and constant cutting quality
- •Integrated monitoring of peripheral units like laser sources and sensors

PROGRAM MANAGEMENT

- •Quick program selection with exhaustive preview function, available also in real time.
- •Support direct production of DXF & G code;support fast process of LXDS & NRP file generated by Libellula & Lantek.

Everything with one click in 3 steps. 100% automated

Optional item FABLE is an acronym of Fully Automated Cut & Bend BundLE and the operator has to set only the initial parameters: FABLE software and algorithms will handle the entire process in a fully automated way, including unfolding.

FULLY IN 3D,CUT BEND THE SHEET METAL

JobTRACK by Accurl

Job tracking add-on

Record and monitor the production\manufacturing process\flow
Store all parts, tubes, daily jobs, SubNests.Sort and filter all the data, and search using complex search queries.
Manage and monitor material consumption and usage efficiency

©Optional*

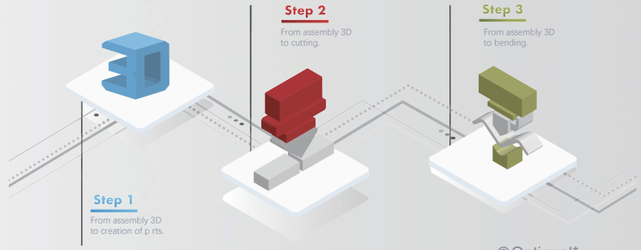
FABLE IN ACTION: 1,2 e 3. UNFOLDED,CUTAND BEND

ACCURL. Claim For 3D Unfolding

Consisting of a suite of outstanding applications,ACCURL.CLAIM allows you to fully control alle the phases of the creative process, converting ideas into technical drawings ready to be sent to the sheet metal working software.

ACCURL. iCut Nesting For Cutting

With ACCURL.iCut software is designed to allow you to achieve the best cutting results, saving material, reducing time & making things easier for the operator, thanks to the high level of automation.



©Optional*

ACCURL. iBend Offline For Bending

Powerful and reliable, create or import geometric details in a moment from any other design platform, automatically optimizing their profiles and optimally preparing them for subsequent processing.

JopTRACK For Shop Management

For every 4 main phases of metal sheet cutting (quotation and order confirmation, order elaboration and warehouse checking for production) the JobTRACK system by ACCURL offers the more suitable software able to support at best the workforce in the relevant decisions and schedules.

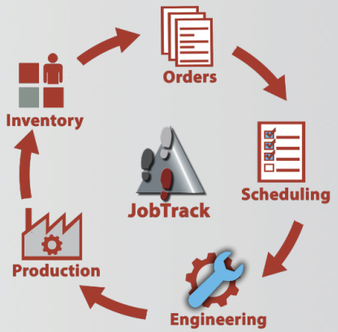
JobTRACK by Accurl

STEP 1 Sales Manager
From offer request to the order confirmation.
Rapid and efficient.

STEP 2 Sales Dept.
The Production Manager open the internal order issued by sales dept. and he creates a list of works to elaborate in the production dept.

STEP 3 Workshop
Order Working
The machine is ready. The operator checks nesting and start the machine.

STEP 4 Warehouse
Warehouse Check for the production
From the Production Manager to the warehouse's workers. It's sent the request to prepare the necessary materials for the production with real-time updates of stocks.



ACCURL.iCut 2D NESTING SOFTWARE*

iCut Software cutting creates programs for your cutting machine from CAD files and designs:
The **ACCURL.iCUT CAM** unique application for the programming of any type of cutting machines: laser, plasma, oxyfuel, waterjet.

ACCURL.iCut

The most efficient nesting of parts by Accurl

ACCURL.iCUT NESTING 2D PROGRAMMING SOFTWARE

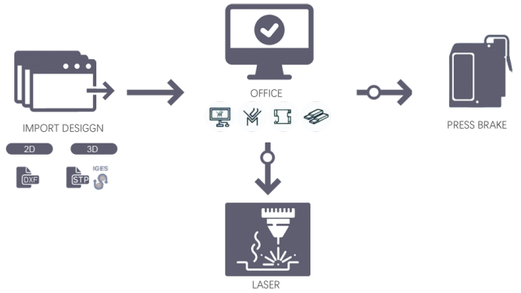
ACCURL.iCut software is designed to allow you to achieve the best cutting results, saving material, reducing time & making things easier for the operator, thanks to the high level of automation.

A WINNING FORMULA

Automation + Integration + Effi ciency + Productivity:
The best of the technological research of iCUT in a powerful and intelligent application, which reduces the processing time. In iCUT, the software engineers and analysts have concentrated the best Of ACCURL.iCUT technological know-how in theme of sheet cutting.

SETUP REPORTS

ACCURL iCut AutoNest is a recent addition to AutoNest. It includes an automatic nesting algorithm that dramatically improves both nesting quality and speed.



ADVANTAGE

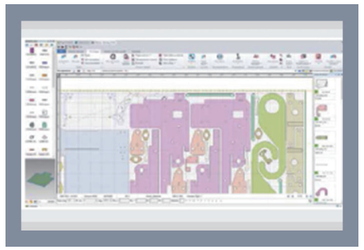
- Full automation available in every step of the programming process
- Ability to manage all the cutting machines with the same system
- Optimization of nesting with the [ISA] system and less scrap
- Optimized generation of nesting on uneven scraps
- Reduction in the number of piercings and route optimization
- Optimal management of cutting conditions

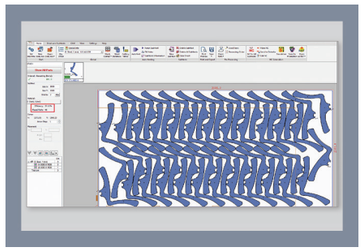
DRAWING MODIFICATION AND IMPORT

- Intelligent parts recognition, drawing error identification & optimization.support file formats of DWG and DXF. Support batch create and import parts via Excel table.

ACCURL. iCUT IS AVAILABLE FOR

- **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
- **Nesting Strategy**
  Powerful algorithm engine of high efficiency and production rate; no limit of sheet and parts quantity in nesting; support manual and automatic nesting; support free form sheet nesting.
- **Setup Reports**
  Comprehensive iBend reports include all the information the operator needs to set up the tooling and bend the part.
- You can generate your report files in several formats:
  PDF, DOC, RTF, XLS\XLSX, XML, CSV, and RPT.
  The iBend comes with real-time, automatic 3D simulation, presenting a realistic visualization of the bending process. and the simulation helps you to create an error-free process, producing NC code or a bending repor





PRECITEC LASER CUTTING HEAD

The Precitec offers high-quality tailor-made solutions for all requirements and machine concepts in 2D laser cutting and has gained world wide recognition as the market leader in cutting optics, distance sensor technology,and process monitoring..

EFFICIENT AUTOMATED PERSISTENT

BEVEL HEAD ± 45 °

Bevel Head for vertical and bevel cuts from 0 ° to 45 °. Optimal results provided through the combination of 5 axis interpolation and software . Positive and negative bevel angles in one part.

○ optional

THE BEST – MADE EVEN BETTER

With the new ProCutter Thunder & 2.0 cutting head generation, Precitec is pursuing a revolutionary concept for processing in demanding environments.

PRECITEC ProCutter Thunder

The ProCutter Thunder comes with a revolutionary compact design and offers unmatched stable and precise operation. Achieve high-cutting edge quality, reduce service costs and downtime with the new laser cutting head from Precitec.

PERMANENTLY EXCELLENT CUTTING QUALITY

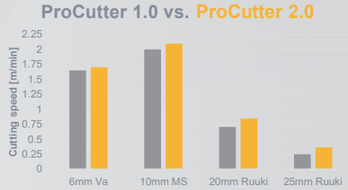
- Smooth cutting edges with minimal burrs
- LED operating status display
- Short process times
- Process-stable machining of thick materials

PRECITEC ProCutter 2.0

The new ProCutter 2.0 generation impresses with its increased performance and new automation features. Faster, easier, more efficient, more enduring – this is how laser cutting is shaping up in the new generation, due to numerous developments.

USER FRIENDLY & SAVE:

- Completely dustproof beam path with protective windows
- LED operating status display
- Monitoring of the piercing process and
- Detection of cutting breaks with CutMonitor
- Pressure monitoring in the nozzle area (gas cutting) and in the head
- Display of operating parameters via Bluetooth and interface for machine control



YOUR ADVANTAGES AT A GLANCE

Compact design

- High cutting speeds due to low weight
- Visual check of the focus position

Permanently excellent cutting quality

- Smooth cutting edges with minimal burrs
- Short process times
- Process-stable machining of thick materials

Low service costs and less downtime

- Easy & quick maintenance
- Protection of high-quality optics

TECHNOLOGIES FOR LASER MACHINES

The ACCURL Loader & unloader BRG System 2.O 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 s olutions included range from simple operation to fully automated operation.

LIGHTS-OUT PRODUCTION

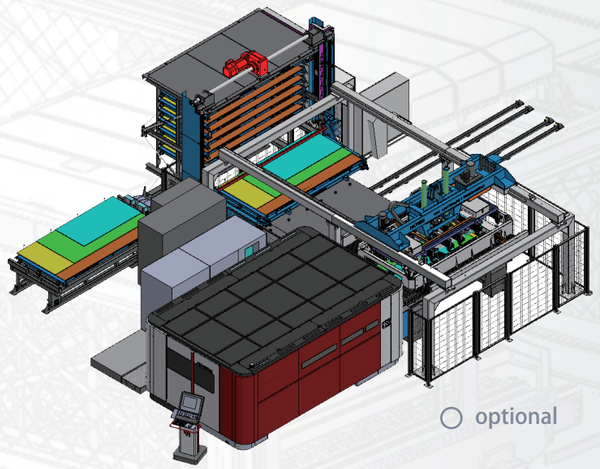
Combo Tower Laser also provides an optimal solution for lights-out production as capacity of available raw maDterials and unloading positions for skeletons can meet production requirements. Combo Tower Laser can be equipped with Night Train FMS® connection

THE WORLD OF SHEET PROCESSING

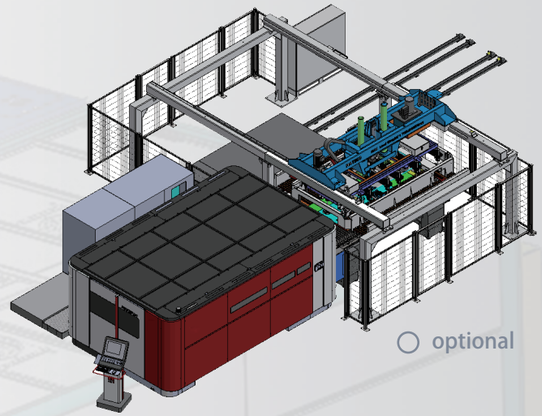
The Combo Tower Laser is a flexible storage system with integrated loading and unloading features for 2D lasers. It makes different materials available whenever needed automatically and without delays; it can also serve as intermediate storage for ready cut components along with skeleton.

SMART-LIFTER

- Loading/unloading device for handling blanks and processed sheets.
- Two storage units (one for the blanks and one for the processed sheets).
- Single sheet separating and control systems and sheet reference.



○ optional



○ optional

SMART-TOWER

- Loading/unloading devices for handling blanks and processed sheets.
- Storage tower with 10 or 15 pallets.
- Single sheet separating and control Systems and sheet reference.
- Very limited footprint.

TWO DYNAMIC TABLE FOR CONTINUOUS CUTTING*

The pallet changer system is ergonomically designed with 3-sided access in order tomake loading and unloading easier for the operator. and easily integrates withmaterial handling automation.

THE WORLD OF SHEET PROCESSING

QUALITY STEEL FRAMES

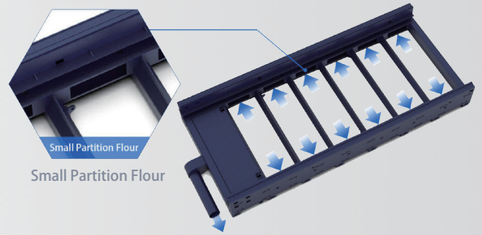
ACCURL steel frames undergo annealing at over 600° to relieve stress.and they are built to last years of heavy use without distortion,

ADVANTAGE

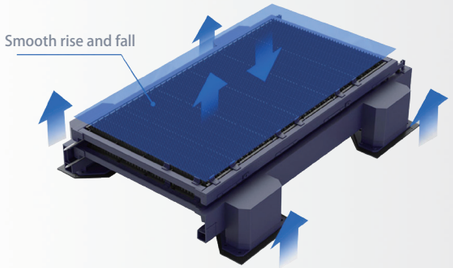
- Very stiff and stable base frame
- Deformation simulation made by CAE
- Eight(8) zone & ducted exhaust system
- Dual synchronized twin servo motor drive system
- Helical rack & slant pinion drive system enables very smooth Movements.

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.

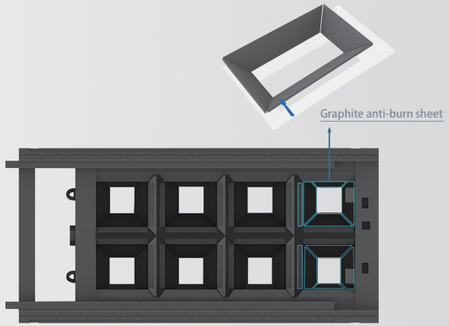


Small Partition Flour



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.



GRAPHITE ANTI-BURN TECHNOLOGY*:

The area in the entirelaser where the laser can shoot at is all covered and protected by manganese orgraphite anti-bruning

HIGHPOWER CW FIBER LASER FOR METAL CUTTING

The IPG YLR & YLS series is the latest super-compact hermetic cabinet packaging of kW-class lasers in power 1-30 kW range incorporating all of thefeatures and technology advancements of YLS-CUT series.

COST SAVINGS FROM OPTIMAL CUTTING QUALITY

IPG PHOTONICS®

YLS-30000 ECO

Highest-Efficiency High-Power Fiber Laser

YLS-20000 & YLS-30000 ECO fiber lasers offer industry record energy efficiencies over 50% paired with unmatched reliability and long-term power stability.

FEATURES

- 20kw,30 kW Continuous Wave Laser Power
- Low Operating Cost
- Record Reliability & Stability
- **50% Energy Efficient**
- Maintenance-free Operation
- Compact & Rugged Design

IPG ECO SERIES FIBER LASERS ARE UP TO **2X** MORE ENERGY EFFICIENT THAN OTHER FIBER LASERS

YLS-ECO high-power fiber lasers offer the highest energy efficiencies with unmatched reliability. Less input power required dramatically reduces energy costs without sacrificing output power.

	IPG	Other Fiber Laser
Power Consumption	40 kW	60 kW
Energy Efficiency	50%	33%
Cooling Capacity	20 kW	41 kW
Laser Energy Cost	22,560 USD	34,180 USD
Chiller Energy Cost	6,770 USD	13,740 USD
Total Energy Cost	29,330 USD	47,920 USD

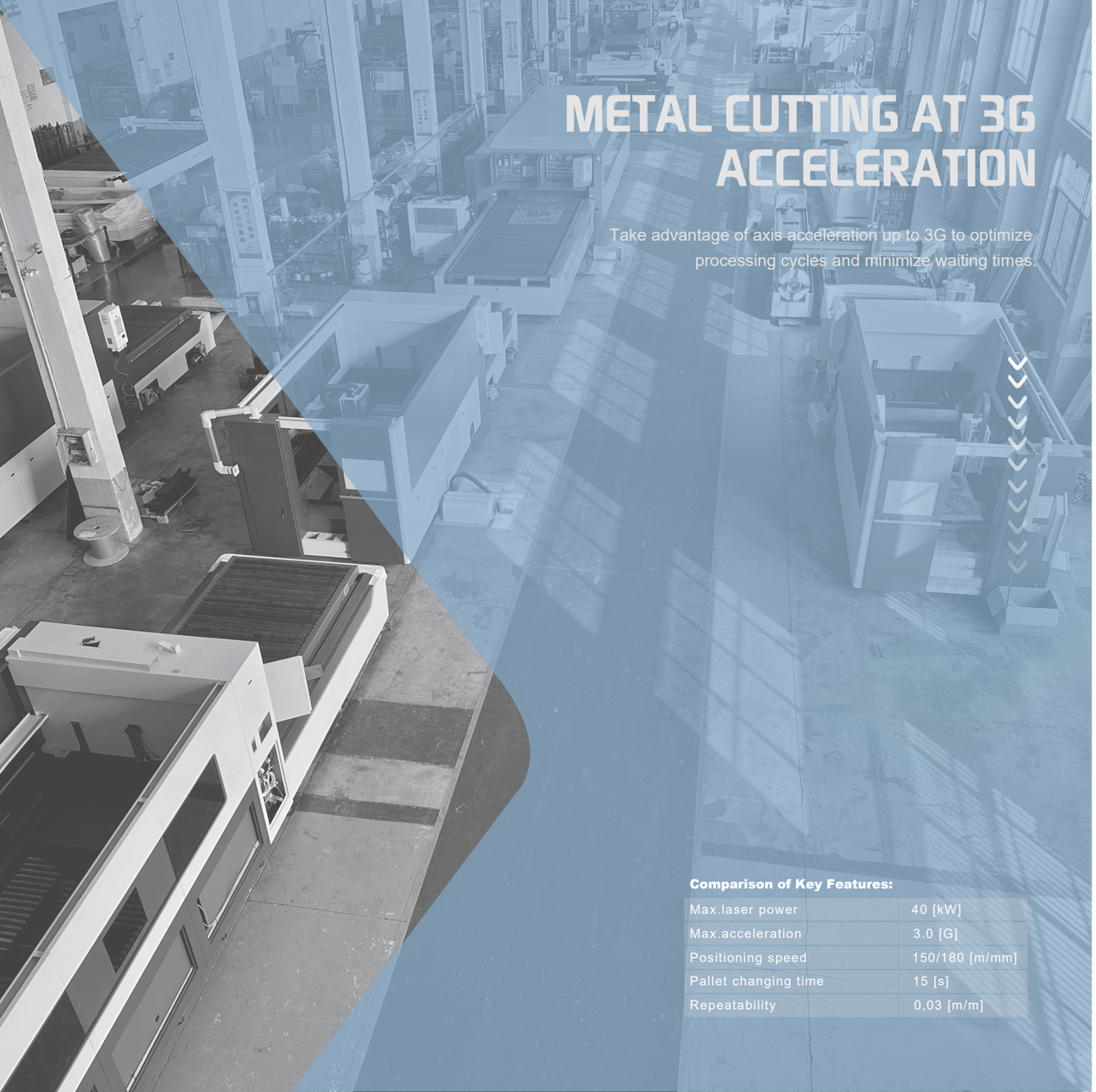
IPG 30 kW ECO Energy Savings

*Annual Energy Savings
$18,590

3 Year Energy Savings
$37,180

5 year Energy Savings
$55,770

*Savings example based on energy cost $0.16/kWh, 75% duty cycle and 16 hour/day operation. Customer savings varies by actual energy cost, duty cycle and hours of operation. Other fibers lasers are typically 25 - 35% energy efficient.



METAL CUTTING AT 3G ACCELERATION

Take advantage of axis acceleration up to 3G to optimize processing cycles and minimize waiting times.

Comparison of Key Features:

Max.laser power	40 [kW]
Max.acceleration	3.0 [G]
Positioning speed	150/180 [m/mm]
Pallet changing time	15 [s]
Repeatability	0,03 [m/m]

TECHNOLOGIES

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

	3015	4020	6020	8025	12025	
X Axis	3060	4100	6150	8200	12200	mm
Y Axis	1530	2100	2100	2550	2550	mm
Z Axis	180	185	185	185	185	mm
Max. Sheet Size	3048 x 1524	4064x2032	6096x2032	8128x2032	12192x2032	mm
Max. Sheet Weight	200	200	200	200	200	Kg/m2

	SmartLINE	MasterLINE	
X Axis	120	160	m/min
Y Axis	120	180	m/min
Synchronous	170	226	m/min
Acceleration	20	25	m/s2
Positional Accuracy	±0.05	±0.03	mm
Repeatability	±0.05	±0.03	mm
	According to VDI/DGQ 3441 standards		
	Length of measuring: complete stroke		
Fiber Laser Power	IPG YLS/YLR (Germany) 3Kw ~ 40kw		
Table Change Time	± 25 Seconds		
Operating System	FSCUT8000 CNC (Optional with Beckhoff or Eckelmann)		
Laser Cutting Head	PRECITEC ProCutter (Auto Focus)		
Motoreducer	Germany ALPHA Level 6 precision		
X ,Y-axis Rack	Germany ALPHA Level 6 precision		
Data Communication	USB, Ethernet LAN		

The accuracy of the piece depends on its type, size and pre-treatment, and the conditions of application