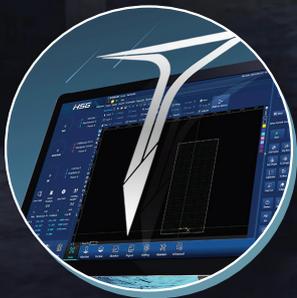
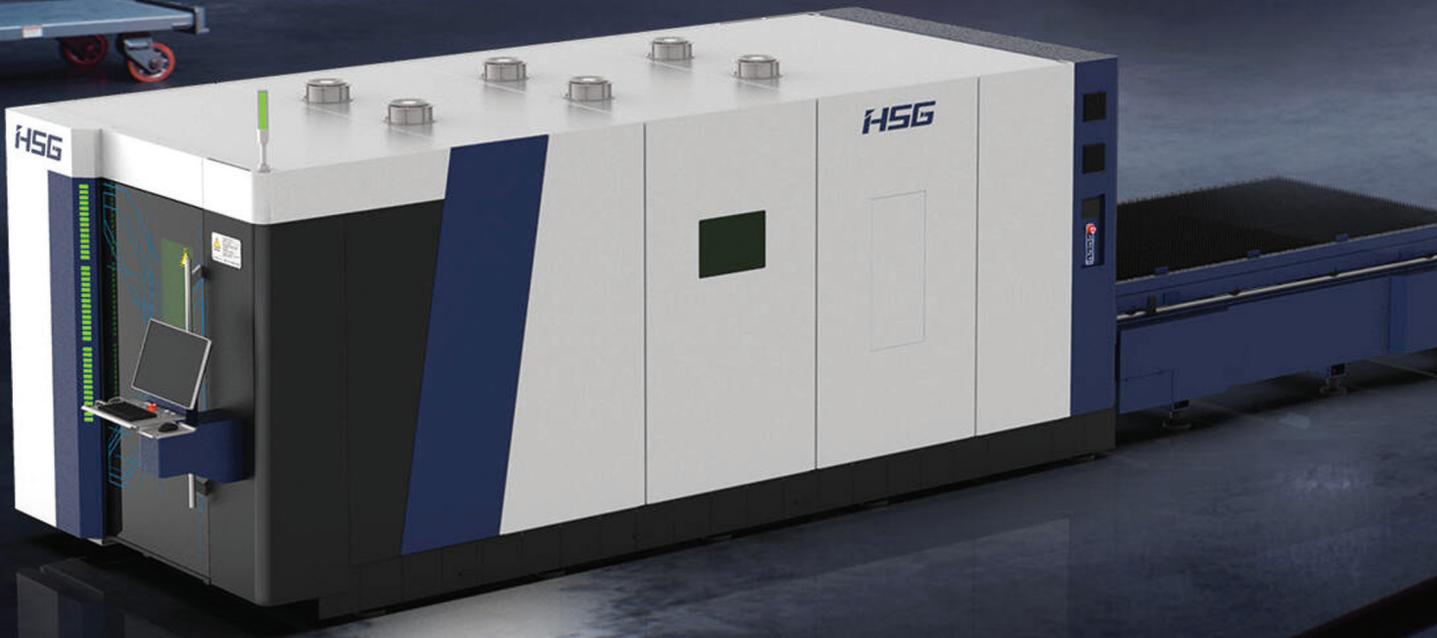




PRODUCT CATALOG



Alpha T Bus CNC System



3D Five-axis Cutting Technology



Optical System



Digital Chucks

Presented by



GX SERIES

Double Exchange Platforms Laser Cutting Machine 1500W-6000W

- ▶ Protective Structure for Smoke Exhaust
- ▶ Shipped by A 40HQ Standard Container



- ▶ Counterboring Technology and Perfect Finish Cut
- ▶ Extruded Aluminum Beam

* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Alpha T Bus CNC System

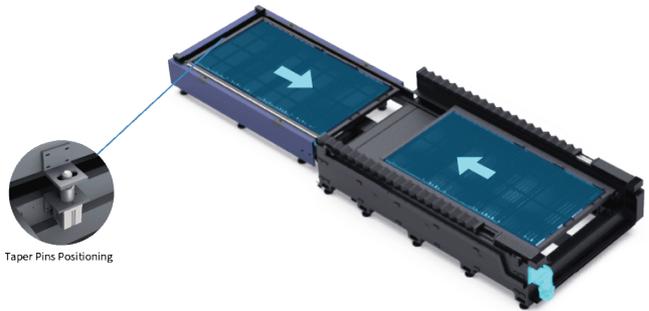
Alpha T can make data transmission via a network cable.

- ▶ Micro-connection cutting
- ▶ Active obstacle avoidance
- ▶ Real-time monitoring of core components
- ▶ Active reminder of machine maintenance
- ▶ HSG-NEST nesting software



Double Exchange Platforms, Taper Pins Positioning

The double platforms are driven by 16A wide chains and positioned by taper pins. The entire exchange process is shown on PLC touch screen.



Taper Pins Positioning

Key Components

German WITTENSTEIN Alpha Speed Reducer, Gear Wheels and Racks

Alpha speed reducer and gear wheels are welded together.



Cutting Samples



Technical Parameter

Model	G3015X
Power	1500-6000W
Working Area (L*W)	3000*1500mm
X/Y-axis Positioning Accuracy	±0.03mm/m

* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

GA IV SERIES

Double Exchange Platforms Laser Cutting Machine 1500-6000W

- ▶ Alpha T Bus CNC System
- ▶ HSG-NEST Nesting Software
- ▶ Double Exchange Platforms
- ▶ Extruded Aluminum Beam



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Carbon Steel Welded

Machine Bed

The machine bed has 500Mpa tensile strength and receives lonnealing and vibration aging to remove its stress. Its rear floorstand has the reinforced loading points, making thick sheet cutting possible.

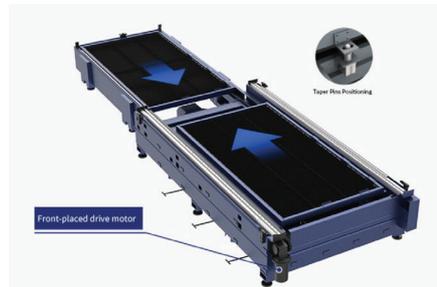


Double Exchange Platforms,

Taper Pins Positioning

The double platforms are driven by 16A wide chains and positioned by taper pins. The entire exchange process is shown on PLC touch screen.

The exchange-driven motor is front-placed to leave enough space for loading & unloading and protect metal plate casing from collision.



Extruded Aluminum Beam

The aluminum alloy is adopted. Our beam is designed as honeycomb anti-compression structure and made by using extrusion molding process.



Cutting Samples



Remote Controller



It has the function of magnetic design and one-button wireless control, incl. callibration, blowing, simulation, cutting, pause, etc.

Autofocus Cutting Head



- ▶ Autofocus accuracy $\pm 0.01\text{mm}$
- ▶ Self water cooling mode
- ▶ Take control of gas flow to enable minor-like surface cutting
- ▶ Feel surrounding and lift itself up to avoid obstacle
- ▶ Anti-pollution design

Alpha T Bus CNC System

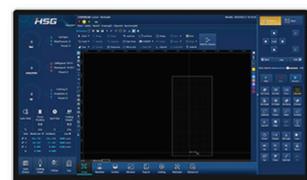
Alpha T can make data transmission via a network cable.

- ▶ Micro-connection cutting
- ▶ Active obstacle avoidance
- ▶ Real-time monitoring of core components
- ▶ Active reminder of machine maintenance
- ▶ HSG-NEST nesting software

Technical Parameter

Model	G3015X	G6025A IV
Power	1500-6000W	1500-12000W
Working Area (L*W)	4000*2000mm	6000*2500mm
X/Y-axis Positioning Accuracy	$\pm 0.03\text{mm/m}$	$\pm 0.03\text{mm/m}$

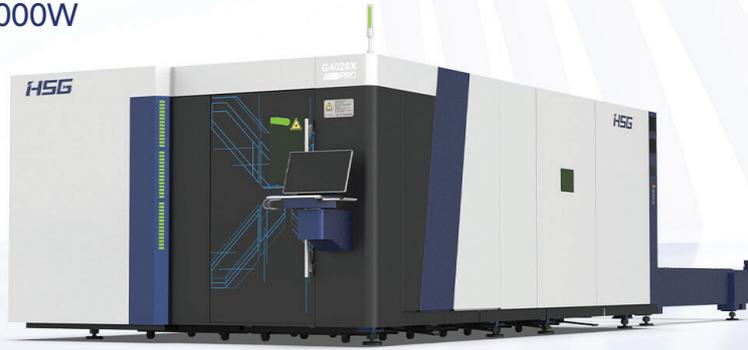
* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.



GX PRO SERIES

High-power Laser Cutting Machine 3000-30000W

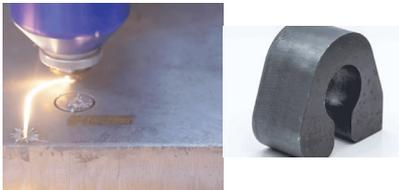
- ▶ HSG-NEST Nesting Software
- ▶ Rear Floorstand Installed Together with Machine Bed
- ▶ Double Exchange Platforms, Taper Pins Positioning
- ▶ Five-stage Piercing and Perfect Finish Cut



High power refers to 12000W and above.
 * Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Competitive Edges of High Power

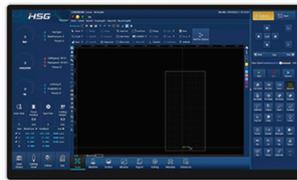
When 20000W model is chosen:
 * Cutting extreme thickness 60mm CS sheet 80mm SS sheet
 * Cutting effects Cutting section is smooth and burr-free.
 Mirror-like surface is made possible while cutting CS sheet by oxygen.



Alpha T Bus CNC System

Alpha T can make data transmission via a network cable.

- ▶ Micro-connection cutting
- ▶ Active obstacle avoidance
- ▶ Real-time monitoring of core components
- ▶ Active reminder of machine maintenance
- ▶ HSG-NEST nesting software



Optional Linear Motor

- * Work performance free from stroke effects because of linear drive
- * No other friction or mechanical contact except for its guideway, so as to relieve parts wear and need little or no maintenance
- ▶ No-load speed 200m/min
- ▶ Acceleration 2.5G



P10/P20 Autofocus

Laser Cutting Head

It can change its laser spot to proper size and shape according to cutting materials and thickness.

- ▶ Active obstacle avoidance, automatic cooling down
- ▶ Optical filming, visual display of temperature and pressure
- ▶ Anti-pollution design, cut with mirror-like surface
- ▶ Remind of regular maintenance, give early warning if abnormal



Eco-friendly Cutting

* Full-protective Design

Top cover is provided and pneumatic safety door is installed between exchange platforms to prevent smoke dispersion.

* Zoning Ventilation

Divide cutting area into left and right zone, outfitted with butterfly valve dampers and outboard 300*300mm full-hollow ventilating ducts

* Positive-pressure Blowing

Blower fans on its top cover and beam offer positive-pressure blowing to press cutting smoke below machine bed.



▶ Zoning ventilation



▶ Positive-pressure blowing from top cover

Technical Parameter

Model	G3015X Pro	G4020X Pro	G6025X Pro
Power	12000-30000W	3000-30000W	3000-30000W
Working Area (L*W)	3000*1500mm	4000*2000mm	6000*2500mm
X/Y-axis Positioning Accuracy	±0.03mm/m	±0.03mm/m	±0.03mm/m

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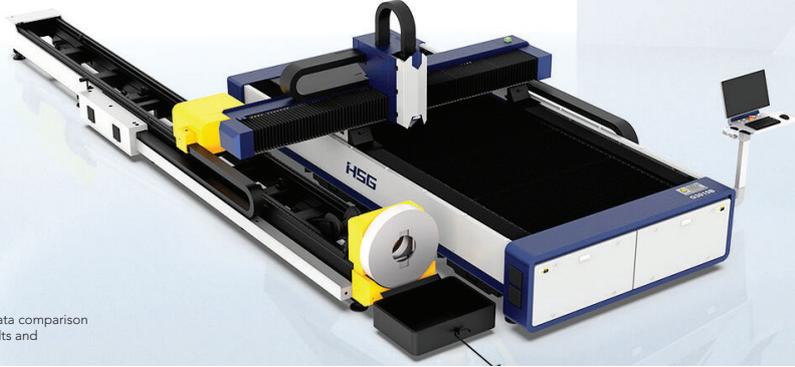
Alpha T Bus CNC System



GB SERIES

Compact-size Single Platform Sheet & Tube Laser Cutting Machine 1500W-6000W

- ▶ Cut Both Sheet and Tube Metals
- ▶ Load from Front, Left and Right Side
- ▶ Autofocus Cutting Head
- ▶ Carbon Steel Welded Machine Bed



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Compact Size

GB has single platform and its size is only 8400*3150mm (G3015B). The machine is open-structured and its work process is visible. Materials are loaded from front, left or right side.



Double Pneumatic Chucks

The chucks are featured by wireless control, one-key clamping and auto centering. The clamping force keeps constant to clamp heavy tube tightly. Concave supports are also adopted to prop up tube.



● Φ20-210mm
 ■ □20*20-150*150mm
 Rectangular diagonal≤210mm

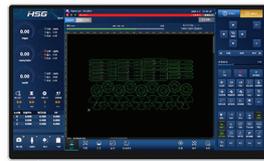
HSG-NEST Nesting Software

HSG-NEST works as a standalone and network-free software. Nesting will start instantly after inputting parts graphics, message and sheet size. Relevant machining reports are also available to be output.



* HSG-NEST is a standard configuration for 4000W+ models and optional for machines below 4000W.

Alpha A CNC System



- ▶ Micro-connection cutting
- ▶ Active obstacle avoidance
- ▶ Real-time monitoring of core components
- ▶ Active reminder of machine maintenance

Cutting Samples



Technical Parameter

Model	G3015B-22EQ	G4020B-22EQ	G6020B-22EQ	G6025B-22EQ
Power	1500-6000W	1500-6000W	1500-6000W	1500-6000W
Working Area (L*W)	3000mm*1500mm	4000mm*2000mm	6000mm*2000mm	6000mm*2500mm
X/Y-axis Positioning Accuracy	±0.03mm/m	±0.03mm/m	±0.03mm/m	±0.03mm/m
Cutting Capacity of Round Tube	Φ20-Φ210mm	Φ20-Φ210mm	Φ20-Φ210mm	Φ20-Φ210mm
Cutting Capacity of Square Tube	□20*20-□150*150mm	□20*20-□150*150mm	□20*20-□150*150mm	□20*20-□150*150mm

* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

GXE SERIES

Double Exchange Platforms Sheet & Tube Laser Cutting Machine 1500W-6000W

- ▶ Cut Both Sheet and Tube Metals
- ▶ Carbon Steel Welded Machine Bed
- ▶ Extruded Aluminum Beam
- ▶ Shipped in 40HQ+40GP Standard Containers



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

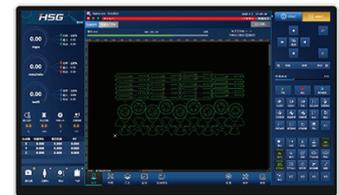
One Machine with Two Functions

GXE can cut both sheet and tube metals, replacing a sheet and a tube laser cutting machine in total. For users, this double-duty machine helps to save the occupied area and costs of purchase.



Alpha A CNC System

- ▶ Micro-connection cutting
- ▶ Active obstacle avoidance
- ▶ Real-time monitoring of core components
- ▶ Active reminder of machine maintenance



Double Pneumatic Chucks

The chucks are featured by wireless control, one-key clamping and auto centering. The clamping force keeps constant to clamp heavy tube tightly. Concave supports are also adopted to prop up tube.



Autofocus Laser Cutting Head

The cutting head can adjust its focus according to laser beam mode to make sure of mirror-like surface.

- Servo autofocus system
- Automatic cooling and obstacle avoidance
- Three built-in protective lens
- Anti-pollution design
- Give early warning if abnormal



Technical Parameter

Model	G3015XE-22EQ	G3015XE-35EQ
Power	1500-6000W	1500-6000W
Working Area (L*W)	3000*1500mm	3000*1500mm
X/Y-axis Positioning Accuracy	±0.03mm/m	±0.03mm/m
Cutting Capacity of Round Tube	Φ20-Φ210mm	Φ20-Φ325mm
Cutting Capacity of Square Tube	□20*20-□150*150mm	□20*20-□230*230mm

Cutting Samples



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

GE SERIES

Double Exchange Platforms Sheet & Tube Laser Cutting Machine 1500-6000W

- ▶ Cut Both Sheet and Tube Metals
- ▶ Extruded Aluminum Beam
- ▶ Carbon Steel Welded Machine Bed
- ▶ Double Exchange Platforms, Taper Pins Positioning



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

325mm Pneumatic Chucks

- The chucks are featured by wireless control, one-key clamping and auto centering.
- The clamping force keeps constant to clamp heavy tube tightly.
- Due to dual-driven pattern, the front and rear chucks can rotate synchronously.

Round tube $\Phi 20$ -210mm
 Square tube 20×20 -150*150mm
 Rectangular diagonal ≤ 210 mm



Autofocus Laser Cutting Heads

- Motor-driven autofocus and its accuracy ± 0.01 mm
- Self-cooling and active obstacle avoidance
- Fully-sealed design to protect inner optical components from dust pollution
- Show machine data and connected devices via bluetooth
- Modular design and drawer-type protective lens for easy replacement



Zoning Ventilation

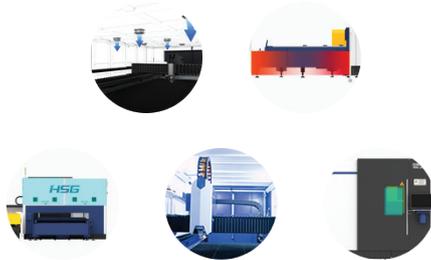
Divide cutting area into left and right zone, outfitted with butterfly valve dampers and 300*300mm full-hollow ventilating ducts

* Tips: It applies to 6000*2000mm and 6000*2500mm.



Optional Features

- Top cover and positive-pressure blower fans thereon
- Laser-proof glass
- Pneumatic door between exchange platforms
- Safety light curtain
- Monitoring cameras



Cutting Samples



Technical Parameter

Model	G4020E-22EQ	G4020E-35EQ	G6025E-22EQ
Power	1500-6000W	1500-6000W	3000-6000W
Working Area (L*W)	4000*2000mm	4000*2000mm	6000*2500mm
X/Y-axis Positioning Accuracy	± 0.03 mm/m	± 0.03 mm/m	± 0.03 mm/m
Cutting Capacity of Round Tube	$\Phi 20$ - $\Phi 210$ mm	$\Phi 20$ - $\Phi 325$ mm	$\Phi 20$ - $\Phi 210$ mm
Cutting Capacity of Square Tube	20×20 - 150×150 mm	20×20 - 230×230 mm	20×20 - 150×150 mm

* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Alpha A CNC System

- ▶ Micro-connection cutting
- ▶ Active obstacle avoidance
- ▶ Real-time monitoring of core components
- ▶ Active reminder of machine maintenance



R3 / R3 PLUS SERIES

Economical Tube Laser Cutting Machine 1500-4000W

- ▶ Flying Cutting and Space Leapfrog
- ▶ Shipped in a 40HQ Standard Container
- ▶ Optional Automatic Loading and Unloading Device
- ▶ Optional Laser-proof Glass



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Economical Model

- Small size and small occupied area, improving the utilization of workshop
- Shipped in a 40HQ standard container with no need for metal plate removal



HSG-X9000 Bus CNC System

- > 21.5-inch touch screen with concise interface
- > Real-time monitoring of core components and early warning if abnormal
- > Simple lines in favor of low failure rate
- > Auxiliary functions incl. tube error detection, welds check
- > Rich tube cutting library

* Bus refers to data transmission mode via on-site bus control system.

KLINGE Autofocus Cutting Head

KLINGE, made of stainless steel, has a function of water cooling, dual-path cooling nozzle, ceramic ring, double focusing protective lens, drawer-type pluggable protective lens, focusing and collimating lens.

- Self-developed by HSG LASER
- Autofocus accuracy $\pm 0.01\text{mm}$
- Flow control for mirror-like surface cutting
- Prevent spark splashing and scalds by SS protective pipes



Double Pneumatic Chucks

- Detecting sensor for front and rear chuck opening & clamping, preventing possible collision
- Function of front chuck ventilation, for dust prevention from entry into chucks
- Front chuck avoidance cutting



R3	R3 PLUS
$\Phi 20\text{-}\Phi 219\text{mm}$	$\Phi 20\text{-}\Phi 325\text{mm}$
$\square 20\text{*}20\text{-}\square 150\text{*}150\text{mm}$	$\square 20\text{*}20\text{-}\square 230\text{*}230\text{mm}$

Technical Parameter

Model	R3	R3 PLUS
Power	1500-4000W	1500-4000W
X/Y-axis Positioning Accuracy	$\pm 0.05\text{mm/m}$	$\pm 0.05\text{mm/m}$
Cutting Capacity of Round Tube	$\Phi 20\text{-}\Phi 219\text{mm}$	$\Phi 20\text{-}\Phi 325\text{mm}$
Cutting Capacity of Square Tube	$\square 20\text{*}20\text{-}\square 150\text{*}150\text{mm}$	$\square 20\text{*}20\text{-}\square 230\text{*}230\text{mm}$
Weight of Single Tube	150kg	200kg

Cutting Samples

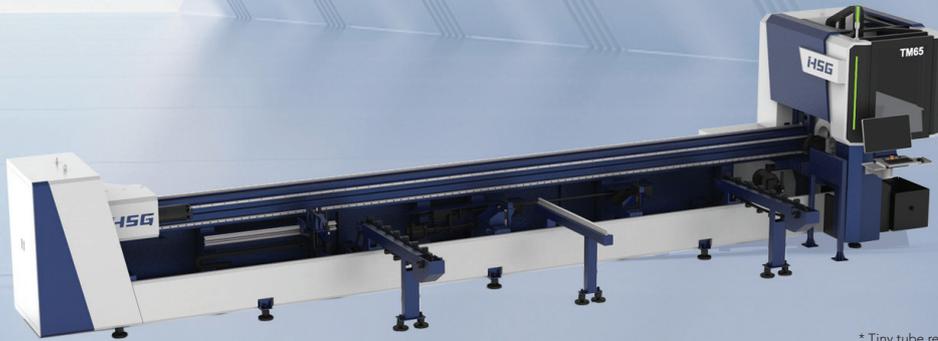


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TM SERIES

Tiny Tube Laser Cutting Machine 1500-3000W

- ▶ Tube Size 10mm
- ▶ Weight of Single Tube 50kg
- ▶ Optional Automatic Loading Devices



* Tiny tube refers to single tube weighing less than 50kg.
 * Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Double Pneumatic

The front and rear chucks are featured by automatic centering and dual-driven rotation, keeping themselves synchronous, therein, front chuck is full-stroke and cutting tailing is further shortened to 50mm by using front chuck avoidance cutting.



Integrated Electric Cabinet

The main electric cabinet, loading cabinet and lasers storage tank are put together to decrease machine size. It is easy to install and transport overseas.



HSG-X9000 Bus CNC System

- > 21.5-inch touch screen with concise interface
- > Real-time monitoring of core components and early warning if abnormal
- > Simple lines in favor of low failure rate
- > Auxiliary functions incl. tube error detection, welds check
- > Rich tube cutting library

* Bus refers to data transmission mode via on-site bus control system.

Space Leapfrog and Flying Cutting

Space Leapfrog and Flying Cutting

The technology helps to minimize the moving path of cutting head by omitting repeated lift and fall, therefore, cutting speed is improved beyond doubt.

Technical Parameter

Model	TM65
Power	1500-3000W
X/Y-axis Positioning Accuracy	±0.03mm/m
Cutting Capacity of Round Tube	Φ10-Φ170mm
Cutting Capacity of Square Tube	□10*10-□150*150mm
Weight of Single Tube	50kg

Cutting Samples



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TS SERIES

Digital Chucks Tube Laser Cutting Machine 1500-4000W

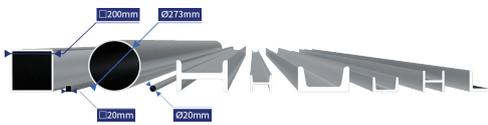
- ▶ Cut $\Phi 273\text{mm}$ Round Tube
- ▶ Double Digital Chucks with 85mm Tailing
- ▶ Autofocus Cutting Head
- ▶ Safety Light Curtain



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Cut Conventional Tubes, Profiles and Special-shaped Tubes

TS can not only cut conventional tubes like round, square and rectangular tubes, and profiles like channel, angle and H-shaped steels, but also cut special-shaped tubes easily like triangular, concave, L and C-shaped tubes, etc.



HSG-X Bus CNC System

- ▶ 21.5-inch touch screen with concise interface
- ▶ Real-time monitoring of core components and early warning if abnormal
- ▶ Simple lines in favor of low failure rate
- ▶ Auxiliary functions incl. tube error detection, welds check
- ▶ Rich tube cutting library

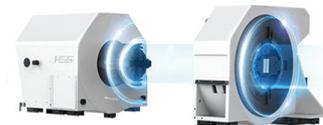


* Bus refers to data transmission mode via on-site bus control system.

Double Digital Chucks

The chucks can identify different tubes and give alarm if abnormal. Front chuck is outfitted with ventilating system to prevent smoke dust entry. Pressure monitor installed on rear chuck shows clamping pressure that allows to be adjusted by hands.

- ▶ Closed-loop control
- ▶ Detect real-life state of clamping claws
- ▶ Access to tube data easily
- ▶ Self-adaptive adjustment of clamping force



Labor-saving Configurations



Optional Automatic Loading Devices

Users can load standard-sized tube and enjoy batch production with little manual intervention. Round, square, rectangular tube, as well as angle, channel and H-shaped steel are loaded easily.



Unloading Device

Turning plates as unloading device can protect tube surface from scratch.

Space Leapfrog and Flying Cutting



Technical Parameter

Model	TS65
Power	1500-4000W
X/Y-axis Positioning Accuracy	$\pm 0.03\text{mm/m}$
Cutting Capacity of Round Tube	$\Phi 10-\Phi 170\text{mm}$
Cutting Capacity of Square Tube	$\square 20*20-\square 200*200\text{mm}$
Weight of Single Tube	200kg

Cutting Samples



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

TX SERIES

Heavy-duty Tube Laser Cutting Machine 3000-12000W

- ▶ Weight of Single Tube 1500kg
- ▶ Length of Single Tube 12000mm
- ▶ Cut Φ 500mm Round Tube
- ▶ Cut with 45° Bevel (Optional)

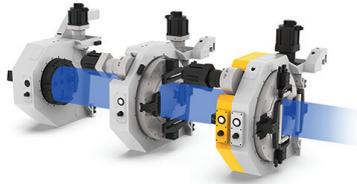


* Heavy-duty tube refers to single tube weighing 500kg+.
* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Chuck Clamping Technology

Chuck C3 and C4 are combined as one and can rotate or move synchronously but control its claws opening and closing independently. Except for clamping, tube supporting is also available for the combined chuck, remedying the common weakness of four chucks.

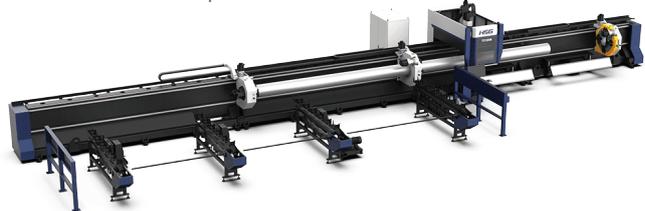
- Both tube clamping and supporting
- Shipped in a 40HQ standard container with no need for Correction of tube deviation



Labor-saving Configurations

Multi-tube Automatic Loading Device
Several heavy tubes are usually loaded synchronously.

Automatic Unloading Equipment
Two follow-up turning plates are available to convey \leq 6000mm heavy tube stably from high to low while unloading, so that tube surface is well protected.



Optional 3D Five-axis

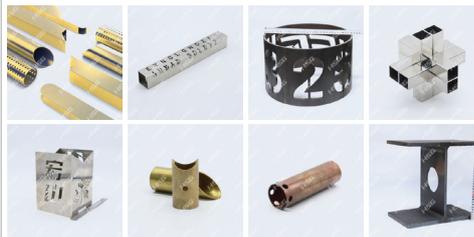
Cutting Head,

45° Bevel

- Self-developed by HSG Laser
- Take control of laser focus thanks to its fully automated servo motor
- Laser path reshaping technology
- Swingable head outfitted with the function of collision prevention
- Modular structure in favor of repair or maintenance



Cutting Samples



HSG-X CNC System

- ▶ 21.5-inch touch screen with concise interface
- ▶ Real-time monitoring of core components and early warning if abnormal
- ▶ Simple lines in favor of low failure rate
- ▶ Auxiliary functions incl. tube error detection, welds check
- ▶ Rich tube cutting library



* Bus refers to data transmission mode via on-site bus control system.

Technical Parameter

Model	TX7026	TX9036	TX12036
Power	3000-6000W	6000-12000W	6000-12000W
X/Y-axis Positioning Accuracy	\pm 0.03mm/m	\pm 0.05mm/m	\pm 0.05mm/m
Cutting Capacity of Round Tube	Φ 15- Φ 260mm	Φ 40- Φ 360mm	Φ 40- Φ 360mm
Cutting Capacity of Square Tube	15*15-180*180mm	\square 40*40- \square 250*250mm	\square 40*40- \square 250*250mm
Weight of Single Tube	400kg	800kg	1200kg

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HC SERIES

Electro Hydraulic Servo Bending Machine

- ▶ Servo Variable Pumping
- ▶ Carbon Steel Welded Frame
- ▶ Movable Front Carrier
- ▶ Various Upper and Lower Tools

* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.



Switzerland (CYBELEC) CybTouch

12PS Control System

- ▶ Touch screen
- ▶ Correct angle and backgauge range
- ▶ Auto calculation of bending data, pressure and deflection compensation
- ▶ Bending program makes mass production come true



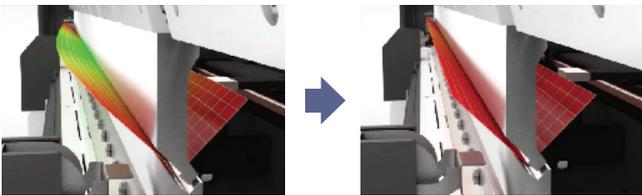
Post-positioning System

- Move back and forth (X axis), up and down (R axis) driven by servo motor
- positioning fingers available



Automatic Deflection Compensation

- Compensate for deflection deformation caused by platform
- Calculate compensation according to length, thickness and angle of bending workpiece



Bending Follow-up Trolley (Optional)

With the trolley, semi-automatization of bending is made possible and bending difficulty of large or heavy workpiece is reduced.



Bending Samples



FMW SERIES

Handheld Fiber Laser Welding Machine 1000-2000W



- ▶ Small in Size, Easy to Move
- ▶ Clean and Pollution-free Welding
- ▶ Automatic and Flexible Welding
- ▶ Weld 0.5-4mm CS, SS, AL, Galvanized Sheet



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Upgraded Model



FMW IV

- Power 1000-2000W
- RD interface
- Double protective lens+ adjustable laser spot (Pro)
- Electro-optical conversion rate 45%+
- 1mm dual-driven wire feeder

FMW

- Power 1000-1500W
- QBH interface
- Handheld swingable welding head
- Electro-optical conversion rate 30%



Small in Size,

Easy to Move



* The machine is integrated and its overall size is only 1300*800*1206mm. 5m/8m optical fiber cable enables are available for use.

* Handheld welding head is equipped with temperature sensor and double protective lens. Welders will feel no tired after a long work.

* Its top pull-push handle and bottom universal casters (lockable) are convenient for users to move this machine.

Use and Maintenance



The electro-optical conversion rate is as high as above 45% and its power stability is $\pm 0.5\%$.

Pumping source can last for over 100000h, basically maintenance-free.

Comparison of Laser Welding and Other Welding Patterns

Type	Traditional Welding Machine	Solid YAG Welding Machine	FMW	
Welding Quality	Heat input	High	Low	
	Workpiece deformation/undercut	Large	Small	
	Welds forming	Fish scale	Fish scale	Smooth
	Post-processing	Polish	Polish	None
Operation	Welding speed	Slow	Medium	Fast
	Operation difficulty	High	High	Low
Environmental Protection and Safety	Personal harm	Large	Small	Small
	Environmental pollution	Heavy	Light	Light
Operation Cost	Consumables	Welding rod	Laser crystal, xenon lamp	None
	Energy consumed	Low	High	Low
	Welder requirements	High	Medium	Low
	Occupied area	Small	Large	Small

Scope of Application



Technical Parameter

Model	FMW
Power	1500-2000W
Laser Wavelength	IPG:1070 \pm 10nm;Raycus:1080 \pm 5nm
Working Mode	Continuous/Pulse
Length of Optical Fiber	5/8m
Seams Requirements	<1mm
Overall Dimensions (L*W*H)	1300*800*1206mm

* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Five Functions



- Temperature sensor
- Double protective lens
- RD interface (only for Raycus laser device)
- 1.6mm dual-driven wire feeder
- Adjustable laser spot (Pro)

ARW SERIES

Automatic Pallet Racks for Sheet Metals

- ▶ Allow Customization
- ▶ Unmanned and Full-automatic Operation
- ▶ Feed One or Multiple Machines

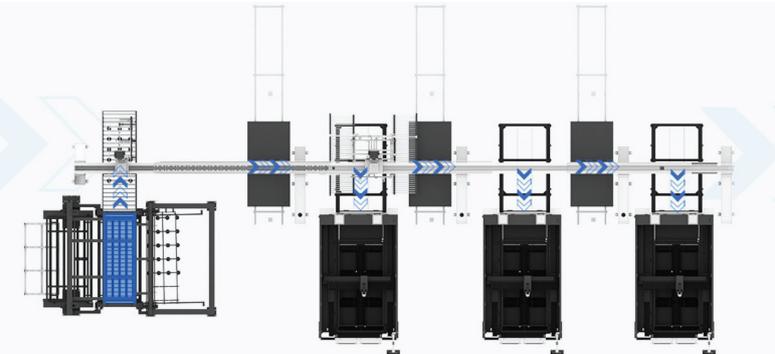


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Scientific and Tightly-packed

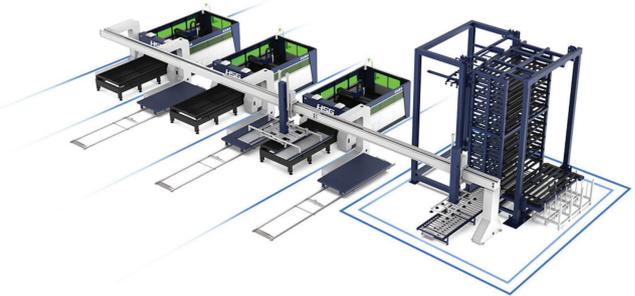
Sheet metals are stored in a batch and systematic way for the convenience of easy invocation. This tower-type stereoscopic pallet rack makes effective use of cubical space and accommodates sheet metals compactly. As thus, disordered storage manner will become a thing of the past.



Unmanned but Well-arranged Production

The production starts by itself according to relevant plans. Its control system can invoke sheet metals for loading and enable unmanned cutting. Consequently labor costs are saved and misoperation caused by manual work is effectively avoided.

Feed One or Multiple Machines



A pallet rack can simultaneously serve for several cutting machines. Except for reduction in energy consumption, the utilization of workshop will also be enhanced.

Technical Parameters

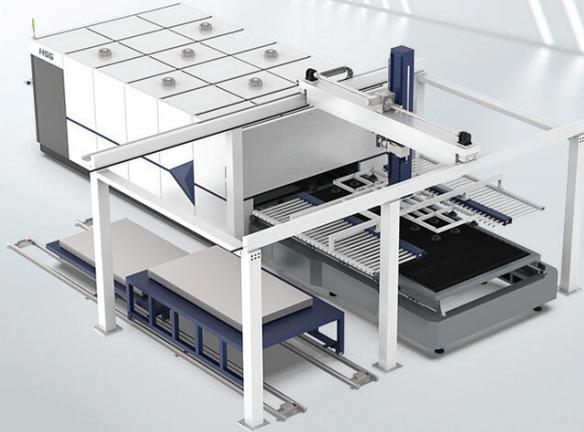
Model	ARW3015-8	ARW4020-8
Number of Pallets	8/10/16(to be tailored)	8/10/16(to be tailored)
Range of Sheet Size	1250*1250mm - 3000*1500mm	1250*1250mm - 4000*2000mm
Sheet Thickness	0.8-6mm	0.8-6mm
Loading Weight of Single Pallet	3t	3t
Height between Pallets	120mm	120mm
Applicable Models	GX IV, GX-M, GX Pro, GA IV, GT Pro II, GH Pro II, GV-B, X3015A GL-S	

Tips: X=number of pallets. The stereoscopic pallet rack can work with automatic loading & unloading system.

ALG SERIES

Automatic Loading & Unloading System

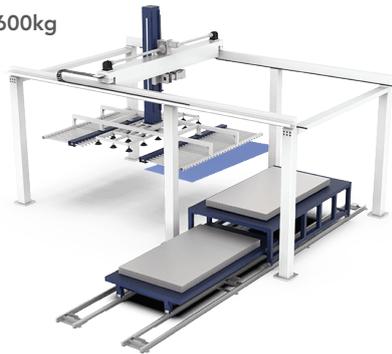
- ▶ Apply to Medium-to-thin Sheets
- ▶ Unmanned and Full-automatic Operation
- ▶ Feed One or Multiple Machines



* Machine appearance, technical parameters, function description, data comparison shown in this page are from HSG in-house laboratory. All testing results and experimental data shall be subject to real machine.

Range of Application

- ▶ Rated size
3000*1500mm, 4000*2000mm, 6000*2000mm
- ▶ Sheet thickness 1-8mm
- ▶ Sheet weight 200kg-600kg



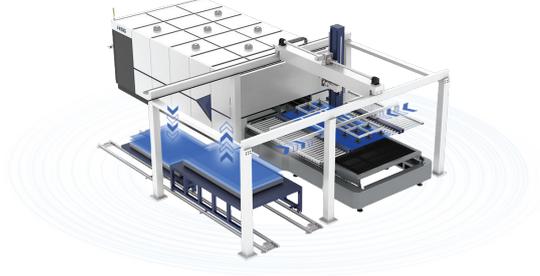
Layer-based Measurement of Sheet Thickness

Sheet metals are subject to thickness measurement to ensure that only one sheet is loaded each time.



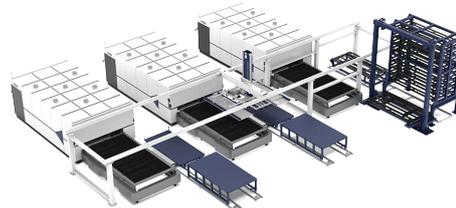
User-friendly Design

- ▶ **Automatic**
Sheet metals are loaded to exchange platforms and finished products are stacked to pallets automatically.
- ▶ **Safe**
With digital operation and safe handling, sheet metals are well protected from scratching.



Feed One or Multiple Machines

A set of automatic loading & unloading system can simultaneously serve for several cutting machines. Except for reduction in energy consumption, the utilization of workshop will also be enhanced.



Technical Parameters

Model	ALG		
Model	ALG-3015-200	ALG-4020-400	ALG-6020-600
Sheet Thickness	1-8mm	1-6mm	1-6mm
Sheet Weight	200-400kg	400kg	600kg
Sheet Size	3000*1500*6/8mm	4000*2000*6mm	6000*2000*6mm
Height between Pallets	120mm	120mm	120mm
Applicable Models	GX IV, GX-M, GX Pro, GA IV, GT Pro II, GH Pro II, GV-B, X3015A GL-S		

* Global users can also customize other models.

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