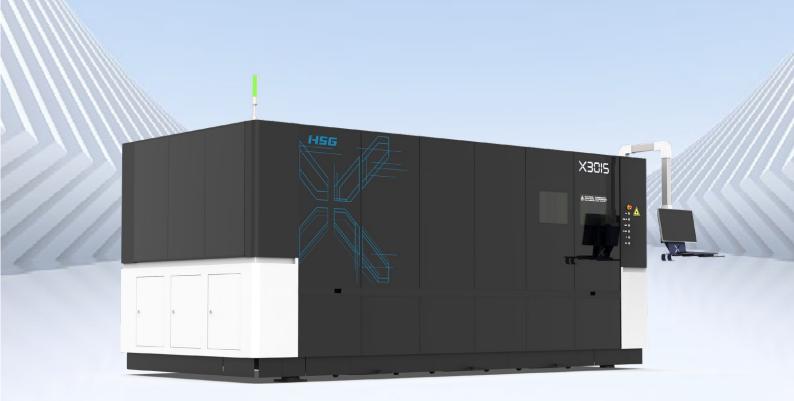


## **ULTRA-HIGH-PRECISION**

Sheet Laser Cutting Machine

1500-3000W

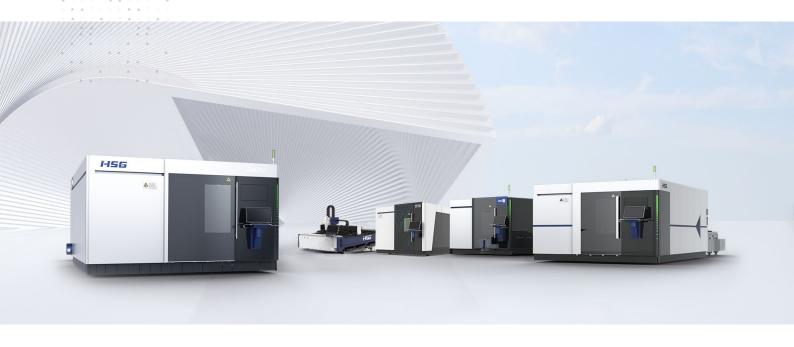


X series

Sheet Laser Cutting Machine

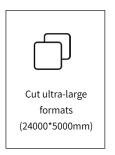






## OUR CURRENT FAMILY OF SHEET METAL LASER CUTTING MACHINES





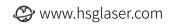






Power	Single Platform			Double Exchange Platforms			Coil Stock Cutting
1500W						N/A	
2000W	GCIII	X		GA IV GX IV		,	GL,GL-S
3000W							
4000W		N/A		GX-M	1	GX	
6000W							
8000W	N/A				N/A	N/A	N/A
12000W	GF-A/GF-B(45° bevel)		GX PRO	GH PRO II	GT PRO II	N/A	
15000W							
20000W					GV-B (45° bevel)		
30000W					N/A		

<sup>\*</sup>The above data are for reference only, subject to the actual product!







## **WHY CHOOSE X?**

- \* Three different models for selection
- \* A model with the highest repositioning accuracy ( $\pm 0.005$ mm) in HSG
- \* A high-precision model specially engineered for overseas customers

T 1 : 15	х					
Technical Parameter	0606	1510	3015			
Power	1500-3000W	1500-3000W	1500-3000W			
Processing Format (L*W)	600*600mm	1550mm*1050mm	3048mm*1525mm			
X/Y-axis Positioning Accuracy	$\pm$ 0.02mm/m	±0.03mm/m	±0.03mm/m			
X/Y-axis Repositioning Accuracy	±0.005mm	±0.03mm	±0.03mm			
Max. No-load Speed	80m/min	100m/min	120m/min			
Max. Acceleration	1.5G	1.2G	1.5G			
Max. Cutting Capacity	16-20mm CS, 10-12mm SS, 4-12mm AL alloy, 4-8mm brass, 3-4mm red copper					
Max. Loading Weight of Platform	28kg	190kg	200kg			
Overall Dimensions (L*W*H)	2010*2105*2070mm	3800*1910*1920mm	4850*2260*2100mm			



## **FULL-PROTECTIVE STRUCTURE**

- Prevent possible personal harm
- Make machine work longer by dust pollution prevention

#### **Optional Features**

Laser-proof glass: low laser transmittance, protect operators' retina, in line with international standards



## ALPHA T BUS CNC SYSTEM

- Bus control
- Ultra-high-speed scanning & cutting with micro-connection
- Active obstacle avoidance
- Real-time monitoring of core components
- Flexible/batch processing mode
- Special cutting technology for thick sheets



21.5-inch touch screen

Easy to operate even by green hands

Match with 2000+ process data on its graphical programming interface Compatible with multiple graphic files, incl. DXF, DWG, PLT and NC code

Improve stock layout and material utilization by 20% and 9.5%, with no limit of quantity of spare parts

**\$** 

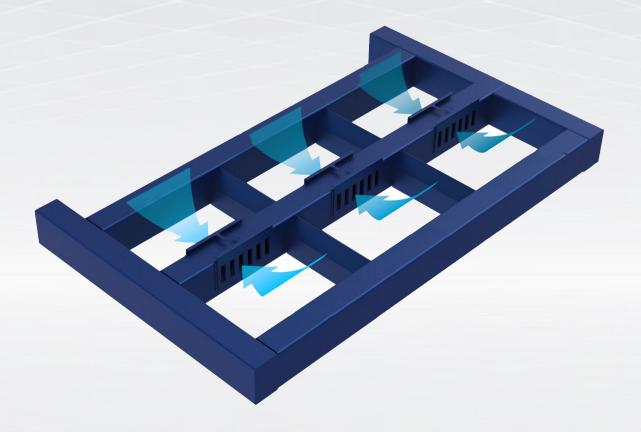
Alpha T, self-developed by HSG LASER, can make data transmission rapid, stable and accurate only via a network cable as a technically advanced bus system.



## KLINGE AUTOFOCUS LASER CUTTING HEAD

- ▶ Self-developed by HSG LASER based on Japanese technology
- ▶ Autofocus accuracy ±0.01mm
- ▶ Take accurate control of gas flow for easy cutting with mirror-like surface
- Multiple protective lens for favorable airtightness
- Module-based design for easy repair and maintenance
- Long service life at low maintenance costs





## **ECO-FRIENDLY CUTTING**



ost smoke-free ir an instant



Environmental and pollution-free



Low noise



- ➢ Zoning ventilation, namely, divide cutting area into left and right zone
- Synchronize cutting and smoke discharge





## **PULL-OUT SINGLE PLATFORM**

- Double clips (except for X3015) on both sides of platform, preventing sheet deformation and allowing width adjustment
- Single push-pull platform (except for X0606 and X1510) for easy sheet loading and scrap collecting
- ⊗ Rear loading available, especially suitable for cutting thin and ultra-long sheet







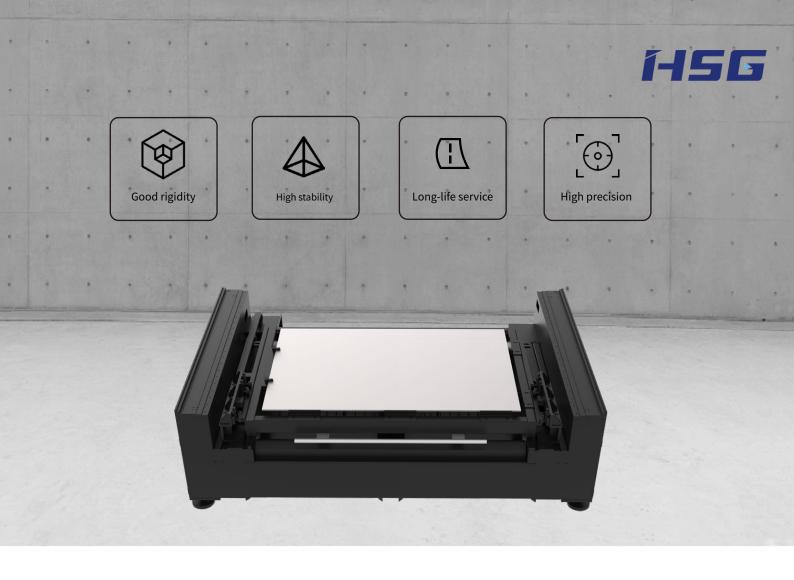


# THE LATEST GENERATION OF EXTRUDED AVIATION ALUMINUM BEAM

- Lighter in weight
- More solid in structure
- Uniform textures
- Higher in strength

- \* Adopt light-weight 6 series aviation aluminum alloy, with good dynamic performance
- \* Anti-compressive honeycomb structure, keeping up with aerospacecraft design standards
- \* No air or sand hole but higher strength because of extrusion forming technology
- \* One-piece structure of beam and its column, as thus, keep high precision for 20+ years

Applicable model: X1510

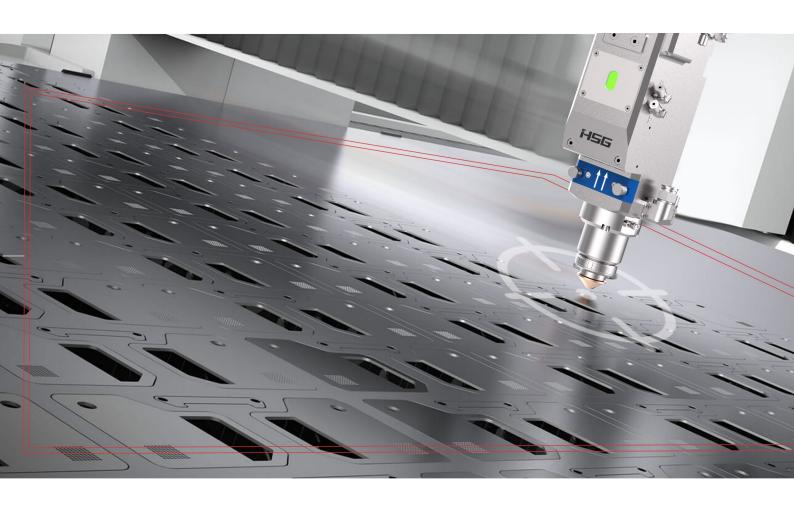


## MARBLE OR PLATE-WELDED MACHINE BED

- ♦ Protect and make the machine bed work longer



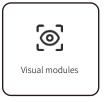




## OPTIONAL FEATURES VISUAL POSITIONING SYSTEM

- Perceive accurate sheet size during cutting
- Show the entire cutting process
- Improve sheet cutting precision







## PROFITABLE COOL TECHNOLOGIES FOR YOU



#### MIRROR-LIKE SURFACE CUTTING

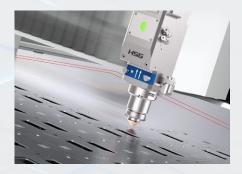
- \* Cutting section as smooth as a mirror
- \* Smaller degree of taper
- \* High cutting precision
- \* Save energy and costs
- \* With no need for secondary polishing

Tips: It is only applicable to carbon steel cutting by oxygen.



#### LIGHTNING-FAST PIERCING

- \* Piercing at millisecond level
- \* Piercing with high precision
- \* Negligible popping rate
- \* Clean and slagless



#### MICRON-LEVEL SUPERFINE CUTTING

Cutting precision at micron level
Smooth, flat and sightly incision
IPG or Raycus lasers adopted
Fit for precision-demanding industries



## **STANDARD WIRING**











- The integrated cabinet caters to EU CE standards and separates weak current from strong current area to prevent electromagnetic interference, dust entry and possible ignition.
- External control elements are equipped with Phoenix pluggable fail-safe wiring terminal.
- Every line matches with its own code. The optical fiber line, gas hose, water hose, strong current line and weak current line in wiring duct are arranged in different zones to prevent signal interference and frictional loss among lines.

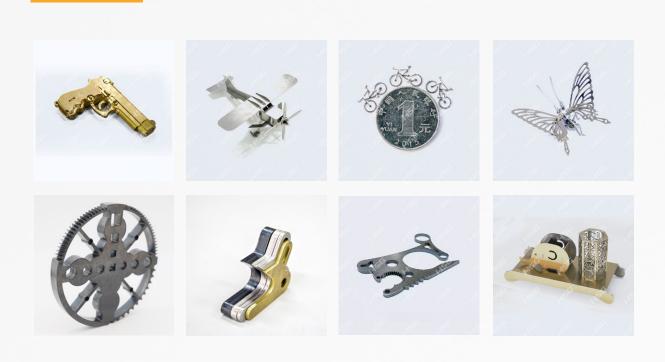


## **HIGH-STANDARD PACKAGE**

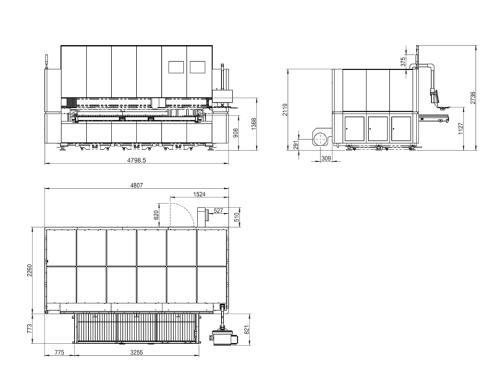
Our machines are packed by aluminum foil, metal framework, fumigation wooden case, anti-rust oil+oilpaper, moisture-barrier bag, plastic waterproof film, filled with foam and covered by vacuum aluminum foil and plastic film.



## **CUTTING SAMPLES**



## **MACHINE FOUNDATION(X3015)**





## A HI-TECH ENTERPRISE IN CHINA

HSG Laser, founded in 2006 as a hi-tech enterprise focusing on R&D, production and sales of laser equipment, is dedicated to serve global customers with intelligent metal forming solutions.







## **SERVE 100+ COUNTRIES AND REGIONS**



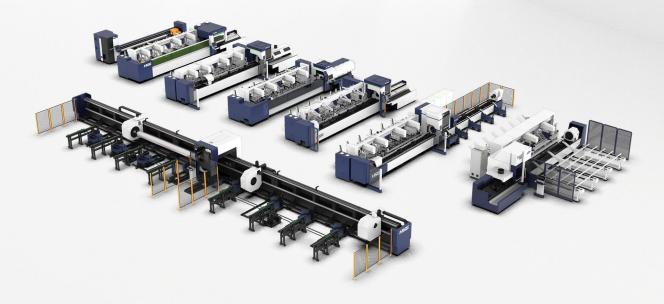


- \* 3D five-axis bevel cutting technology
- \* P30 ultra-high-power intelligent laser cutting head
- \* Intelligent digital four chucks
- \* Alpha T bus system
- \* HSG-XMT multi-touch operating system



## MACHINES AVAILABLE FOR SALE

- Sheet metal laser cutting machines
- Sheet & tube laser cutting machines
- Tube metal laser cutting machines
- Bending machines
- Welding machine
- Automation devices





## STRICT IN QUALITY CONTROL FLOW







COLORIMETER

FILM THICKNESS GAUGE



**COLLIMATOR** (beam)



HARDNESS TESTER



**2D CATHETOMETER** 



**COLLIMATOR** (bed)



**INTERFEROMETER** 

#### PROFESSIONAL AFTER-SALES SERVICE



#### **One-year Warranty**

All unit components are warranted for 1-year, except items listed in the Exclusions section below. Our after-sales engineer or local agent will supply new or remanufactured component of equal or better quality to replace the failed one.

#### **Exclusions**

Unit components subjected to normal wear during the Warranty Period are not covered by warranty, including: 1. Nozzle 2. Protective lens 3. Ceramic ring

Machine breakdown caused by part handling/misuse or corrosion due to exposure to caustic materials, voids the warranty.

Component failure caused by customer misuse/abuse of the unit (e.g. using incompatible materials or wrong axial position settings), voids the warranty.



### TABLE OF SHEET THICKNESS AND CUTTING SPEED

Material name	Thickness (mm)	CUTTING SPEED (m/min)		
Material Haine	Tillekiless (IIIII)	1500W	3000W	
Carbon Steel (O <sub>2</sub> )	1	6.0-11.0	7.0-12.0	
	2	5.0-6.6	5.0-7.0	
	3	3.0-3.6	3.0-3.8	
	4	2.0-3.0	2.6-3.5	
	5	1.8-2.4	2.5-3.1	
	6	1.5-2.0	2.0-3.0	
	8	1.0-1.3	1.4-2.2	
	10	0.7-1.2	1.2-1.8	
	12	0.6-1.0	1.0-1.5	
	16	0.5-0.7	0.7-0.85	
	20		0.6-0.75	
	1	30.0-40.0	42.0-62.0	
	2	8.0-9.6	12.0-25.0	
	3	3.0-4.0	7.0-12.0	
Stainless Steel	4	2.0-3.0	4.0-6.5	
(N <sub>2</sub> )	5	1.0-1.5	2.5-4.5	
(2/	6	0.5-0.8	1.5-3.2	
	8	0.2-0.3	0.6-1.0	
	10		0.4-0.8	
	12			
	1	15.0-30.0	35.0-55.0	
	2	6.0-9.0	12.0-20.0	
	3	1.4-3.0	7.0-10.0	
Aluminum Alloy	4	1.0-1.5	3.7-5.0	
	5		2.5-3.5	
(N <sub>2</sub> )	6		1.5-2.5	
	8		0.6-1.2	
	10			
	12			
	1	18.0-25.0	28.0-55.0	
	2	5.0-6.0	9.0-20.0	
	3	1.4-1.8	4.5-10.0	
Brass (N <sub>2</sub> )	4	1.0-1.2	2.5-4.5	
	5		1.2-2.5	
	6		0.9-2.0	
	8			
Red Copper (O <sub>2</sub> )	1	9.0-12.0	15.0-33.0	
	2	2.8-3.6	5.5-9.5	
	3	1.0-1.5	1.7-3.8	
	4			

Version No.:2022.02

The actual machines shall prevail and above data & pictures are only for reference.