

# HIGH-POWER DOUBLE EXCHANGE PLATFORMS LASER CUTTING MACHINE



## G3015X Pro

### 40HQ STANDARD CONTAINER TRANSPORT MODEL

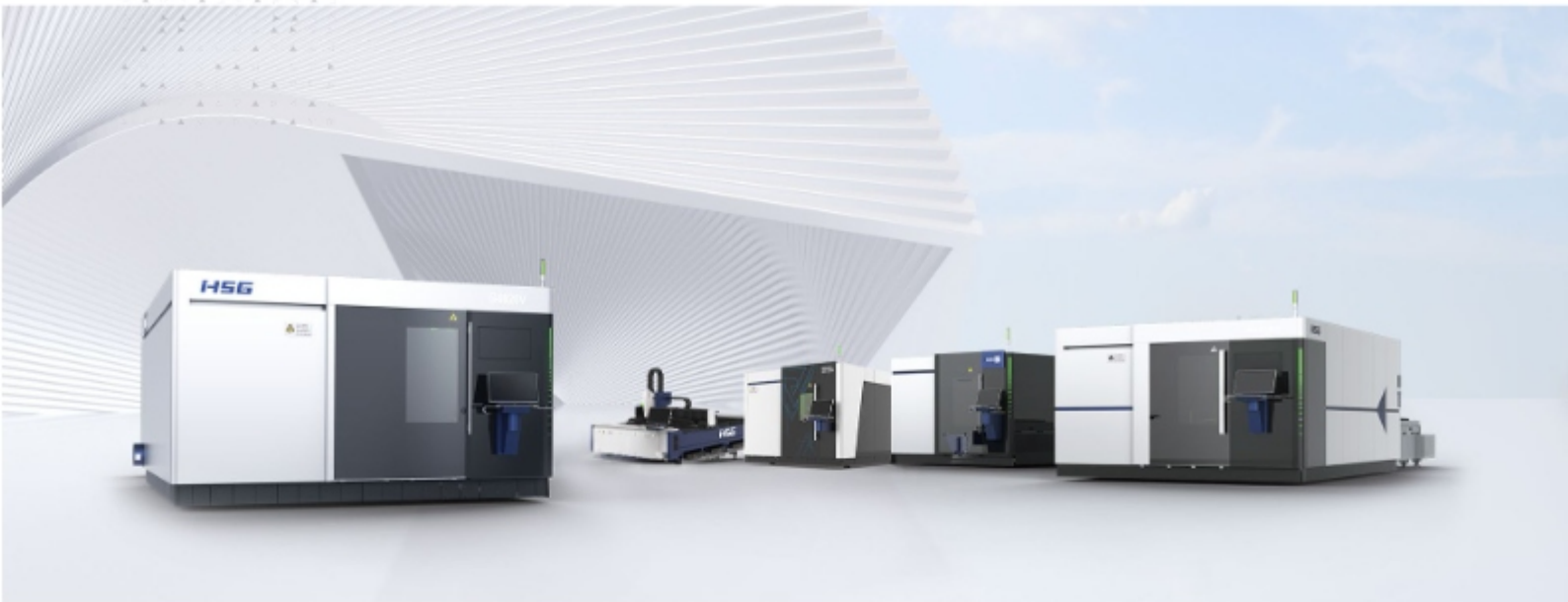
Technical Parameter	G3015X Pro
Processing Format (L*W)	3048*1524mm
Power	12000W
X/Y-axis Positioning Accuracy	±0.03mm/m
X/Y-axis Repositioning Accuracy	±0.03mm
Max. Acceleration	1.5G
Max. No-load Speed	140m/min
Max. Loading Weight of Platforms	1100kg
Overseas Transport	A 40HQ Standard Container
Overall Dimensions (L*W*H)	8900*2260*2200mm




## WHY CHOOSE G3015X PRO?

- 📦 Packed in a 40HQ standard container overseas
- 📦 High-standard configurations as one of our high-end sheet laser cutting machines
- 📦 Fast delivery to oversea customers
- 📦 Lay equal stress on self innovation and import from world-famous brands







# OUR CURRENT FAMILY OF SHEET METAL LASER CUTTING MACHINES




Power range  
1.5-30kW




Cut ultra-large  
formats  
(24000\*5000mm)



Cut super-thick  
sheets (100mm CS)



Max. 45° bevel  
cutting



Cut with ultra-high  
precision (X0606:  
max. ±0.005mm/m)

Power	Single Platform		Double Exchange Platforms			Coil Stock Cutting
1500W	GC III	X	GA IV	N/A	G3015X IV	GL
2000W				GX (2/3/6KW)		
3000W						
4000W	GF-A/GF-B		GT PRO II		N/A	N/A
6000W					G3015X PRO	
8000W			GV			
12000W				GH PRO II		
15000W					N/A	
20000W			N/A			
30000W						

# 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
- Built-in nesting software



**1**  
21.5-inch touch  
screen

**2**  
Easy to operate even  
by green hands

**3**  
Match with 2000+ process  
data on its graphical  
programming interface

**4**  
Compatible with multiple  
graphic files, incl. DXF,  
DWG, PLT and NC code

**5**  
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.

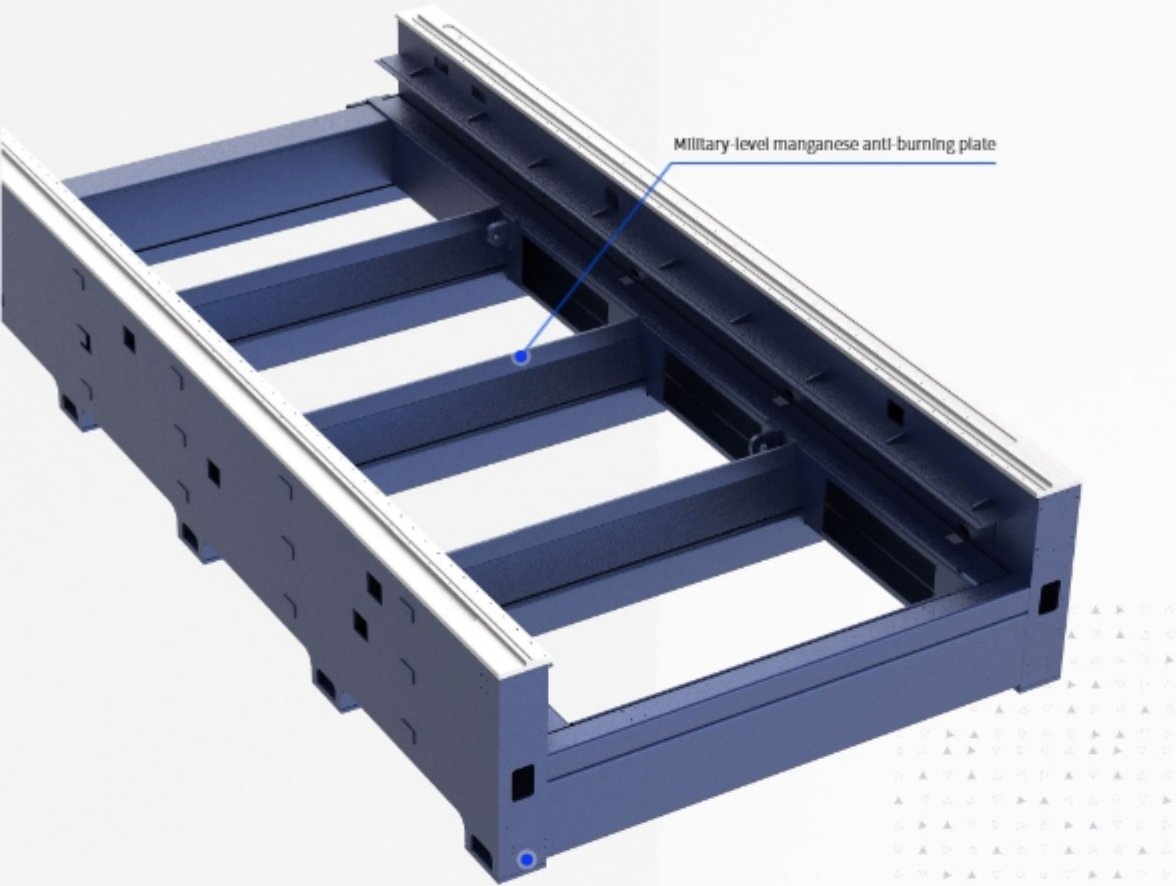
-  Autofocus precision  $\pm 0.01\text{mm}$
-  Active obstacle avoidance
-  High-transmittance lens
-  Lower requirements for materials
-  Give early warning if abnormal
-  Easy to maintain at low costs



## P10

# INTELLIGENT AUTOFOCUS LASER CUTTING HEAD 10-15KW

- ▶ Self-developed by HSG LASER
- ▶ Real-time monitoring of focus position (auto correction) and processing status
- ▶ Adjust laser spot based on materials quality and thickness
- ▶ Fast-cooling modules for sensor
- ▶ Cut thin sheets at fast speed and thick sheet of high quality
- ▶ Offer one-stop service, incl. installation, debugging and after-sales service



Military-level manganese anti-burning plate

Keep high precision for 20+ years



More solid in structure



Highly precise and stable for 20+ years



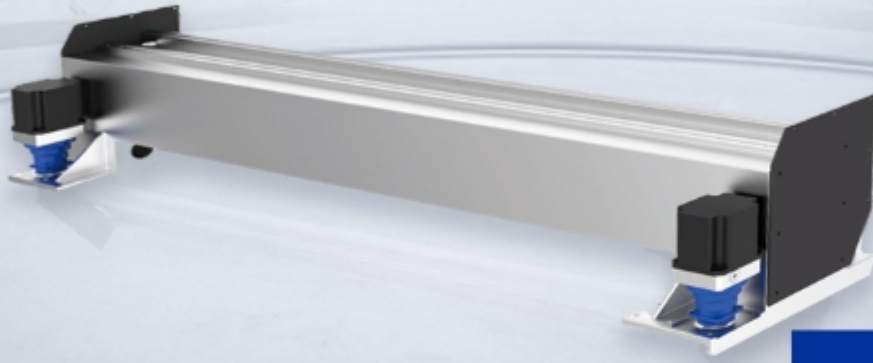
Much safer in cutting



Keep operators safe

## HIGH-QUALITY CARBON STEEL WELDED MACHINE BED

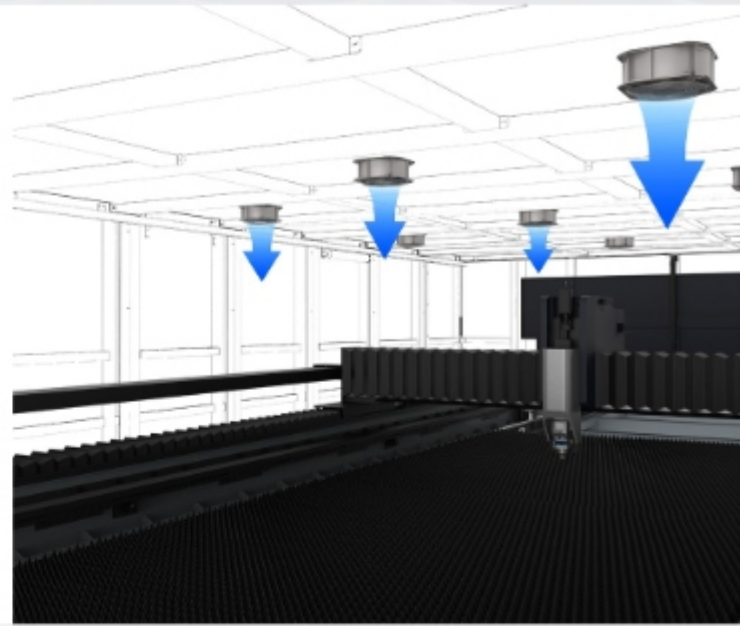
- High-quality carbon steel adopted, with less impurity, less heat absorption and good rigidity
- Keep high precision for long term due to welding stress removal via low annealing and vibration aging
- 20 years using without deformation
- Lessen the area heated by laser



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

## THE LATEST GENERATION OF EXTRUDED AVIATION ALUMINUM BEAM

- ☞ 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



## ECO-FRIENDLY CUTTING



Almost smoke-free in an instant



Environmental and pollution-free



Low noise



Long-life components

### ZONING VENTILATION

- Divide cutting area into left and right zone
- Generally controlled by butterfly valve
- 300\*300mm full-hollow air ducts on both sides of machine bed
- Synchronize cutting and smoke discharge

### POSITIVE-PRESSURE PROTECTION

- At national standard level
- Several blower fans on top cover and beam, pressing smoke below machine bed
- Work with button hurricane-force ventilation system
- Air outlet on Z axis of P10 can blow away cutting smoke to keep itself clean

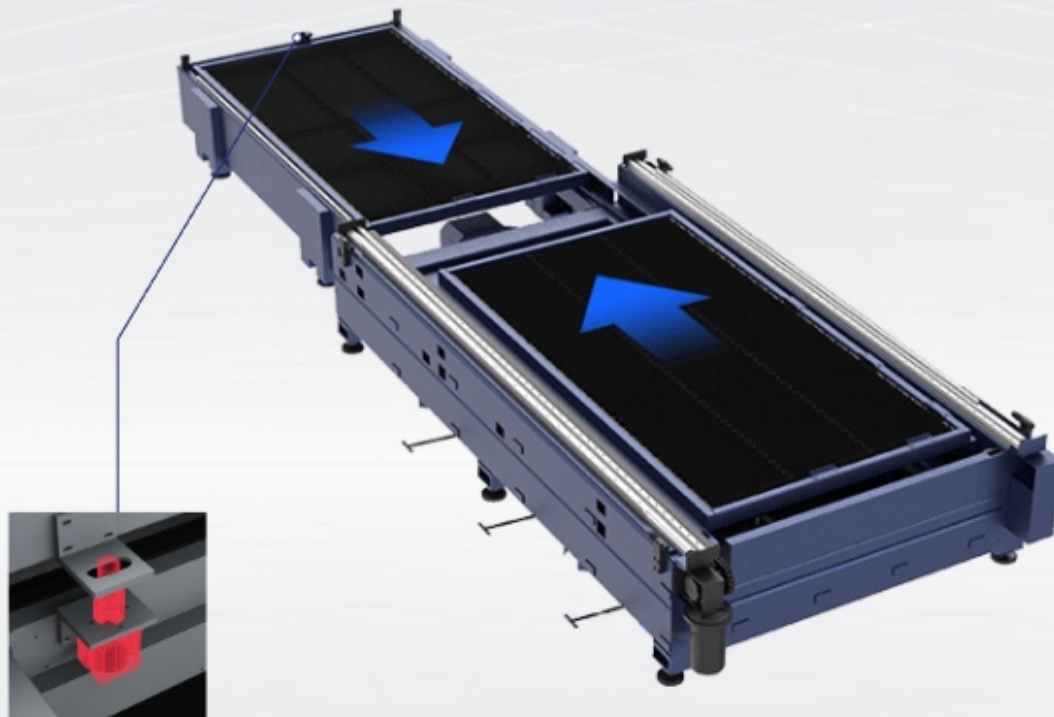


# FULL-PROTECTIVE STRUCTURE

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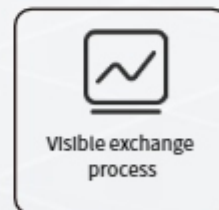


- 📦 G3015X Pro is full-protective without any laser leakage. There is a safety door between exchange platforms to enable eco-friendly cutting and protect operators and whole machine.



Taper Pins Positioning

## DOUBLE EXCHANGE PLATFORMS TAPER PINS POSITIONING



- 🔸 16A wide chains for more stable cutting
- 🔸 Positioned by taper pins to prevent vibration and secure high positioning precision
- 🔸 High-precision CNC system, protecting the machine and operators well

## 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

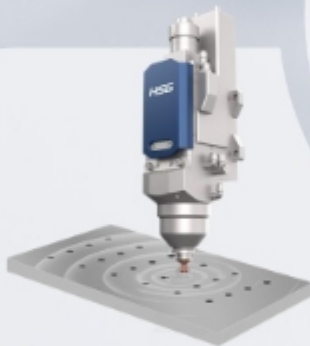
Tips: It is only applicable to carbon steel cutting by oxygen.



## LOW-PRESSURE AIR CUTTING

- \* Triple cutting speed
- \* Halve total costs and energy consumption
- \* Require little polishing due to less adhering slags

# PROFITABLE COOL TECHNOLOGIES FOR YOU



## LIGHTNING-FAST PIERCING

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



## INTELLIGENT CUTTING PATH PLANNING

- \* Cutting precision at micron level
- \* Smooth, flat and slightly incision
- \* IPG or Raycus lasers
- \* Fit for precision-demanding industries

## STANDARD WIRING

**CE**

CE-compliant

No worry about  
wiring errorIndependent  
electrical cabinetMuch safer in  
operation

- 📦 The independent electrical 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



To keep entire machine safe during long-distance sea transport, we adopt high-standard package, incl. aluminum foil, metal framework, fumigation wooden case, anti-rust oil+oilpaper, moisture-barrier bag, waterproof plastic film and filling foam.



# WORLD-FAMOUS COMPONENTS



## GERMAN WITTENSTEIN ALPHA

Speed reducer (incl. gears)



## GERMANY, AMERICAN AND FRENCH BRANDS

Electrical control and cutting path system



## CUTTING SAMPLES

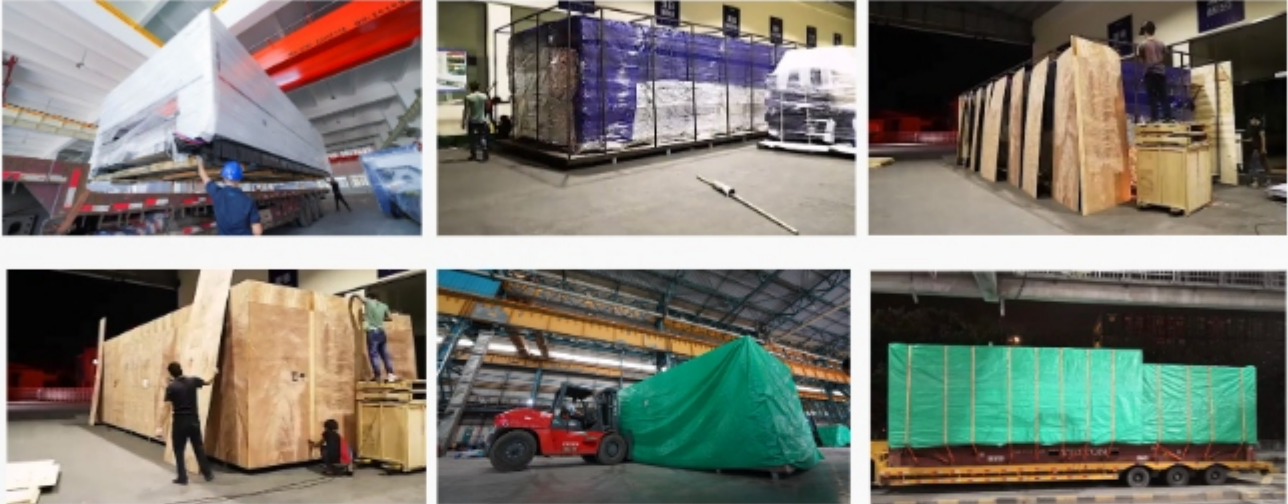


## MACHINE DIMENSION



# HIGH-STANDARD PACKAGE

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# CUSTOMER TESTIMONIALS

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## Intelligent Manufacturing Changes Future

### HI-TECH ENTERPRISE IN CHINA

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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.



33 patents for  
invention



316 patents  
in total

# SERVE 100+ COUNTRIES AND REGIONS



**4**  
Standardized  
manufacturing  
bases in China

**80000m<sup>2</sup> +**  
Total area of  
production factories

**5000+**  
Annual productivity

**3000+**  
Global sales in 2020

**1500+**  
Employees

**170+**  
R&D personnel

**10**  
Branches/subsidiaries/  
sub-subsidiaries

**30+**  
Service outlets overseas









- \* 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

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-  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



## 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)
		12000W
Carbon steel (O <sub>2</sub> )	1	8.0-12.0
	2	6.0-7.5
	3	3.6-4.5
	4	3.2-3.8
	5	3.0-3.4
	6	2.6-3.3
	8	2.3-2.8
	10	2.0-2.8
	12	1.6-2.7
	16	1.4-2.4
	20	1.0-2.4
	25	0.8-1.3
	30	0.4-1.2
40	0.2-0.6	
Stainless steel (N <sub>2</sub> )	1	48.0-60.0
	2	24.0-30.0
	3	20.0-25.0
	4	18.0-24.0
	5	14.0-19.0
	6	9.0-12.0
	8	6.5-10.0
	10	5.0-7.0
	12	3.2-5.5
	14	2.8-4.5
	16	2.0-3.0
	18	2.0-2.3
	20	1.2-1.9
25	0.7-1.0	
30	0.5-0.7	
40	0.2-0.3	
Aluminum alloy (N <sub>2</sub> )	1	40.0-50.0
	2	25.0-30.0
	3	20.0-25.0
	4	18.0-23.0
	5	14.0-17.0
	6	11.0-14.0
	8	7.0-8.5
	10	3.5-4.5
	12	3.3-4.0
	16	1.5-2.0
	20	1.0-1.2
	25	0.8-0.9
	30	0.5-0.7
40	0.3-0.4	

TABLE OF SHEET THICKNESS AND CUTTING SPEED		
Material name	Thickness (mm)	CUTTING SPEED (m/min)
		12000W
Brass (N.)	1	40.0-50.0
	2	20.0-25.0
	3	14.0-20.0
	4	13.0-17.0
	5	10.5-11.5
	6	8.0-9.5
	8	5.0-6.5
	10	4.0-5.0
	12	2.5-3.5
Red copper (O.)	1	28.0-45.0
	2	18.0-25.0
	3	14.0-18.0
	4	10.0-14.0
	5	8.0-9.5
	6	6.0-7.0
	8	4.0-5.0
	10	2.0-3.0