



**PRICE
FROM:
289.900 EUR**

PRODUCT INTRODUCTION

- HK-IT300 fiber laser cutter is mainly designed for the power :1kw to 6kw
- It is with full-protection cover, which can prevent the laser radiation and protect the worker safety, reduce the environment pollution.
- It is also with auto-exchangeable platforms, which can save the materials loading time, improve the processing efficiency. The exchange platform only takes 20 seconds to complete the exchange.
- The biggest feature of this machine is that the whole machine can fit into a 40HQ. No need frame container, which greatly saves freight cost. The sheet metal does not have to be dismantled for packing. It will save a lot of installation time.

TECHNICAL PARAMETER

Item	Parameter					
	1KW	1.5kw	2KW	3KW	4KW	6KW
Work Area	3000*1500mm/9.84*4.92ft					
X-axis Travel	1530mm/5ft					
Y-axis Travel	3050mm/10ft					
Z-axis Travel	220mm/0.72ft					
Positioning accuracy	±0.05mm					
Repeated positioning	±0.02mm					
Maximum speed	130m/min					
Maximum acceleration	1.0G					
Machine Total weight(KG)	6125	6115	6217	6365	6660	6760
Table maximum load(KG)	700					
Outline size (mm)	8300*2270*2260mm					
Power parameters	Three-phase AC380V 50Hz/60Hz					
Protection Level of Total Power Supply	IP54					

MORE DETAILS

- Machine size is 2270mm*8300mm *2340mm (including Backing Board).

High strength machine bed

- The high strength machine bed is welded with high-quality steel plates and pipes. The bed has sufficient structural stability and shock resistance. There is no connection inside the bed to block heat transfer, avoiding the heat generated by cutting from being transferred to the bed and affecting the processing accuracy.

Intelligent surrounding spiral negative pressure dust removal

- Intelligent surrounding spiral negative pressure partition dust removal system, according to the current cutting position, intelligently switch the air outlet, time sharing, partition, and sectional air exhaust, and cooperate with the back-shaped sealing structure design at the bottom of the base to realize smokeless cutting.

Strong Aviation Aluminum Beam

- The use of aviation-grade high-strength aluminum alloy beams, light weight, low inertia
- Built-in triangular reinforced structure, strong rigidity, good shock absorption
- Rough machining after annealing to eliminate internal stress, and fine machining after secondary vibration aging treatment to ensure improve the overall strength and stability of the beam.

720° all-round safety inspection

- The omni-directional monitoring system greatly reduces the blind spot of the operator's line of sight and ensures the safe and stable cutting operation.

Automatic gas distribution device for auxiliary gas

- HK-IT300 CNC laser cutting machine can control the oxygen automatically and control its flow and pressure independently.
- The type and pressure of the auxiliary gas can be automatically set and selected through the numerical control program, without manual operation.
- The air pressure of oxygen can be adjusted between 0.005 Mpa and 0.9 Mpa, and the compressed air and nitrogen can be adjusted between 3 Mpa and

0.01 Mpa.

- In addition, the actual air pressure at the exit of the cutting head can also be easily read and displayed on the panel in real time.

Automatic Focusing Fiber Laser Cutting Head

- This kind laser head has a strong advantage on medium power large format fiber laser cutting application.
- Completely sealed internal structure of laser head can avoid optical part polluted by dust.
- Two-point centering adjustment of laser head; the focus adjusting take imported motor driving and has great improvement in perforation.
- Protective lenses take more convenient replacement drawer installation way.
- Can be equipped with various kind of QBH connectors laser machine.

Raycus Laser Device

- It has the advantages of high electro-optical conversion efficiency (>40%), good beam quality, high energy density, wide modulation frequency, strong reliability, long life, and maintenance-free operation. It can be widely used in welding, precision cutting, cladding, and surface treatment, 3D printing and other fields.

FSCUT2000 medium and low power laser cutting system

- Convenient installation, easy debugging, excellent performance, complete solutions, stable and reliable, easy deployment, easy debugging, safe production, rich functions, excellent performance, etc.;
- support and provide modular, personalized, automated, and information solutions that can be realized Memory cache, powerful cutting process database, all kinds of cutting parameters of different thicknesses and different plates, fast operation, and efficient cutting.

Metal Wheel Exchange Table

- More durable and stable, ensuring the fast-exchanging time

Transmission System

High precision, long life, can provide rigorous support for quenching helical

gears and grinding helical gears, so that the load drive structure is compact, can effectively reduce the driving torque.

Water Cooling System

- Large cooling capacity, stable performance, trouble-free, clean water quality, good heat exchange effect with fiber laser, and linkage signal to protect the laser.

Automatic Lubrication System

- Lubricating the guide rails of X axis, Y axis, Z axis automatically, which could reduce maintenance cost and save time significantly.
- Oiling time can be adjusted
- According to processing
- Amount, which is more humanized.

Cutting Capability and Application

Cutting Materials

- Carbon steel, stainless steel, aluminum alloy, brass, copper, galvanized sheet, silicon steel sheet, electrolytic sheet, titanium alloy, manganese alloy, etc.

Application Industry

- Manufacturing industry
- Refrigeration Manufacturing industry equipment
- Mechanical processing
- Sheet Metal Fabrication
- Elevator production
- Advertising industry
- Metal Cabinet Industry



H.KLEEMANN
INDUSTRIAL TECHNOLOGIES

FIBER LASER CUTTER HK-IT300

Cutting Thickness

Material	Thickness (MM)	Cutting Speed (m/min) (gas)																
		1KW	1.5kw	2KW	3KW	4KW	6KW	8KW	10KW	12KW	15KW	20KW	30KW					
Stainless Steel	1	18-20(N ₂)	23-30(N ₂)	30-35(N ₂)	30-45(N ₂)	45-55(N ₂)	50-55(N ₂)	50-65(N ₂)	60-80(N ₂ air)									
	2	6.0-8.0(N ₂)	7.0-13(N ₂)	10-15(N ₂)	20-25(N ₂)	25-30(N ₂)	30-35(N ₂)											
	3	2.8-3.5(N ₂)	4.5-5.5(N ₂)	5.0-6.5(N ₂)	8.0-10(N ₂)	8.5-12(N ₂)	18-22(N ₂)	21-25(N ₂)	28-33(N ₂ air)									
	4	1.5-2.0(N ₂)	2.0-2.5(N ₂)	4.0-5.0(N ₂)	6.0-9.0(N ₂)	6.0-9.3(N ₂)	10-14(N ₂)											
	5	0.8-1.0(N ₂)	1.4-1.8(N ₂)	2.0-2.3(N ₂)			8.0-10(N ₂)	10-14(N ₂)	17-20(N ₂ air)		17-22(N ₂ air)							
	6		1.0-1.2(N ₂)	1.5-2.0(N ₂)	3.0-3.5(N ₂)	4.0-5.0(N ₂)	6.0-7.0(N ₂)				17-20(N ₂ air)		23-25(N ₂)	24-26(N ₂)				
	8			0.8-1.2(N ₂)	1.0-1.5(N ₂)	2.0-3.0(N ₂)	4.0-5.0(N ₂)	5-6(N ₂)	5.5-7(N ₂ air)	8.0-11(N ₂ air)	11-15(N ₂ air)							
	10				0.6-1.0(N ₂)	1.2-1.6(N ₂)	1.8-2.5(N ₂)	3.5-4(N ₂)	4.0-5(N ₂ air)	7.0-9.0(N ₂ air)	8-11(N ₂ air)	15-17(N ₂)	15-18(N ₂)					
	12				0.4-0.6(N ₂)	0.8-1.2(N ₂)	1.0-1.5(N ₂)	2-2.5(N ₂)		5-5.5(N ₂ air)								
	14						0.8-1.2(N ₂)	1.5-2(N ₂)	2.0-2.7(N ₂ air)	3.0-3.5(N ₂ air)			10-12(N ₂)	10-13(N ₂)				
	16						0.6-1.0(N ₂)	1.0-1.4(N ₂)	1.5-1.9(N ₂ air)	2-2.3(N ₂ air)	2.8-3.8(N ₂ air)							
	18									1.4-2.0(N ₂ air)								
	20						0.4-0.5(air)	0.9-1.1(N ₂)	1.0-1.2(N ₂ air)	1.4-1.8(N ₂ air)	1.8-2.5(N ₂ air)	3-3.2(N ₂)	4-5(N ₂)					
	25							0.3-0.6(N ₂)	0.4-0.7(N ₂ air)	0.7-1.2(N ₂ air)		2.5-2.8(N ₂)	3-3.5(N ₂)					
	30								0.2-0.4(N ₂)	0.3-0.5(N ₂ air)	0.6-0.8(N ₂ air)	0.7-1.0(N ₂ air)	1.5-1.8(N ₂)	1.5-2(N ₂)				
	35												1-1.3(N ₂)	1-1.5(N ₂)				
	40									0.2-0.3(N ₂ air)	0.25-0.5(N ₂ air)	0.3-0.6(N ₂ air)	0.5-0.8(N ₂)	0.6-0.8(N ₂)				
	45												0.3-0.5(N ₂)	0.3-0.5(N ₂)				
50										0.1-0.3(N ₂ air)	0.15-0.35(N ₂ air)	0.2-0.3(N ₂)	0.2-0.3(N ₂)					
60												0.15-0.2(N ₂)	0.15-0.2(N ₂)					
70												0.1-0.13(N ₂)	0.1-0.13(N ₂)					
80																0.08-1.1(N ₂)		
90																	0.05-0.06(N ₂)	

Material	Thickness (MM)	Cutting Speed (m/min) (gas)																
		1KW	1.5kw	2KW	3KW	4KW	6KW	8KW	10KW	12KW	15KW	20KW	30KW					
Carbon Steel	1	15-18 (N ₂)	25-28 (O ₂)	25-35(O ₂)	30-40(N ₂ /Air)	35-40(N ₂ /Air)	40-45(N ₂ /Air)	40-65(N ₂)	60-70(N ₂ air)	15-25(N ₂ air)								
	2	5.0-7.0 (O ₂)	6.2-8.5 (O ₂)	10-15(O ₂)	15-17(N ₂ /Air)	15-20(N ₂ /Air)	20-25(N ₂ /Air)											
	3	3.0-4.0 (O ₂)	3.5-5.0 (O ₂)	3.5-5.5(O ₂)	4.5-5.0 (O ₂)	7.0-9.0(N ₂ /Air)	10-15(N ₂ /Air)	21-25(N ₂ air)	30-35(N ₂ air)									
	4	2.0-3.5 (O ₂)	3.5-4.0 (O ₂)	3.8-4.5(O ₂)	2.8-3.5 (O ₂)	3.5-4.5(O ₂)	8-10(N ₂ /Air)											
	5	1.8-2.5 (O ₂)						13-15(N ₂ air)	15-17(N ₂ air)		18-25(air)	23-28(N ₂ air)	24-30(N ₂ air)					
	6	1.5-2.2 (O ₂)	1.7-2.5(O ₂)	2.0-2.7(O ₂)	2.8-3.5(O ₂)	2.8-4.0(O ₂)	3-4.5(O ₂)					21-25(N ₂ air)	20-27(N ₂ air)					
	8	1.0-1.5 (O ₂)	1.2-1.6(O ₂)	1.3-1.7(O ₂)	2.3-2.5(O ₂)	2.3-3.0(O ₂)	2.3-3.5(O ₂)	5-7(N ₂ air)	6-8.5(N ₂ air)	9-12(N ₂ air)	10-13(air)	14-16(N ₂ air)	14-18(N ₂ air)					
	10	0.8-1.0 (O ₂)	1.0-1.2(O ₂)	1.0-1.6(O ₂)	1.8-2.1(O ₂)	2.0-2.3(O ₂)	2.0-2.5(O ₂)	2-2.8(N ₂)	3-5(N ₂ air)	3.0/8.0-9.0(O ₂ air)	8-10(air)	10-12(N ₂ air)	12-14(N ₂ air)					
	12	0.6-0.8 (O ₂)	0.8-1.0(O ₂)	0.8-1.2(O ₂)	1.4-1.6(O ₂)	1.5-1.7(O ₂)	1.8-2.2(O ₂)							8-10(N ₂ air)				
	14		0.6-0.7(O ₂)	0.8-1.0(O ₂)	1.0-1.3(O ₂)	1.0-1.4(O ₂)	1.4-1.7(O ₂)	1.4-1.8(O ₂)	1.7-2.0(O ₂)					6-8(N ₂ air)	8-8.5(N ₂ air)			
	16		0.5-0.6(O ₂)	0.7-1.0(O ₂)	0.7-1.2(O ₂)	0.8-1.4(O ₂)	1.0-1.6(O ₂)	1.5-2.0(O ₂)	1.5-2.3(O ₂)	1.5-3.0(O ₂)	3-3.5(air)	5-6(N ₂ air)	5.5-6.5(N ₂ air)					
	18			0.5-0.6(O ₂)										3.2-4(N ₂ air)	4.5-5.5(N ₂ air)			
	20				0.5-0.7(O ₂)	0.6-0.8(O ₂)	0.6-1.2(O ₂)	0.9-1.5(O ₂)	1.0-1.8(O ₂)	1.2-1.5(O ₂)	1.2-1.5(O ₂)	2.7-3.2(N ₂ air)						
	22										0.5-0.9(O ₂)							
	25					0.4-0.6(O ₂)	0.5-0.7(O ₂)	0.5-0.8(O ₂)	0.5-0.8(O ₂)	0.8-1.1(O ₂)	0.8-1.1(O ₂)	1.3-1.5(O ₂)	2.8-3.2(N ₂ air)					
	30						0.4-0.6(O ₂)	0.4-0.8(O ₂)	0.1-0.3(O ₂)	0.5-1.0(O ₂)	0.5-1.0(O ₂)	1.2-1.3(O ₂)	1.3-1.4(O ₂)					
	35											0.9-1.2(O ₂)	0.9-1.2(O ₂)					
	40									0.3-0.5(O ₂)	0.3-0.5(O ₂)	0.6-0.9(O ₂)	0.9-1.3(O ₂)					
50										0.18(O ₂)	0.2-0.3(O ₂)	0.3-0.5(O ₂)	0.6-0.8(O ₂)					
60												0.17-0.22(O ₂)	0.2-0.25(O ₂)					
70												0.15-0.18(O ₂)	0.18-0.2(O ₂)					
80																0.12-0.15(O ₂)		



Material	Thickness (MM)	1KW	1.5kw	2KW	3KW	4KW	6KW	8KW	10KW	12KW	15KW	20KW	30KW	
		Cutting Speed (m/min) (gas)												
Brass	1	10.0-12.0 (N ₂)	12.0-13.0 (N ₂)	15-25 (N ₂)	25-35 (N ₂)	30-35 (N ₂)	40-45 (N ₂)	40-55 (N ₂)	40-55 (N ₂)					
	2	4.5-5.0 (N ₂)	5.0-6.0 (N ₂)	8.0-11 (N ₂)	12-18 (N ₂)	15-18 (N ₂)	20-25 (N ₂)							
	3	1.0-1.2 (N ₂)	1.5-2.0 (N ₂)	3.0-4.5 (N ₂)	6.0-8.0 (N ₂)	8.0-12 (N ₂)	12-15 (N ₂)	15-20 (N ₂)	20-30 (N ₂)					
	4			1.3-1.7 (N ₂)	3.0-4.0 (N ₂)	3.0-4.0 (N ₂)								
	5		0.5-0.7 (N ₂)		1.8-2.0 (N ₂)	2.0-2.5 (N ₂)	5.0-6.0 (N ₂)	5-9 (N ₂)	9-13 (N ₂)	13-16 (N ₂)	13-17 (N ₂)	25-28(N ₂)	25-28(N ₂)	
	6			0.6-0.8 (N ₂)	0.8-1.0 (N ₂)	1.0-1.6 (N ₂)	3.5-4.5 (N ₂)							
	8						1.5-2.0 (N ₂)	2-3.5 (N ₂)	5-6.5 (N ₂)	6.0-8.0 (N ₂)	6-9 (N ₂)	17-20(N ₂)	17-20(N ₂)	
	10						1.0-1.5 (N ₂)	1.5-2.2 (N ₂)	2.5-3.5 (N ₂)	4.5-5.5 (N ₂)	4.5-6 (N ₂)	10-13(N ₂)	10-13(N ₂)	
	12						0.8-1 (N ₂)	1-1.4 (N ₂)				6-8(N ₂)	6-8(N ₂)	
	14							0.8-1 (N ₂)	1.0-1.4 (N ₂)		1.7-2.5 (N ₂)	4-5(N ₂)	4-5(N ₂)	
	16							0.5-0.7 (N ₂)	0.7-0.9 (N ₂)	1.7-2.3 (N ₂)		2.5-3.5(N ₂)	2.5-3.5(N ₂)	
	18													
	20									0.2-0.4 (N ₂)	1.5-2.5 (N ₂)	1.5-2.8 (N ₂)	1.8-2.3(N ₂)	1.8-2.3(N ₂)
	22													
	25												1.2-1.5(N ₂)	1.2-1.5(N ₂)

Material	Thickness (MM)	1KW	1.5kw	2KW	3KW	4KW	6KW	8KW	10KW	12KW	15KW	20KW	30KW	
		Cutting Speed (m/min) (gas)												
Aluminum	1	13-17 (N ₂)	15-23 (N ₂)	20-25(N ₂)	30-35(N ₂)	35-40(N ₂)	50-55(N ₂ /Air)	50-65(N ₂)	50-65(N ₂ /Air)					
	2	4.8-5.2 (N ₂)	6.0-8.0 (N ₂)	10-15(N ₂)	14-20(N ₂)	20-25(N ₂)	25-30(N ₂ /Air)							
	3	1.2-1.6 (N ₂)	2.0-3.0 (N ₂)	4.0-5.0(N ₂)	8.0-10(N ₂)	8.0-13(N ₂)	12-15(N ₂ /Air)	20-30(N ₂)	25-30(N ₂ /Air)					
	4		1.0-1.7 (N ₂)	2.0-2.5(N ₂)	5.0-7.5(N ₂)	6.0-7.5(N ₂)	10-13(N ₂ /Air)							
	5		0.5-0.8 (N ₂)		3.0-3.5(N ₂)			10-15(N ₂)	13-16(N ₂ /Air)	15-17(N ₂ /Air)	17-20(N ₂ /Air)	21-24(N ₂)	21-24(N ₂)	
	6			0.6-1.0(N ₂)	1.2-1.5(N ₂)	3.5-4.0(N ₂)	4.0-5.0(N ₂ /Air)							
	8				0.7-1.0(N ₂)	2.0-2.5(N ₂)	2.0-3.0(N ₂ /Air)	4-6(N ₂)	5-7.5(N ₂ /Air)	6-10(N ₂ /Air)	11-15(N ₂ /Air)	18-20(N ₂)	18-20(N ₂)	
	10					1.0-1.2(N ₂)	1.0-1.7(N ₂ /Air)	2-3(N ₂)	4-6(N ₂ /Air)	5-7(N ₂ /Air)	7-9(N ₂ /Air)	14-16(N ₂)		
	12					0.4-0.6(N ₂)	0.7-1.2(N ₂ /Air)		2-3(N ₂ /Air)				14-16(N ₂)	
	16								1-1.4(N ₂)	1.0-1.8(N ₂ /Air)	1.5-1.8(N ₂ /Air)	1.8-2.0(N ₂ /Air)	5-8(N ₂)	5-8(N ₂)
	20								0.6-1(N ₂)	1.0-1.4(N ₂ /Air)	1.0-1.5(N ₂ /Air)	1.0-1.8(N ₂ /Air)	2.5-4.5(N ₂)	2.5-4.5(N ₂)
	25								0.3-0.6(N ₂)					
	30								0.3-0.5(N ₂)	0.3-0.6(N ₂ /Air)	0.4-0.7(N ₂ /Air)	0.6-0.8(N ₂ /Air)	1.8-2.3(N ₂)	1.8-2.3(N ₂)
	35												1.3-1.5(N ₂)	1.3-1.5(N ₂)
	40									0.2-0.3(N ₂ /Air)	0.3-0.5(N ₂ /Air)	0.3-0.5(N ₂ /Air)	0.8-1(N ₂)	0.8-1(N ₂)
50										0.1-0.3(N ₂ /Air)	0.2-0.3(N ₂ /Air)	0.4-0.6(N ₂)	0.4-0.6(N ₂)	
60												0.2-0.3(N ₂)		

Note: As gas purity, on-site voltage and current, plate type and operator expertise are different, the cutting parameters above are only for your reference.