

AHB

TOOLING & MACHINERY, INC.
COMPLETE METALWORKING SOLUTIONS



**Quoted machine may look different from the picture*

ERMAKSAN **FIBERMAK HAWK (5' x 10') 1kW** Fiber Laser Cutting Machine
Technical Features and Sales Terms & Conditions:



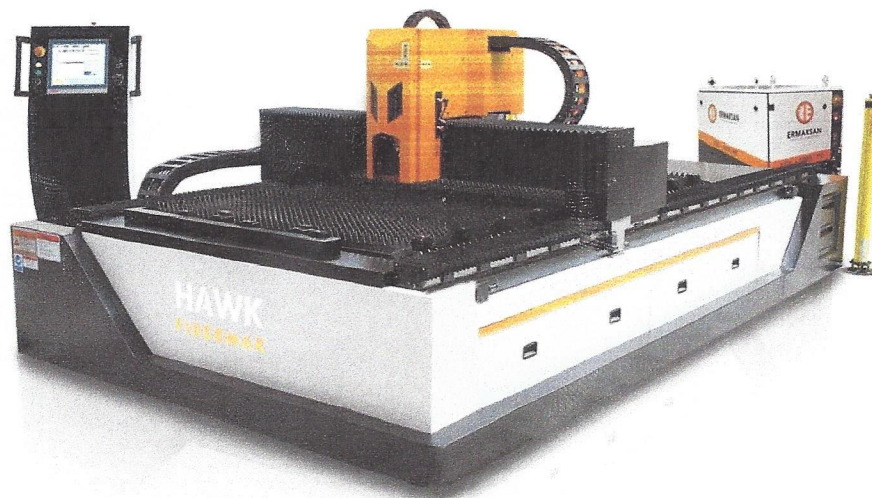
ERMAKSAN is established in 1965 in Bursa, TURKEY and became a premier manufacturer of fabricating machinery with a wide product line of CNC hydraulic press brakes, hydraulic guillotine shears, CNC Fiber Optic Laser Cutting, CNC punch presses and CNC plasma cutting machines in a 1.125.000 sqf modern plant with state-of-the-art machinery.

Ermaksan adheres to rigid product quality control systems covering design, development, production, installation, testing and inspection and is CE Mark and ISO 9001:2000 certified company. Quality control process goes along with manufacturing machines that incorporates the latest technologies; computer aided research & development with 150 engineers and 700 employees.

The philosophy of Ermaksan is continual innovation and improvement. This helped us expand our borders tremendously throughout the world in six different continents nearly over 110 countries in Europe, North and South America, West and Far East Asia, Gulf Region and whole continent of Africa. The investment you make in an Ermaksan machine is your first step joining our family where you will get high quality product, superior after sales support, innovative research & technical expertise and prestige that fulfill your expectations today and tomorrow and years to come.

General Features of Machine:

- Robust and solid frame design with enclosure
- Smaller footprint
- 5' x 10' single table size with clamps
- Easy and immediate access to table and parts
- Ability to cut mild steel, stainless steel, aluminum, copper and brass
- Offered with IPG Generator
- Chiller unit included
- Dust collector and safety light guard protection
- Precitec Cutting Head
- BECKHOFF 2215 Stand Alone and Mobile Controller
- 15-inch touch screen 1024x768 alphanumeric keyboard, on-screen keyboard PLC
- LANTEK Expert Cut Nesting Software
- 4-Axis (X, Y, Z, U) servo-driven
- 1G acceleration speed
- .05mm repetition and .1mm position accuracy
- Suitable for internet connection
- Service and parts availability from Chicago, IL.



*Machine look without enclosure (includes light curtain)

CNC Control Unit

All software on the Control Panel has been developed by the ERMAKSAN engineers and you may add special features.

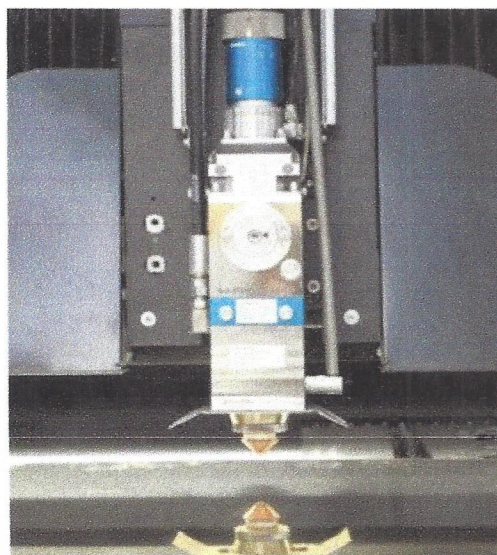
- Control panel is the unit which controls the system and sends the user commands to the machine.
- Control panel is resistant to various environmental conditions.
- Shock, dirt, humidity, temperature, etc.
- It is used as touch screen and an external keyboard is available.
- With the speed adjustment potentiometer on the control panel, you can increase and decrease the axis speed in the working area.
- NC graphic display.



(Optional) Cutting Head

Precitec LIGHT CUTTER (Auto Focusing)

The LightCutter is suitable for integration in small and medium-sized flatbed cutting systems. Stainless steel and aluminum can be cut with the best cutting quality. The completeness of the sealed beam input protects the optic from contaminants. A flushing air system provides protection for the collimated and focusing optics from external influences. The LightCutter can be adapted to different laser and process requirements with various lenses.



Precitec Light Cutter Cutting Head with Auto Focus

FIBERMAK TECHNICAL FEATURES		HAWK 1000 KW 5'x10'		
RESONATOR		Watt	1000	
POWER RANGE		%	10-105	
LASER BEAM QUALITY @ COLLIMATOR		mm mrad	1 - 2	
POWER STABILITY		%	1 - 3	
PULSE FREQUENCY RANGE		kHz	5	
LASER WAVE LENGTH		nm	1070 ± 5	
OUTPUT FIBER CORE DIAMETER		µm	50	
EXCITATION		-	Laser diod	
COOLING WATER FLOW RATE		Gallon/Min	4.2	
CUTTING CAPACITY (High Quality)		-	-	
		MILD STEEL (S235JR, S355MC)	inch	5/16"
		STAINLESS STEEL (AISI 304)	inch	5/32"
		ALUMINUM (AIMg3)	inch	1/8"
		BRASS (CuZn37)	inch	5/64"
		COPPER (Cu-ETP)	inch	5/64"
MAXIMUM WORKSHEET DIMENSIONS		inch	118.1 X 59.1	
MAXIMUM BURDEN CAPACITY		pounds	661	
MACHINE AXES		-	4-Axes [X, Y, Z, U]	
AXIAL MOVEMENTS		-	-	
	X, U AXES	Servo Motorized Table	inch	120
	Y AXIS	Servo Motorized Bridge	inch	60
	Z AXIS	Servo Motorized Cutting Head	inch	4
ACCELERATIONS		-	-	
	X, U AXES	Servo Motorized Table	G	1
	Y AXIS	Servo Motorized Bridge	G	1
	Z AXIS	Servo Motorized Cutting Head	G	1
MAXIMUM AXES VELOCITIES		IPM	[4174 (simultaneous) (X, Y single axis velocity 2953 Inch/min)]	
POSITIONING ACCURACY		inch	± 0,004	
REPETITION ACCURACY		inch	± 0,002	
ASSIST GAS		-	-	
		MILD STEEL	-	Oxygen (0,5-6 Bar)
		STAINLESS STEEL	-	Nitrogen (0,5-25 Bar)
		ALUMINUM	-	Dry Air (0,5-25 Bar)
CUTTING HEAD		-	Precitec Mini Cutter	
CNC		-	BECKHOFF CP 2215	
CAD/CAM SOFTWARE		-	LANTEK EXPERT CUT	
NETWORK CONNECTION		-	Ethernet	
OPERATION VIA PANEL		-	15-inch display 1024 x 768, alphanumeric keyboard, PLC keys on the sides, touch screen keyboard	
AVARAGE POWER CONSUMPTION		HP	9	
MACHINE DIMENSIONS (L x W x H)		inch	201 X 104 X 71	
MACHINE WEIGHT		pounds	11684	

*All specs are subject to change without notice

*Sheet metal cutting thicknesses and speeds varies when the factors such as material quality, assist gas purity, environment conditions, parameter setting, original spare part usage, periodical maintenances, cleanness of optics are not proper.

*The quality of cuts on limit thicknesses will depend on the gometries required the quality of the material and the operating conditions of the system. At the limit values, the cut may have burrs on the lower edge.

*Cutting surface roughness increases at bigger thicknesses by fiber laser technology.

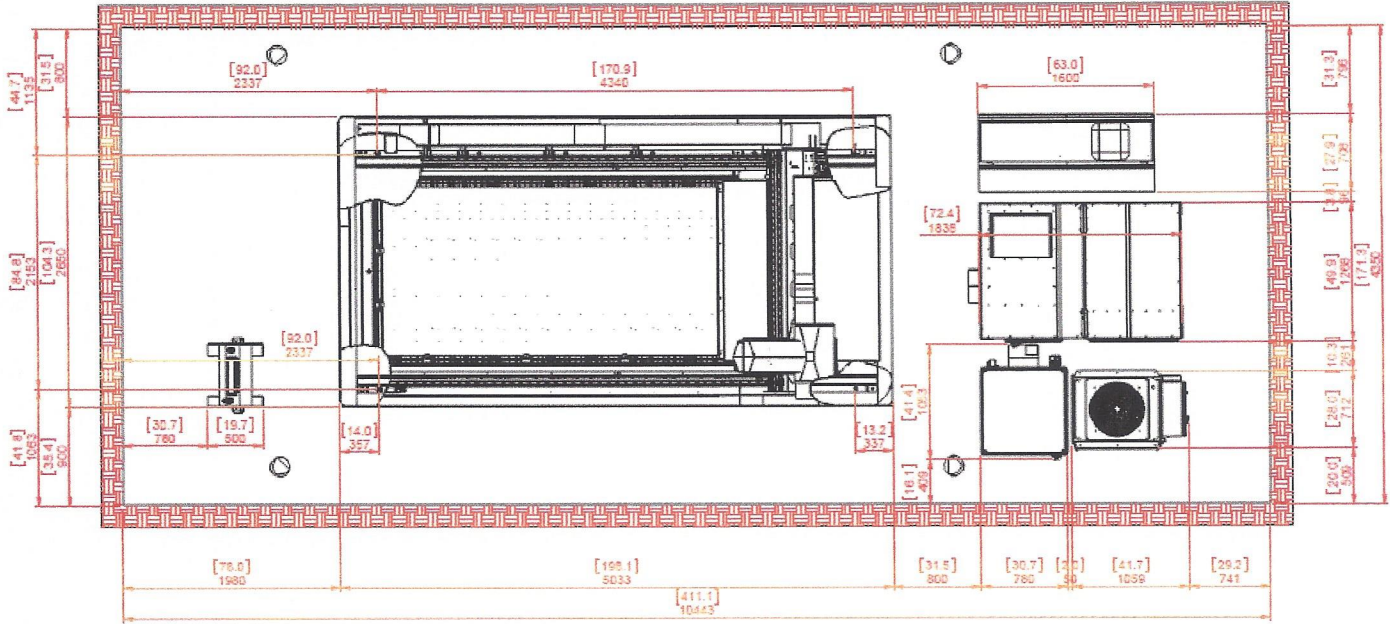


ERMAKSAN HAWK Series Fiber Laser Machine fits in smaller areas thanks to its rigid, ergonomical and compact design.



HAWK Series Fiber Laser Machine is capable of cutting mild, stainless, aluminum, copper and brass materials with maximum precision and provides smooth surfaces (edge quality).

FLOOR PLAN:



ISOMETRIC FLOOR PLAN:

