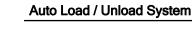
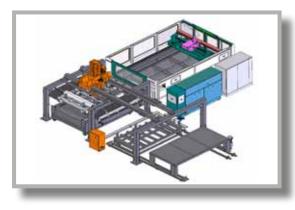
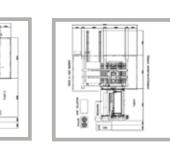
The FS series, loadable with various resonator power levels, are our standard types of industrial laser cutting machine models, making fast cutting possible by concurrent control. These models can meet all customer demands by cutting materials from regular size to irregular shapes.

## Automation Systems

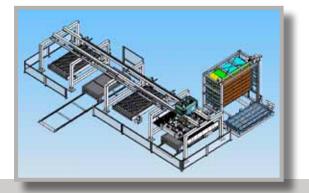




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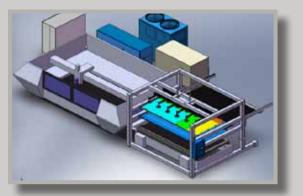


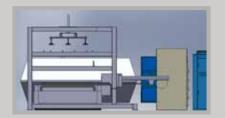
### **Tower Automation**



Items	HCS310	HCS420			
Sheet Size	5' x 10'	6' x 12'			
Material Thickness	Up to 0.750"				
Number of Shelves	8 (Standard)				
Max. Load Weight	4400 lbs/shelf				
Stacking Height	Max. 3.54"				
Sheet Separator	Magnetic & Vibration with Air Unit				

### Compact Load / Unload System



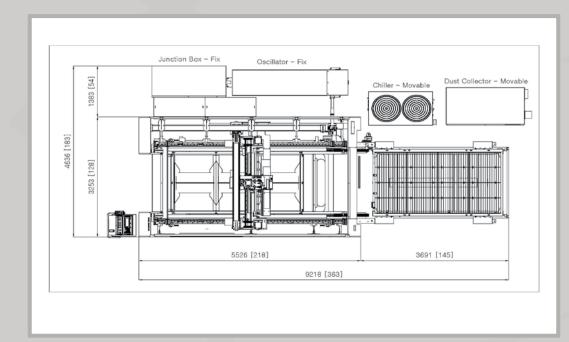


- Double-deck load/unloading compact automation system
- Space saving solutions providing increased productivity by allowing optimal material flow and unattended operation with uninterrupted processing
- HCA-310 provides full capabilities for loading, unloading, and storage of raw materials and finished parts
- 137.8" (H) x 145.7" (W) x 208.7" (D)

	Laser Model	2.0KW	2.5KW	3.3KW	4.0KW	5.0KW	6.0KW		
	Table size	62" X 123"							
	Max. Rapid	6700 IPM							
	Max. Rapid X	4720 IPM							
	Max. Rapid Y	4720 IPM							
	Accuracy	0.0039" over 120"							
	Repeatability	0.001″							
Op	perating Software	Window XP Pro							
	Monitor	15" Flat Touch Panel Screen							
	HDD	40G							
	Memory	512M							
(	Communication	USB, Ethernet LAN							
	wer Consumption cl. Dust Collector)	90KVA	100KVA	120KVA	135KVA	150KVA	163KVA		
:	230VAC Service	220A	260A	290A	330A	370A	405A		
460VAC Service		112A	125A	145A	165A	185A	200A		
Laser Gas		10 L/Hr	10 L/Hr	10 L/Hr	25 L/Hr	25 L/Hr	25 L/Hr		
Air Consumption Main Machine		ISO 8573-1 Standard							
		26CFM							
		1/2" Connection							
	Cooling Water	Distilled Water (70%) : Propylene Glycol (30%)							
	Cutting Head	HK 55							
Max. Cut*	Mild Steel	0.625″	0.75″	0.75″	1.00"	1.00″	1.25″		
	Stainless 304	0.32"	0.375″	0.50″	0.625″	0.75″	0.75″		
	Aluminum 60	0.25″	0.25″	0.375″	0.375″	0.50″	0.50"		

\* Max Cut thickness is typical and only for reference, not guaranteed, and varies depending upon the material quality and the cutting parameters and circumstances.

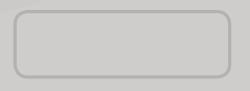
\* Specifications are subject to change without notice.





Han-Kwang USA, Inc. • 1120 North Garfield Street • Lombard, IL 60148 • 630.916.0200 • www.hankwang.us

## System Layout & Specifications



FS 3015

Flying Optic Series 2D Laser Cutting System







## FS 3015



## Versatile Cutting Edge Technologies

## Flying optic type, high-speed laser cutting system

- Superb cutting quality & speed
- New high-speed S5 cutting head
- HP Quick-Piercing system (standard)
- Synchronized dual servo motors drive
- Remote diagnosis / multi-language display
- 6800 IPM
- Durable rack & pinion system
- Siemens 840D control & drive system
- 15" flat-panel touch screen
- Low maintenance cost







### **Features & Functions**

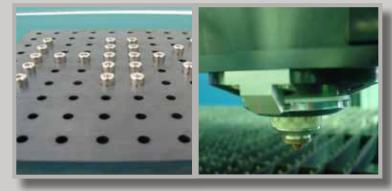
- Synchronized dual servo motor gantry
- Durable rack & pinion motion system
- Adaptive optics AFC unit
- Quick change lens cartridge
- Rigid heavy-duty body frame
- Built-in air filtration & dryer system
- Automatic dual shuttle table
- Zone & ducting exhaust system
- Automatic nozzle cleaning system
- Aiming diode laser
- Cross-jet oil mist spray system
- Flat 15" touch screen panel
- Beam collimator & phase retarder unit
- Step-down transformer

### Design & Structure

- Dynamic power/speed rampingEdge detection & axis re-alignment
- High-speed etching mode
- Quick Micro-tap & Micro-welding
- Pre-piercing mode

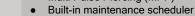
- Operation scheduling
- Restart & retrace
- Various lead-in patterns
- Various head moving modes
- Pro-Design nesting softwarePlasma Monitoring Unit (PMU) option
- Lens Crack Sensor (LCS) option

#### HP Quick Pierce System



The innovated Quick Pierce System is a built-in standard feature which makes piercing for thick materials swift and effortless; which makes the hole 50-60% in diameter of the thickness that will appear as a pulse pierce, making the hole miniscule & clean.

Multi Pulse Piercing (MPP)



### High-Speed S5 Cutting Head

The new high speed cutting head incorporated with the new FM sensing technology provides unsurpassed cutting speed and edge quality with a cross-jet oil spray unit, a quick-change lens cartridge, and a built-in HP quick-pierce system.





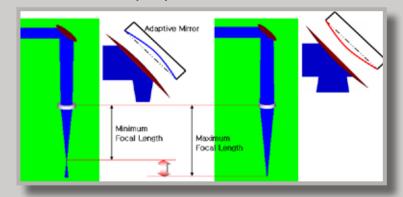
15" Flat Screen Touch-Panel

Lightweight roll around operator console with wide touchpanel screen gives enhanced convenience and easiness to operate the machine.



### Auto Focus Control (AFC)

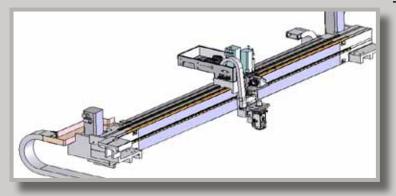
FS3015



This pneumatic-control AFC adaptive optical system keeps the focused beam spot size constant and consistent wherever the cutting head is located; also providing the pre-programmed automation of focal positioning when loaded with a different material

#### **Dual Servo Motors Drive**

FS3015



Superior quality and durability

at a competitive price.

Light weight gantry which is driven by SIEMENS synchronized dual servo motors enabling 1.5G of acceleration and long-term reliability of the gantry system.

#### Advanced Air Filter System

The built-in air filter / dryer system has 4 stages of air filtration which makes assurance that the air entering the machine is moisture-free with maximum purification.



