

Design and specifications subject to change without notice.



2025



**COGENTECH INTERNATIONAL LTD.
SHANDONG COGENTECH CIRCULAR SAWING MACHINE MANUFACTURING CO.,LTD.**

ADD: No.41-2-1203 Donghai Xi Road,
Qingdao-266071, Shandong, China
TEL: +86-532-85979312,85979316
FAX: +86-532-85979318
E-MAIL: cogentech@163.com
info@cogentech.com.cn
WEB: www.cogentech.com.cn



**Cogentech International Ltd.
Shandong Cogentech Circular Sawing Machine Manufacturing Co.,Ltd.**

Company Profile

Shandong Cogentech Circular Sawing Machine Manufacturing Co., Ltd.

is a high-tech enterprise specializing in the R&D and production of CNC circular sawing machines. Located in Shandong Province, known as China's "Advanced Manufacturing Province", the company covers an area of 16,000 m^2 , has over 100 employees, and an annual production capacity of 1,000 sets of circular sawing machines.

Technological Collaboration & Innovation

The company strategically cooperates with the Taiwan Institute of Industrial Technology, boasting over 30 R&D engineers. It has independently developed and manufactured CNC high-speed metal circular sawing machines, flexible automated processing lines, and special sawing machines. As a leading R&D base for high-speed metal circular sawing machines in China, our products are sold worldwide, renowned for stable performance and reliable quality. Relying on technical support from prestigious research institutions—including Berlin University of Technology, Tsinghua Institute of Mechanical Structure, and Shandong Institute of Technology and Machinery—each machine's performance remains at the forefront of metal cutting R&D.

Commitment to Excellence

Cogentech is dedicated to becoming the world's top manufacturer of high-speed circular sawing machines. Our R&D and manufacturing achievements have earned multiple national patent certificates, honorary awards, and provincial outstanding innovation achievements.

Customer-Centric Solutions

Designed with customer needs in mind, our machines enable more precise and efficient material cutting, significantly improving production efficiency and sawing accuracy.

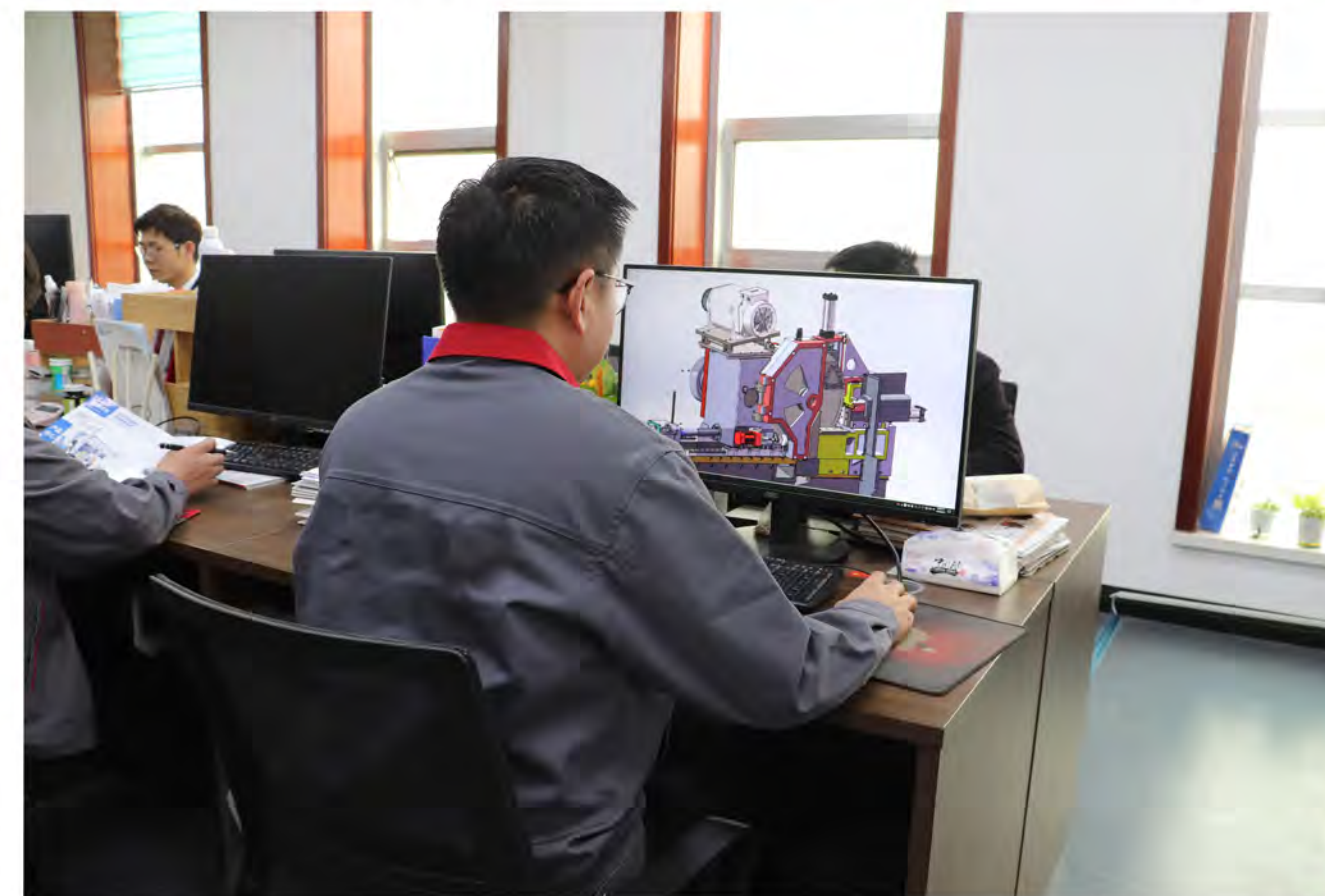


Manufacturing Strength

Equipped with a 10,000 m^2 dust-free assembly workshop, we employ advanced equipment to ensure precision: Swiss KEL-VERA CNC universal cylindrical grinder, Japanese OKUMA CNC double-column machining center, Swiss DIXI coordinate boring machine, and imported high-precision rail grinding machine. These CNC machines guarantee the production of high-precision machine tool parts and complete products.

Quality Assurance

Our strict quality management systems and internal control standards ensure rigorous testing throughout the equipment design and manufacturing process. With 45 inspection items, 632 quality control points, and 48-hour full-stroke load processing tests—supported by German ZEISS three-coordinate measuring instruments—we maintain precise control over every detail of the machine tool.





CNC High-speed Circular Saws



Features:

1. Jointly designed in Switzerland and Taiwan, produced by Chinese OEM. The oblique cutting structure.
2. High strength cast iron body, produced by CNC machining center, high rigidity.
3. Innovative spindle gear box, the gear anti-backlash mechanism is adopted to realize zero clearance transmission, high torque, high performance.
4. Input cutting length, remaining length and other parameters by HMI touch screen, easy to operate.
5. Three-point universal cutting clamp, suitable for different material shapes.
6. No-material shutdown and automatic counting shutdown, convenient for management.
7. It is equipped with a quasi-dry saw blade lubrication and cooling device to increase the service life of the saw blade.
8. It has manual operation and automatic operation functions.



CNC High-speed Circular Saws

ORDER NO.			12-5510	12-5512	12-5514	12-5516
MODEL		UNIT	HCS-75S	HSC-90S	HCS-110S	HCS-150S
Sawing capacity	Round bar	mm	12-75	12-90	20-110	40-150
	Square bar	mm	12-58	12-70	20-75	40-105
	Round tube	mm	12-75	12-90	20-110	40-150
	Square tube	mm	12-58	12-70	20-75	40-105
Spindle box	TCT super hard blade	mm	285t2.0	315t2.25	360t2.6	460t2.7
	Spindle motor	kW	7.5/11/4P	11/4P	11/6P	15/6P
	Spindle speed	rpm	30-150	30-150	20-120	20-120
	Cut-off feeding mode		AC servo motor + ball screw			
	Main clamp mode		Hydraulic, one set of vertical and horizontal clamps			
	Blade debris removal device		Passive round wire brush			
	Gear backlash compensation device		Through shaft coupling magnetic powder brake			
Feeding clamp(vice)	Feeding drive mode		AC servo motor, ball screw, swing feeding, rod feeding			
	Feeding clamp mode		Hydraulic, horizontal clamp			
	Material front end removal length	mm	10-99 (No cutting head is optional)			
	Material rear end residual length	mm	65+a	75+a	75+a	85+a
	Single feeding length	mm	10-800	10-800	10-800	10-800
Automatic feeding device	Allowable material placement length	mm	3000-6000			
	Feeding method		Pre-arranged, hydraulic lift			
Hydraulic station	Hydraulic pump type		Variable displacement vane pump			
	Hydraulic drive motor	kW	2.25(4P)	2.25(4P)	3.75(4P)	3.75(4P)
	Rated pressure of hydraulic system	MPa	4-6	4-6	4-6	4-6
	Hydraulic oil capacity	L	70	90	110	120
Others	Overall dimensions	mm	6700*2800*2000	7500x2900x2000	7700x3200x2250	7700x3400x2250
	Weight	kg	5100	5250	5000	6700

Note: a is not enough to cut a work-piece.

Standard accessories:

1. Blade sway anti-vibration device
2. Material distribution device (Pneumatic, reciprocating)
3. Automatic centralized grease lubrication system
4. Oil mist coolant system
5. Chip conveyor
6. LED working light
7. Heat exchanger
8. Air spray gun
9. Circular saw blade
10. Tools and tool box

Optional accessories:

1. Oil mist collector
2. Cluster feeding device (Bundle loading, first choice for long material cutting)
3. The third clamp
4. Active round wire brush
5. Shared material rack for square and round materials
6. Long material receiving device (discharging device)





CNC Heavy-duty High-speed Circular Saws

Standard accessories:

1. Blade sway anti-vibration device
2. Material distribution device (Pneumatic, reciprocating)
3. Automatic centralized grease lubrication system
4. Oil mist coolant system
5. Chip conveyor
6. LED working light
7. Heat exchanger (Model 200-300: Air conditioner)
8. Air spray gun
9. Mechanical oil mist collector
10. Circular saw blade
11. Tools and tool box

Optional accessories:

1. Electrostatic oil mist collector
2. Cluster feeding device (Bundle loading, first choice for long material cutting)
3. The third clamp
4. Active round wire brush (Model 75/90/120)
5. Shared material rack for square and round materials
6. Long material receiving device (discharging device)



ORDER NO.			112-5610	12-5612	12-5614
MODEL			HCS-75H	HCS-90H	HCS-120H
Sawing capacity	Round bar	mm	12-75	12-90	20-120
	Square bar	mm	12-58	12-70	20-80
	Round tube	mm	12-75	12-90	20-120
	Square tube	mm	12-58	12-70	20-80
Spindle box	TCT super hard blade	mm	285t2.0	315t2.25	380t2.6
	Spindle motor	kW	11	11	11/15
	Spindle speed	rpm	30-150	30-150	20-120
	Cut-off feeding mode		AC servo motor, ball screw, linear guideway		
	Main clamp mode		Hydraulic, one set of vertical and horizontal clamps		
	Blade debris removal device		Passive round wire brush		
	Gear backlash compensation device		Through shaft coupling magnetic powder brake		
Feeding clamp(vice)	Feeding drive mode		AC servo motor, ball screw, swing feed, linear guideway feeding		
	Feeding clamp mode		Hydraulic, horizontal clamp		
	Material front end removal length	mm	10-99 (No cutting head is optional)		
	Material rear end residual length	mm	65+a	75+a	75+a
	Single feeding length	mm	10-800	10-800	10-800
Automatic feeding device	Allowable material placement length	mm	3000-6000		
	Feeding method		Pre-arranged, hydraulic lift		
Hydraulic station	Hydraulic pump type		Variable displacement vane pump		
	Hydraulic drive motor	kW	2.25(4P)	2.25(4P)	3.75(4P)
	Rated pressure of hydraulic system	MPa	4-6	4-6	4-6
	Hydraulic oil capacity	L	70	90	110
Others	Overall dimensions	mm	7500x2900x2100	7500x2900x2100	7700x3200x2250
	Weight	kg	5100	5250	6000



CNC Heavy-duty High-speed Circular Saws

Featu res:

1. Jointly designed in Switzerland and Taiwan, produced by Chinese OEM. Model 75-230 with oblique cutting structure. Model 260-300 with parallel cutting structure.
2. High strength cast iron body, produced by CNC machining center, high rigidity.
3. Innovative spindle gear box, the gear anti-backlash mechanism is adopted to realize zero clearance transmission, high torque, high performance.
4. The sawing is controlled by servo motor, feeding is a servo motor with ball screw in the direction of linear guideway, stable cutting and accurate feeding.
5. Input cutting length, remaining length and other parameters by HMI touch screen, easy to operate.
6. Three-point universal cutting clamp, suitable for different material shapes.
7. No-material shutdown and automatic counting shutdown, convenient for management.
8. It is equipped with a quasi-dry saw blade lubrication and cooling device to increase the service life of the saw blade.
9. It has manual operation and automatic operation functions.

Note: a is not enough to cut a work-piece.

112-5616	12-5618	12-5620	12-5622	12-5624	12-5626
HCS-150H	HCS-180H	HCS-200H	HCS-230HP	HCS-260HP	HCS-300HP
40-150	70-180	80-200	110-230	120-260	160-300
40-105	70-140	80-150	110-180	120-220	160-220
40-150	70-180	80-200	110-230	120-260	160-300
40-105	70-140	80-150	110-180	120-195	160-220
460t2.7	520t3.0	630t3.4	700t3.8	750t3.8	840t4.0
18.5	22	30	30	37/45	45
20-120	20-100	20-80	20-80	15-80	15-80
AC servo motor, ball screw, linear guideway					
Hydraulic, one set of vertical and horizontal clamps					
Active round wire brush					
Through shaft coupling magnetic powder brake					
AC servo motor, ball screw, swing feed, linear guideway feeding					
Hydraulic, horizontal clamp					
10-99 (No cutting head is optional)					
85+a	120+a	120+a	145+a	145+a	160+a
10-800	10-800	10-800	10-800	10-800	10-800
3000-6000		3000-6000			
Pre-arranged, hydraulic lift		Pre-arranged, hydraulic lift			
Variable displacement vane pump		Variable displacement piston pump			
85+a	5.5(4P)	5.5(4P)	5.5(4P)	5.5(4P)	5.5(4P)
10-800	5-7	6-8	6-8	6-8	6-8
	120	160	160	160	170
	7700x3400x2250	8300x3850x2570	8300x3850x2570	8300x4150x2570	8300x4150x2570
	7000	9800	9800	12600	13000

The oblique cutting



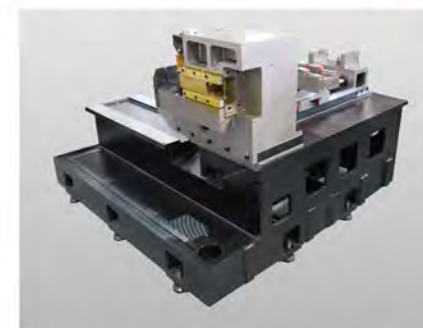
The parallel cutting



The difference between HCS-S and HCS-H

NO.		HCS-S		HCS-H	
1	Operation box		Embedded box		Cantilever box
2	PLC		MCGS		Mitsubishi
3	Feeding device		Rod		Linear guideway
4	Spindle motor		Three-phase asynchronous motor		Servo motor
5	Main electrical parts		China		Siemens or Schneider
6	Hydraulic station		3 adjustment valves, the front horizontal clamp and the upper clamp share one adjustment valve.		4 adjustment valves, the front horizontal clamp and upper clamp are controlled by separate valves.
7	Material rack		Standard type		Heavy duty type (+200kg)
8	Machine weight		Standard		Heavier (+500kg)

Main Structure and Configuration



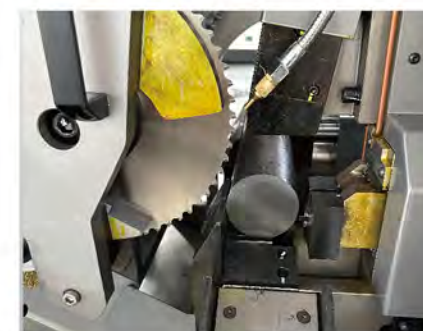
High strength cast iron body, integrated structure. High rigidity and stability.



The spindle gear box feeding structure: servo motor + ball screw + linear guideway. Model 75-180 in 30° oblique cut. Model 200/230 in 15° oblique cut. Model 260/300 in parallel cut.



Feeding clamp(vice): servo motor + ball screw.



Hydraulic clamping device



Discharge device



Magnetic powder brake removes all backlash for long blade life.



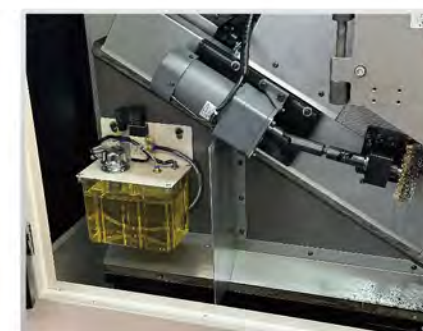
Oil mist coolant system



Automatic centralized lubrication pump



Hydraulic station



Passive round wire brush



Active round wire brush



Remote after-sales service

Special Machines – Meet individual demand!



Truss palletizing robot equipment



Front suction equipment



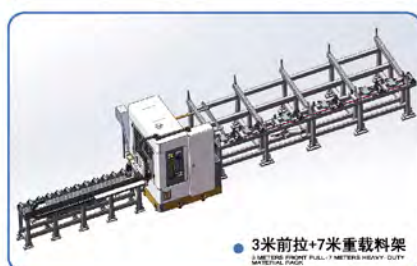
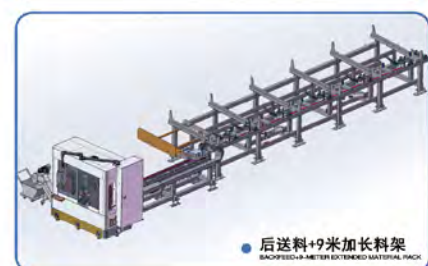
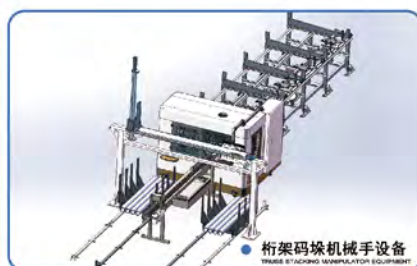
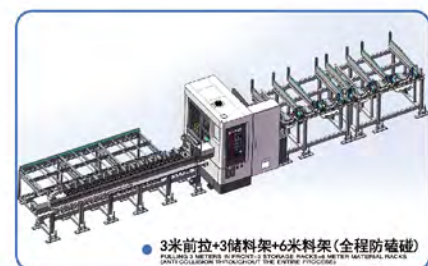
Forward pull mode equipment



Receiving rack side push mode equipment

Automatic Production Line

All-in-one solution of production line design, integration and turnkey, etc.



Rich Circular Saw Blades



Cutting Applications

Our circular saw can cut stainless steel, mild steel, Aluminum alloy, high-speed steel, tool and mold steel, bearing steel, angle steel, galvanized pipe, cooper, etc., suitable for cutting fields such as construction, automobile, aviation, military industry, shipbuilding, forging and non-ferrous metals.

