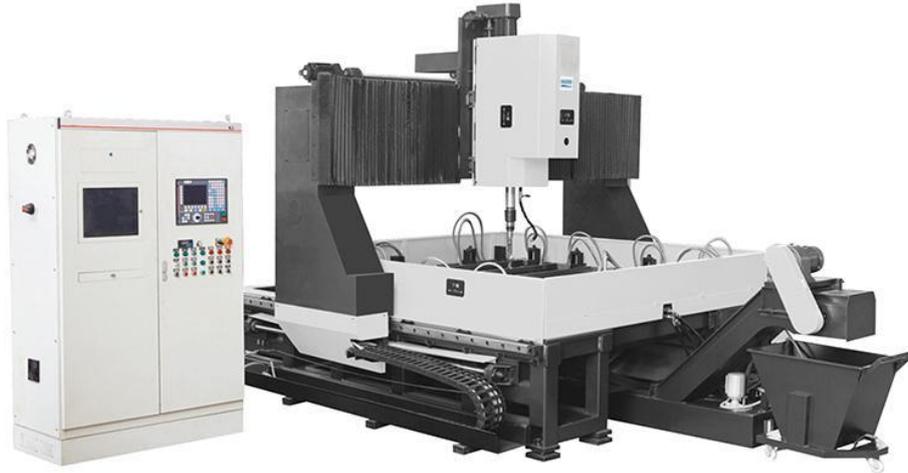


CNC Drilling Machine for Steel Plate&Tube sheet&Flange

1. ACD series CNC drilling machine with 560rpm



Apply scope:

For steel structure, tower, bridge, mechanical processing and other industries of the connecting plate, baseboard drilling processing.

Product structure:

Casting bed, spindle hydraulic feed, workpiece automatic clamping.

This machine is mainly composed of bed, gantry structure, drilling power head, hydraulic system, control system, centralized

lubrication system, cooling system chip removal system and quick change chuck.

The characteristics:

- 1.The bed is made of high quality gray cast iron with stable performance and no deformation.
- 2.Spindle hydraulic feed, high efficiency and very durable.
- 3.Adopt hydraulic clamping system, small workpiece can be clamped at four corners of worktable, shortening production preparation period and improving production efficiency.
4. Mitsubishi/SIEMENS servo motor + CNC system control, gantry mobile dual servo motor + ball screw synchronous dual drive.
- 5.

Technical parameters:

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ACD series	Unit	2012	2016	2016/2	2020	2020/2	3016	3016/2
Processing size	mm	2000 x1200	2000 x1600		2000 x2000		3000 x1600	
Processing thickness	mm	15-100						
Qty. of drilling spindle	nos	1	1	2	1	2	1	2
Model of drilling spindle		Morse taper4#						
Speed of drilling	rpm	120-560 Infinitely variable speed						
Feeding way of drilling		Driller driven by the hydraulic control stroke						
Feeding stroke of drilling	mm	180						
Drilling diameter	mm	Φ12-Φ50 (Optional: Φ12-Φ63)						
Main motor	kw	5.5 (Optional7.5)						
Clamping cylinder	nos	12						
Clamping force	kn	7.5/pcs						
Clamping way		Double side button control in Gantry						
Pressure	mpa	6						
Oil tank	L	100						
Control mode		Mitsubishi/Siemens control system /PLC+ Host computer						
X-axis servo motor	kw	1.5	1.5	2x1.5	1.5	2x1.5	1.5	2x1.5
Y-axis servo motor	kw	1.5	1.5	2x1.5	1.5	2x1.5	1.5	2x1.5
Precision Positioning	mm	±0.2mm						
Precision Repeating positioning	mm	±0.1mm						
Cooling mode		Forced circulation water cooling						
Chip removal method		Flat chain automatic chip conveyor						
Dimension(L*W*H)	mm	3160 x2200 x2370	3160 x2400 x2370		3160 x2800 x2370		4160 x2400 x2370	
Weight of machine	T	5.2	7	7.5	8.5	9	9.5	10

2. ALD Series large gantry CNC drilling machine



Apply scope:

For power,petrochemical,presure vessels and other heat exchanger tube plate,steel structure and the use of electrical equipment hole processing,but also can be applied to other industries of large plate hole processing.

The machine is gantry movable CNC drilling and milling machine,which is mainly used for drilling,expanding and opening of flat head and pipe,and has the function of light milling and boring.

The characteristics:

- 1.Servo slide type drilling head,with drilling,reaming,chamfering,slot milling function,all drilling heads can work together,or independently.
- 2.In X,Y direction for automatic point drilling,spindle speed and feed speed step-less adjustable.
- 3.Bed is arranged on the T slot,using plate clamping work-piece.
- 4.Available hand wheel,thimble,inquiry edge and other means to find work center.
- 5.CNC,PLC control,CRT display.
- 6.Programming software based on the WINDOWS platform,with CAD interface,quick and easy programming,preview image.
- 7.Automatic chip removal,cooling liquid recycling.
- 8.Key CNC systems,electrical components adopt well-known domestic and foreign products.
- 9.The first choice for large tube sheet drilling in heat ex-changer and chemical machinery industry.

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ALD Series		Unit	ALD3030	ALD3030/2	ALD4040/2	ALD5050/4
Processing size	L×W	mm	3000x3000		4000x4000	5000x5000
	Max. thickness	mm	250	200	250	200
Drilling spindle	Qty. of spindle	nos	1	2	2	4
	Model of spindle		Morse taper 4#			
	Speed of spindle	rpm	120-560 Infinitely variable speed			
	Feeding method		Servo feeding / Hydraulic feeding			
	Feeding stroke	mm	350			
	Drilling diameter	mm	Φ12-Φ50 (Optional: Φ12-Φ63)			
	Power of motor	KW	5.5 (Optional: 7.5)			
Electrical control	Control method		Siemens/Mitsubishi control system /PLC + host computer			
	X-axis servo motor	KW	2x2			
	Y-axis servo motor	KW	2	2x2	2x2	2x4
	Z-axis servo motor	KW	2	2x2	2x2	2x4
Drilling precision	Precision of position	mm	±0.2mm	±0.2mm	±0.2mm	±0.2mm
	Precision of repeating position	mm	±0.1mm	±0.1mm	±0.1mm	±0.1mm
Cooling method			Forced circulation water cooling			
Chip removal method			Flat chain automatic chip conveyor			
Dimension	Lx W x H	m	5x4x3	5x4x3	6x5x3	8x7x3
Weight of machine		T	18	19	30	55

3. AWT series high speed cnc drilling machine



Apply scope:

The machine is mainly used for drilling and milling of steel structure, iron tower, bridge, mechanical processing and other industries, such as connecting plate and floor board, drilling and milling of tubes, baffles and flanges in industries such as boiler, petrochemical, pressure vessel and so on; drilling holes, blind holes, step holes, chamfering and light milling.



Product structure:

This machine is mainly composed of bed, gantry, drilling and milling power head, electric control system, centralized lubrication system, cooling system and chips removal system etc.

The characteristics:

1. The bed is made of high quality gray cast iron, no need foundation.
2. Double side lead screw synchronous driving system, stable performance, flexible movement, accurate positioning.
3. Adopting slide head drilling and milling power head, it can realize the automatic conversion of fast forward, drilling and quickly, and has the function of automatic chip breaking.

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4.Adopt Taiwan BT40 high speed internal cooling precision spindle, can adopt hard alloy internal cold drill bit, processing efficiency is high.

5.Equipped with pneumatic knife cylinder automatic knife replacement, optional tool magazine.

6.SIEMENS/ Mitsubishi+ servo motor control, can directly transfer Auto CAD drawings to general processing program.

7.Automatic chip removal, cooling liquid recycling.

Technical parameters:

AWT Series		AWT1616	AWT2016	AWT2020
Processing size	LxW(mm)	1600x1600	2000x1600	2000x2000
	Thickness(mm)	15-100		
Drilling spindle	Qty. of spindle	1		
	Model of spindle	BT40		
	Speed(r/min)	30-4500		
	Feeding stroke(mm)	260 (Servo feeding)		
	Tapping diameter(mm)	M20		
Power of motor	Spindle motor(KW)	7.5 /11 (Servo motor)		
	X-axis(KW)	2×2.3		
	Y- axis(KW)	2.3		
	Z- axis(KW)	2.3 (with brake)		
Precision of positioning(mm)		0.1		
Precision of repeating positioning(mm)		0.08		
Control mode		CNC system+ host computer		
Weight of machine(T)		5.5	6.6	7.2
Dimension(m)		3800x2050x2750	4200x2450x2750	4200x2850x2750
Optional- Tool magazine		6units of Straight tools		
Optional- automatic clamp		12 units of hydraulic clamber		

4. AMD Series CNC plate drilling & milling machine



Apply scope:

This machine is suitable for drilling plate & pipe, baffle and flange in the petrochemical, boiler, refrigeration, wind power flange and other industries. It can also be used in the drilling of connecting plate in the steel structure such as building, bridge, tower and so on.

The characteristics:

1. The machine mainly consists of the bed and the longitudinal slide table, gantry and the horizontal slide table, the vertical sliding pillow drilling power box, the work table, the electric control system, the hydraulic system, the cooling system, the chip system, the centralized lubrication system and so on.
2. The machine adopts movable gantry and fixed worktable, save the floor area.
3. The machine bed and worktable are independent, which improves the stability of the equipment and effectively reduces the vibration generated during high-speed drilling.
4. The longitudinal and lateral movements of machine tools are guided by precision roller linear guide, which greatly increases the rigidity of the equipment.
5. The spindle motor uses a special servo motor to drive the spindle through the synchronous belt, step-less speed regulation, low speed torque, can withstand heavy cutting load, and can be suitable for high-speed machining of hard alloy tools.
6. The main axis of drilling is Taiwan precision spindle (internal cooling), the main axis cone hole BT50, with a butterfly spring automatic broaching mechanism, through the rod to install the drill or milling cutter, the hydraulic cylinder loose knife, the replacement tool is very convenient.

Technical parameters:

AMD Series

AMD3030

AMD3030/2

AMD4040/2

AMD5050/2

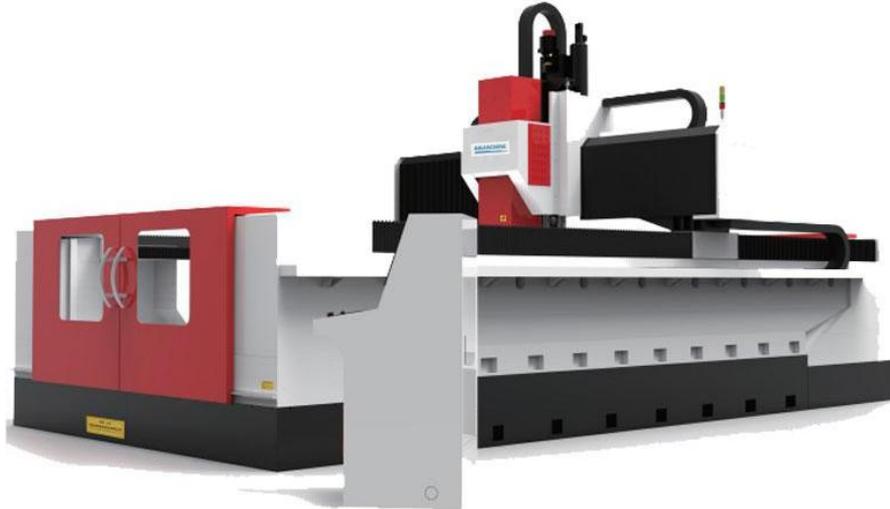
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Processing size	L*W(mm)	3000x3000		4000x4000	5000x5000
	Max. thickness	300mm			
Drilling powered head	Qty. of spindle	1	2	2	2
	Spindle taper	BT50 (inner cooling)			
	Speed of spindle	120-3200r/min			
	Stroke of spindle	500mm			
	Max. drilling	φ50mm twist drill /φ40mm hard alloy			
	Max. tapping	M32mm			
	Motor of spindle	18.5 KW /22 KW /30 KW /37KW			
	Spindle torque	180/240/360 n≤600r/min			
	Distance under the shaft	280-780mm			
X-axis	Max. stroke	3000mm		4000mm	5000mm
	Servo motor	2x3KW			
Y-axis	Max. stroke	3000mm		4000mm	5000mm
	Servo motor	3KW	2x3KW	2x3KW	2x3KW
Z-axis	Max. stroke	500mm			
	Servo motor	3KW	2x3KW	2x3KW	2x3KW
Precision of positioning		≤0.1mm/whole length			
Precision of repeating positioning		≤0.08mm			
Chip removal		Flat chain			
Qty. of chip removal		2pcs			
Speed of chip removal		1m/min			
Power of motor of chip removal		2x0.75kw			
Power of motor for inner cooling		3kw			
Power of motor for outer cooling pum		1kw			
Lubrication pressure		2MPa			
Oil of lubrication point		0.1ml			
Dimension	L×W×H	7x6x3.5		8x7x3.5	10x8x3.5
Weight	T	32	36	48	60

5. AM series gantry drilling & milling machine



Apply scope:

The machine is mainly used for processing large parts and large moulds. It is suitable for processing general machinery parts, automobile membrane tools, stamping dies, ship dies, precision machinery parts, aerospace parts, large electronic products and so on, and can meet various kinds of precision parts such as large parts, plates, plates and dies. It is an ideal processing equipment for automobile manufacturing, construction machinery, aerospace, electronics, military industry and other industries.

The characteristics:

1. The whole machine adopts HT300 advanced resin sand molding castings for special treatment to eliminate internal stress, reduce deformation and stabilize machine accuracy.
2. Step beam, slide design, guide rail span increased, ensure stronger rigidity and moving stability.
3. Integrated spindle gear box, high output torque and heavy cutting.
4. The machine head and the Z axis drive mechanism are designed in the same center, and the spindle motor and the ball screw are on the same central line to reduce the imbalance torque.
5. The chip groove is integrated with the base, and the rigidity is stronger. The iron scrap and cutting fluid can be completely stored in the groove of the base so as to avoid the worry of the side leakage of the sheet metal.
6. Adopt no counterweight axle. The German imported precision planetary gear reducer is used for direct transmission, to avoid poor cutting because of the unbalanced weight

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7.Taiwan made P grade roller linear slide rail,Z axis hardened rail,ensure high speed,high precision and heavy load heavy cutting.

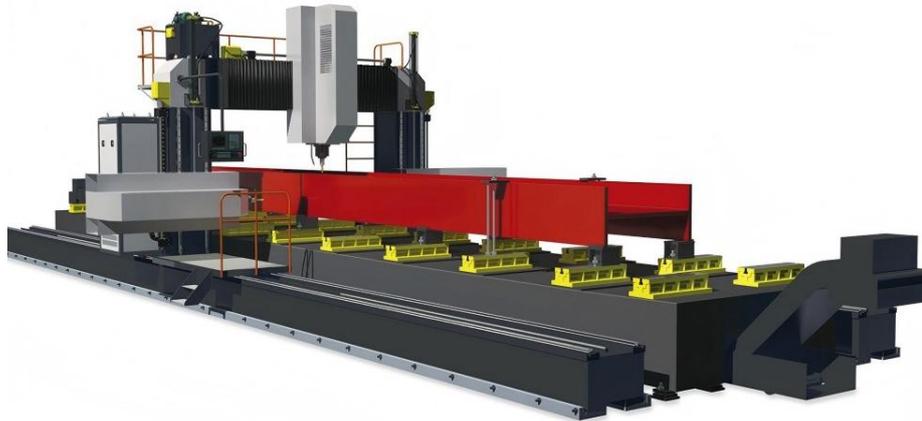
8.Use MITSUBISHI,FANUC,SIEMENS high performance CNC control system.

Technical parameters:

AM Series	AM2013	AM2518	AM3022	AM4022	AM6030
Worktable size	2000×1300	2500×1800	3000×2200	4000×2200	6000×3000
Max. loading weight(T)	6	8	15	20	40
Number of spindle	1				
Model of spindle	BT40		BT50		
Rotation speed(rpm)	30-4500				
Feeding stroke of Z-axis(mm)	450	500	1000		1250
Power of spindle motor	15/18.5		22/26		22/30
Optional: Tools number	24				
Control system	Siemens / Mitsubishi				

CNC drilling machine for beams

1.BD Series Gantry movable beam drilling machine



Apply scope:

1. It was designed for large-section beam fabricators
2. It is equipped with three moving drilling spindles. All spindles are built on the gantry and moving along with drilling table.
3. All these 3 drilling units can work simultaneously on the web and flanges of the beam.

The characteristics:

1. Reduced setup time & simple to operate;
2. Sturdy frame, no vibrations and noiseless;
3. Circle-Controlled system to measure accurately;
4. Specialized for large-section beam drilling.
5. Layout marking function easy for welding.
6. Autocad, X-STEEL & Tekla file reading instead of manual input.

Technical parameters:

BD Series	BD1500	BD2000	BD2515	BD3020
Web size	600-1500	1000-2000	1000-2500	800-3000
Flange size	200-1500	400-1000	700-1500	800-2000
Qty. of spindle	3	3	3	3
Max. Hole size	50	50	50	50
Spindle speed	120-560rpm	120-560rpm	120-560rpm	120-560rpm
Spindle power	8kw	8kw	8kw	8kw

2.ABD Series CNC Drilling Machines For Beams



Product feature:

1. Normal machine for drilling beams' web and flange simultaneously
2. Mainly composed of foundation, upper stand, CNC slideway, drilling head, clamp feeding device, electrical system, hydraulic system, cooling system etc.
3. Malformation examination for webs and flanges.Horizontal and vertical clamping for H-beams.
4. As for left and right spindles, one of them is fixed and the other can do horizontal movement so as to drill the workpiece of different size.
5. The high-quality atomizing cooling system is of high quality that ensures the cooling and lubricating when drilling so that it can prolong the drill's life.
6. Main components in control system are all world famous brands with high quality which ensures the reliability of machine. Programming, storing, display, selection and communication are convenient by using host computer.
7. Clamping workpiece, drills feeding, are mainly driven by hydraulic system. Main components in hydraulic system are all world famous brands with high quality that ensures the reliability of the machine.

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Technical parameters:

ABD Series			ABD700	ABD1000	ABD1250
Drill Range	H*W	Max(mm)	700*400	1000*500	1250*600
		Min(mm)	100*50	150*75	
	Thickness(mm)		≤50	≤80	
Length	Auto mode(m)		3000		
	Manual mode(m)		690-3000		
Weight	(kg)		5000	8000	10000
Drill Axis	Qty. of drill axis(pcs)		3 pcs		
	Drill speed (r/min)		180 ~560(Frequency)		
Cooling	Cooling		Compressed air + cutting fluid		
Motor power	Spindle axis motor (KW)		4x3		
Dimension(L×W×H)(m)			36*15*25	45*24*33	47*24*33
Weight(kg)			5500	7000	8000