Beta-300Pro Automatic Abrasive Sectioning Machine

SECTIONING

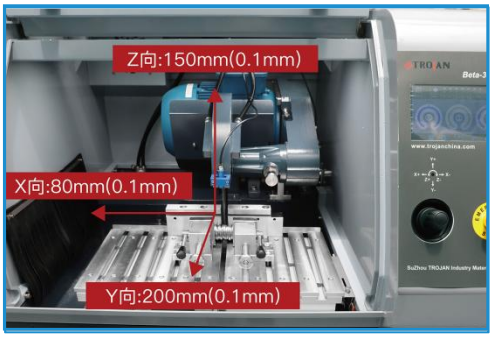


2024.07.18

Beta-300Pro Automatic Abrasive Sectioning Machine

Beta-300Pro is a fully automatic vertical metallographic cutting machine. It utilizes advanced intelligent control technology with full touchscreen operation. Equipped with a threeaxis industrial joystick and laser positioning, it features a larger cutting worktable for easier operation. The machine integrates various cutting methods and techniques, ensuring excellent cutting surfaces even for heavy-duty, large cross-section samples. Its intelligent cutting modes offer the highest level of repeatability.





Features

- Adopt 7-inch high-definition LCD touch screen operation interface, can save and customize 20 groups of cutting parameters;
- X-Y-Z three-axis linkage realizes automatic cutting, laser tool setting, and precise positioning of the cutting position;
- Multiple cutting modes to meet the various cutting requirements of different specimens;
- Settable cutting force, intelligent adjustment and optimization of cutting progress according to the hardness of the material and preset cutting force;
- The standard fixture is a T-fixture, easy to install and operate, can choose a variety of clamps;
- Pulse cutting, automatic speed adjustment for better cutting effect;
- Automatic judgment of cutting end function;
- Quick positioning function.

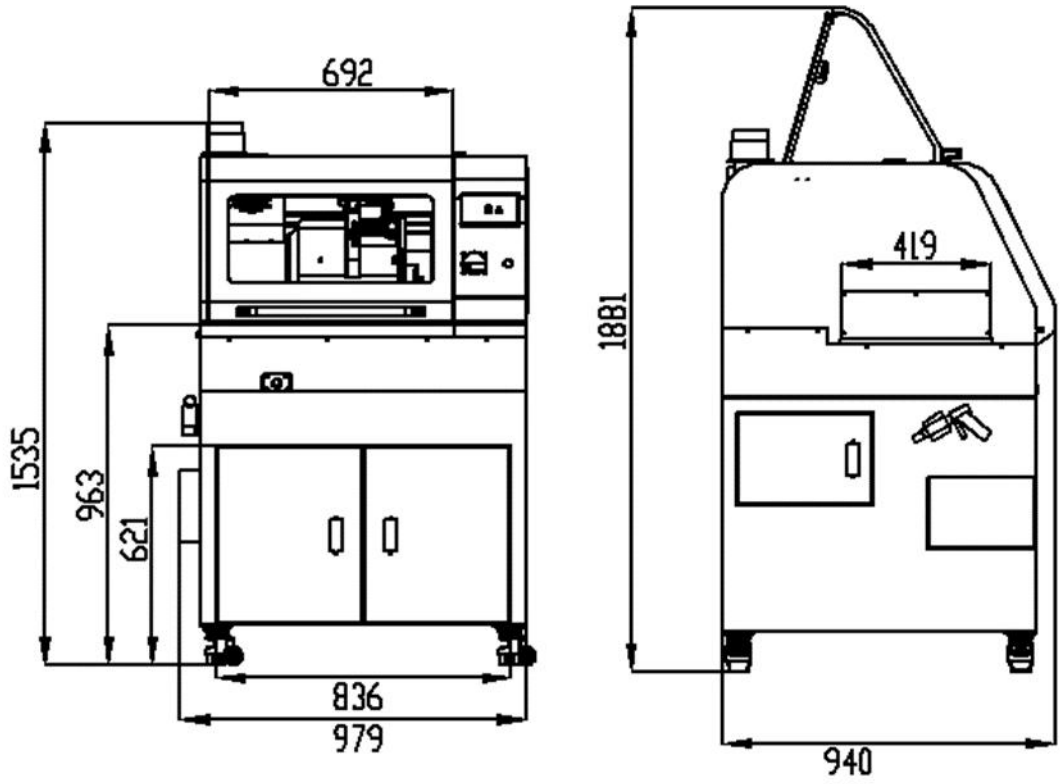


Technical Data

Model		**Beta-300Pro**
Cutting blade	Rotation speed	800~3500rpm
	Diameter	Φ300mm
	Arbor Size	32mm
Electric	Input	3x380V/50Hz+Earth wire
	Rated power	Total power 5.0KW, cutting power 4KW
Safety	Emergency Stop	Press to cut off the control circuit
	Security door lock	When the door is open, it cannot be started; when it is running, the door is locked
	Rocker	Requires two-hand control （Three-axis Swing＋Three-axis Swing Linkage Button）
	Overload protection	Automatic shutdown for overload current
	Cutting force	Monitoring cutting force, automatic stop when exceeding the set value
Control	Display/Control	7-inch touchscreen
	Z-axis feed	Automatic ： 0.1~5mm/s
	Y-axis feed	Automatic ： 0.1~5mm/s
	X-axis feed	Electric control rocker
Cooling	Capacity	80L
	Dimension	720x550x550mm(WxDxH, with paper pump)
	Connection	Inlet: DN15， High Pressure pipe of Φ19 inner diameter; outlet: 1.5 ”, Flexible pipe of Φ38 inner diameter
	Water way	Two , pump flow：100L/Min
Intelligent Cutting	Cutting mode	Vertical/ Horizontal/Vertical + Horizontal
	Speed control mode	Constant speed / Pulsing/ Automatic speed adjustment
	Laser tool setting	Equipped
	Automatic tool setting	Equipped
	Automatic cut off	No need to set cutting depth, automatic stop after cut off
Cutting capacity	Max. diameter	Φ110mm
	Max. square section	80x200mm
Workbench	Dimension	280x536mm
	T-slot	12mm
	Travel	X-axis: 80mm Y-axis: 200mm Z-axis: 150mm

Dimension	W×D×H	979×940×1535mm(Closed cover ）；979×940×1881mm(open cover)
Weight	Beta 300 pro	376kg
	Water tank	34kg

Dimension Figure



Standard Accessories

Serial number	Name	Picture	Specifications	Amount
1	Recirculating cooling and filter system		Capacity：80L，flow：100L/Min	1set
2	Handlebar style fast-lock		S300L/R	1set

3	Open spanner		30 Open spanner	1pc
4	Allen key		8mm Allen key	1pc
5	Cutting blades fix		Lock nut 1pcs+Fixing piece 2pcs	1set
6	Inlet pipe		Φ19mm Rubber pipe 1.5m	1pc
7	Outlet pipe		Φ38mm steel wire pipe	1pc
8	Cutting Wheels		A603020(300*32*2.0) A503020(300*32*2.0)	5pcs each

Optional Accessories

Serial number	Name	Picture	Specification	Quantity
1	Large Veritcal clamp		H400	1pc
2	Fast vise		F300L/R	1pc
3	Padding block for vertical vise		H400-BLOCK	1pc
4	Extend arm		H400-EX	1pc

Related Consumables & Accessories



Cutting Wheels



Cutting Coolant

Purchase list

Cut Off Wheels

01.01.160	A60 Cut Off Wheels(Extremely Hard)	A603020 300*32.0*2.0mm	10PCS
01.01.260	A50 Cut Off Wheels(Medium Hard)	A503020 300*32.0*2.0mm	10PCS
01.01.360	A30 Cut Off Wheels(Soft)	A303020 300*32.0*2.0mm	10PCS
01.02.460	S20 Cut Off Wheels(Soft Non-Ferrous)	S203020 300*32.0*2.0mm	10PCS

Diamond Wafering Blades

01.03.570	DP Diamond Plating Wafering Blade	DP303220 300*32.0*2.0mm	1PC
01.04.670	DR Diamond Resin Bond Wafering Blade	DR303220 300*32.0*2.0mm	1PC
01.05.770	DM Diamond Metal Bond Wafering Blade	DM303220 300*32.0*2.0mm	1PC

CBN Wafering Blades

01.10.970	CBN-M CBN Metal Bond Wafering Blades	CBN-M303220 300*32.0*2.0mm	1PC

Cutting Coolant

01.07.810/820	TJ 1210 Cutting Coolant	1L/5L
01.07.857/860	TJ 1410 Cutting Coolant	1L/5L
01.07.890/900	TJ 1506 Cleaner	1L/5L