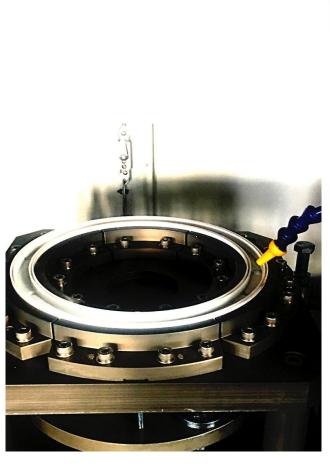
iBORTECH | MP Sonic

Washer Balance Ring Spin Welding Machine MSP-S11BP





ZHEJIANG ZHENBO PRECISION MACHINERY CO., LTD

Add: No.217, Weiqi Road, Yueqing Economic Development Zone, Wenzhou, China

Tel:0577-61517752 Fax:0577-61517750

Web: www.cnzhenbo.com; www.mp-sonic.com; www.ibortech.com

Email: info@mp-sonic.com; ibor@ibortech.com

I. Machine Working Principle

Spin welding is a kind of frictional joining technique in capability of producing strong, air-tight welding to parts with a circular-axis jointing, which with high bond strength / hermeticity requirements. During spin friction welding, one part half is held stationary in a holding fixture while the other one is rotated against it under pressure at a high speed normally 80~1600 rpm, which results friction at the touch area of two part halves (means the joining area) and causes the joining surfaces to melt until form fuse together, after which stop rotation and keep two part halves together under pressure until the interface of the jointing area cool down and become solidification.

Machine subjected to this manual applies pneumatic cylinder to force pressure to parts during operation. Machine is equipped with liquid filling control system to control the liquid filling volume through filling time set on HMI.

I. Machine Instruction

- ◆ This machine applies servo motor in 11KW to control welding spindle, applies pneumatic cylinder to control the vertical motion of working table. The welding spindle torque and the welding depth is adjustable. Liquid filling operation controlled separately;
- Welding spindle speed can be set in $0\sim500$ RPM;
- ◆ Liquid filling volume controlled by timing;
- ◆ Machine control system is designed with formula function, password login function, auto operation function, manual operation function, machine set function, I/O supervision function, alarm protection, etc to fit for requirement.

II. Component Function:

- 1. Servo welding spindle system;
- 2. Pneumatic pressure force system and working table elevating system;
- 3. Liquid filling control system.

III. Machine Performance:

- ♦ With good work efficiency, each station can be operated separately at the same time;
- ♦ The welding of this machine has the characteristics of high strength and good performance;
- Adopt automatic control technology to make welding operation easy and simple;
- ♦ No pollution, no waste, more environmentally friendly

IV. Machine Structure

Machine frame is made of steel square tube by welding with multiple complex process to surface; the transmission parts made by CNC to ensure precision with surface process; machine closure is made of cold-rolled plate, surface is painted after complex processing to ensure its good outlook.

V. Specification Parameters

Power Source:	380V 50-60Hz
Spindle Speed	Max 500 RPM
Jig Bed Motion Distance	300mm
Dimension	(L)1720*(W)1010*(H)2098
Working Room Temperature	10-40°C