

DOUBLE SIDED LAPPING/POLISHING MACHINE

双面研磨/抛光机YJ-SP137A

本机主要用于蓝宝石、碳化硅以及其它硬、脆材料的厚度减薄和表面抛光。机器结构可靠，可适应上盘施加较大压力的使用需求。

The machine is mainly used for thickness thinning and surface polishing of sapphire, silicon carbide and other hard and brittle materials. The structure of the machine is reliable, which meet the demond of exerting greater pressure on the upper plate.



碳化硅衬底



蓝宝石衬底

设备特点

- 机器采用四电机驱动，电机驱动上、下盘作相反方向的转动，实现工件均匀磨抛；
- 电机采用伺服驱动器控制，能在有效设置范围内以任意速度工作、停止、加速、减速；
- 通过改变太阳轮与内齿圈的速度，调整实现游星轮的正、反转；
- 机器整体结构紧凑，运行平稳，有效地缩短各传动轴的长度，增加机器的机械刚度，可以加压至1200kg；
- 上盘装置装有安全装置，在摆片、维修等状态下不会因突然故障而下降，增加了安全性；
- 箱体机架及承载主要零部件采用整体铸件，设备的承载与减振能力强；
- 采用圆柱销齿游轮，降低了耗材维护成本；
- 上、下盘盘内配有迷宫冷却。

MAIN TECHNICAL FEATURES

- The machine is driven by four motors, and the upper and lower plates are driven by the motor to rotate in the opposite direction to achieve uniform grinding of the workpiece.
- The motor is controlled by frequency converter, which can work, stop, accelerate and decelerate at any speed within the effective setting range.
- By changing the speed of the sun gear and inner gear ring, adjust to realize the forward and reverse of the planet gear.
- The overall structure of the machine is compact and runs smoothly, effectively shortening the length of each transmission shaft and increasing the mechanical stiffness of the machine, which can be pressurized to 1200kg.
- The upper plate device is equipped with a safety device, which will not drop due to sudden failure in the state of placement, maintenance, etc., thus increasing the safety.
- The machine frame and the structure supporting key components are fabricated from a single-piece casting, endowing the equipment with exceptional load-bearing capacity and vibration damping properties.
- A cylindrical pin gear system is employed for the planetary rollers, which effectively reduces the maintenance costs associated with consumables.
- The upper and lower plates are equipped with labyrinth cooling.

主要技术参数 MAIN TECHNICAL SPECIFICATIONS

项目/Items	规格/Specs
上、下盘/外径×内径×厚度(Upper (lower) plate /Outer dia*inner dia*thickness)	φ1220×φ552×60mm
游星轮参数(Planet gears specifications)	Z=72, DP=15.875mm, φ10圆柱销齿
游星轮数量(Number of Planet gears)	7
被加工件最大直径(Max diameter of machined workpiece)	φ330 mm
上盘转速(Upper plate rotational speed)	0-50 rpm
下盘转速(Lower plate rotational speed)	0-50 rpm
内齿圈转速(Inner gear ring rotational speed)	0-18 rpm
太阳轮转速(Sun gear rotational speed)	0-50 rpm
内齿圈电机(Inner gear ring motor)	伺服(Servo)4.4kw 1500rpm
上盘电机(Upper plate motor)	伺服(Servo)18.5kw 1700rpm
下盘电机(Lower plate motor)	伺服(Servo)18.5kw 1700rpm
太阳轮电机(Sun gear motor)	伺服(Servo)3.0kw 1500rpm
上盘压力范围(Upper plate pressure range)	0-1200kg
机器外形尺寸(Size)	2763×2710×2960mm
机器重量(Weight)	~7500kg