

WSK063

半导体晶圆切片机

WSK063 SiC slicing machine



技术规格参数 Specifications and Technical Data

工件 workpiece	
横断面 cross section	≤Φ320mm
长度 length	2×300mm/1×600mm
厚度 thickness	≤0.200mm (必须调整制程 must adjust the manufacturing process)
切割速率 cutting rate	
快速移动 fast move	200mm/min
工件行程 working stroke	最大 MAX 385mm
线材 wire	
芯线径 diameter of core wire (external diameter)	0.03-0.5mm
钢线长度 length of wire	按线轮而定 according to wire wheel
钢线方向 direction of wire	前进或后退切割 forward or backward/double directional cutting
预张力 pre-tension	最大 50N (按钢线直径而定) max 50N/50g (according to diameter of wire)
导轮 guide wheel	
直径 diameter	Φ192mm
长度 length	662mm
个数 number	2
电机功率 main motor power	最大 max 32.30KW
轴距 (左右) wheel base (left & right)	540mm
轴距 (上下) wheel base (up & down)	1500mm 450mm
钢线偏移滚轮 offset roller	
直径 diameter	100mm
个数 number	2×3 (个)
卷绕线盘 winding coil	
卷绕轴工作高度 working height of winding shaft	1355mm
卷绕线盘 winding coil	WSK063-WSK0639-01-001
最大容量最大容量 maximum capacity	3000
最大温度 maximum temperature	150℃
冷却水流量冷却水流量 cooling water flow	最大 MAX 100L/min (可调节) max 100L/min (adjustable)
冷却水温度 inflow temperature of cooling water	15℃
控制系统 control system	
安全安全 safety	安全(VPE)
供货商 supplier	SPS 控制系统系列 SPS 控制系统系列 SPS series with integrated PLC
外观尺寸及总重量 outline dimension and total weight	
长度 length	4470mm 4470mm
宽度 width	2170mm 2170mm
高度 height	2503mm 2503mm
总重量 total weight	41300kg 41300kg

设备用途和特性

- 本机适用于半导体行业，用于切割半导体晶圆片，最大长度 330mm，切片厚度最小为 0.2mm，必须调整制程，一次装夹最大可切片达 1300(2300)片，是半导体行业切片生产线的优选设备。
- 本机特点：
- 1、两个钢线导轮驱动，收（放）线速度 0.1-10m/min，钢线张力可调。
- 2、钢线张力的检测控制也是通过伺服电机实现。
- 3、工件进给由伺服电机通过滚珠丝杠驱动，进给速度与大小与钢线的引导速度相匹配。
- 4、切削液的搅拌与输送。切削液管道通过热交换器，保持切削液温度恒定，通过热交换器，保持切削液温度恒定。
- 5、本机底为最新技术集中控制。

Applications and structural features

- the machine is used for cutting semiconductor wafer which is mainly used for processing equipment. The max dimension of cross section is 320mm, the minimum thickness of section is 0.2mm, adjust the manufacturing process, it may cut 1300 pieces at one clamping. the optimized equipment for semiconductor manufacturers.
- features:
- two wire guide wheel drive, speed of wire, cable drive, roll for, wire supply, wire tension, and must be controlled.
- detection control of wire tension, it will be controlled by servo motor (constancy)
- workpiece feeding is driven by servo motor, the rotation ball screw feed, the rotation matching guiding speed of wire.
- addition and conveying of cutting liquid, cutting liquid pipe can reach up constant temperature through heat exchanger, matching with the cutting rate.
- this machine is an integrated high-tech product.