

12英寸全自动环切机器

12 INCH FULLY-AUTOMATIC RING DICING EQUIPMENT

AR9000RR

● 最大有效加工尺寸 (mm)

Maximum effective product size (mm)

Ø12"

● 主轴配置方式

Configuration method of spindle

单主轴

Single-spindle



• 特点 FEATURE

四工位，多片协调加工，加工效率高。

Four-station, multi-piece coordinated processing, highprocessing efficiency.

兼容性好，与市面上的其他类型设备，关键耗材兼容性高。

Good compatibility with other types of equipment on themarket and high compatibility with key consumables.

全自动上下料、传输定位、清洗、解胶、取环，实现全自动运行模式，大大降低OP工作量。

Fully automatic loading and unloading, transferring andpositioning, cleaning, ungluing and ring taking, realizing fullyautomatic operation mode, greatly reducing OP workload.

稳定的TAIKO外环解胶和取环。

Stable TAIKO outer ring ungluing and ring removal.

定制化工作台设计，保证TAIKO工艺下晶圆特殊结构稳定加工。

Customized table design ensures stable processing of special structures of wafers under TAIKO process.

多轴联动环切技术，保证环切精度。

Multi-axis linkage circumferential cutting technology to ensure the precision of circumferential cut.



• 功能 FUNCTION

注: 「*」为选配功能, 支持个性化定制
PS: 「*」is an optional feature that can be customized by the customer

| 掉环检测功能

Drop frame detection function

| 操作日志记录功能

Operation log

| 搬运撞击检测功能

Handle detection

| *软件定制

* Software Customization

| 工作台自动清洗功能

Automatic clean of chuck table

| *工厂自动化模块

* Factory Automation Module

| 条形二维码识别功能

Bar QR code recognition

| 智能UV解胶系统

Intelligent UV unglue

| 真空预警与真空管路去水功能

Vacuum warn and vacuum line de-water

| 二流体清洗功能

Second fluid cleaning function

• 参数 PARAMETER

主轴	Spindle	转速范围 (min-1)	Speed range (min-1)	3,000-60,000
主轴	Spindle	最大刀片径 (mm)	Maximum blade diameter (mm)	Ø58
主轴	Spindle	配置方式	Configuration method	单 轴 single spindle
主轴	Spindle	输出功率 (kW)	Output power (kW)	1.8(2.4可选) at 30,000min-1 1.8(2.4 optional) at 30,000min-1
X 轴	X-axis	可切割范围 (mm)	Cut range (mm)	310
Y 轴	Y-axis	可切割范围 (mm)	Cut range (mm)	310
Y 轴	Y-axis	单步步进量 (mm)	Single step amount (mm)	0.0001
Y 轴	Y-axis	定位精度 (mm)	Position accuracy (mm)	0.003以内/310 0.002以内/5 (单一误差) Within 0.003 / 310 Within 0.002 / 5 (single error)
Z 轴	Z-axis	移动量分辨率 (mm)	Move volume resolution (mm)	0.00005
Z 轴	Z-axis	重复精度 (mm)	Repeat accuracy (mm)	0.001
θ 轴	θ-axis	最大旋转角度 (deg)	Maximum rotation angle (deg)	380
主轴形式	Spindle type	单主轴, 安装硬刀盘做环形切割	Single spindle with hard cutter mounted for ring cut	
环切精度 (μm)	Ring cut accuracy (μm)	±50		
晶圆定位精度 (μm)	Wafer position accuracy (μm)	±50		
单片效率 (min/片)	Monolithic efficiency (min/piece)	8		
多片效率	Multi-slice efficiency	最多4片同时加工	Up to 4 pieces can be processed simultaneously	
设备重量 (kg)	Weight (kg)	≈3,200		
设备尺寸/W*D*H (mm)	Size / W*D*H (mm)	2,730*1,550*2,070		

• 应用 APPLICATION

