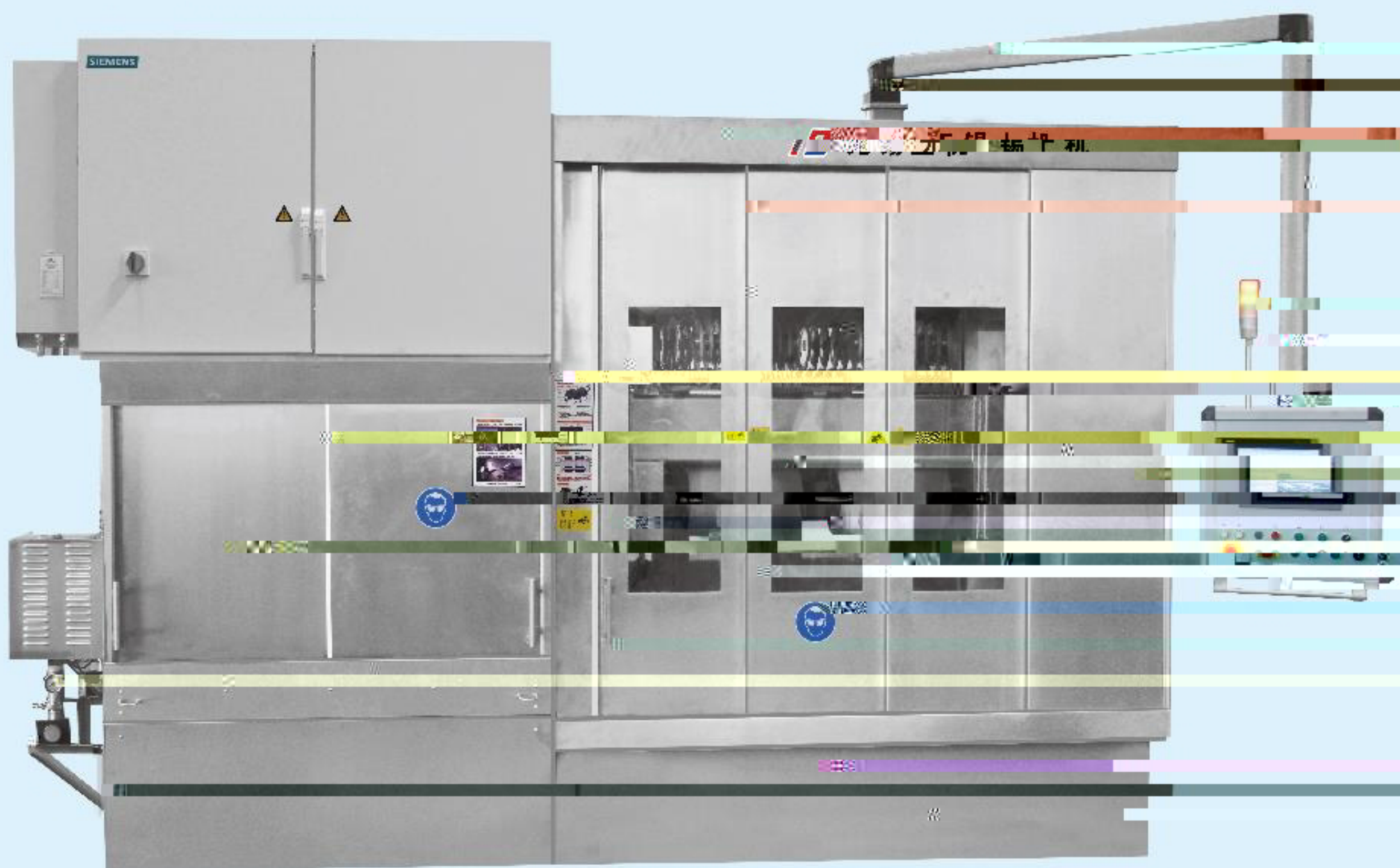


WSK026

数控金刚线蓝宝石开方机

WSK026 CNC cylindrical plain grinding machine for sapphire



加工工件参数 Workpiece parameters

工件规格 Workpiece size

Φ500-Φ800 × 3000/3500mm

工件重量 Workpiece weight

≤250kg/块

主要参数 Main parameters

金刚线直径 Diamond wire diameter

Φ0.05-Φ0.10mm

相邻线间距 Distance between parallel wire

21mm/22mm/23mm/24mm/25mm/26mm/27mm/28mm/29mm/30mm

线网间距 Space between wire

21mm/22mm/23mm/24mm/25mm/26mm/27mm/28mm/29mm/30mm

工件转速 Speed of worktable

0-1000rpm/min

加速度 Acceleration

5-10m/s²(max)

线速度 Line speed

20-30m/s(max)

摇摆角度 Swing angle

±0.5°

摇摆速度 Swing speed

20度/分

工件朝向 Workpiece crystal orientation

360°±90°

切割方向 Slitting orientation

前或后或双向切割 (forward or backward slice, two way exchange of cutting)

电源供给及配套设施 Power supply and auxiliary facilities

电源要求 Requirement of power

三相四线制 380V/50Hz

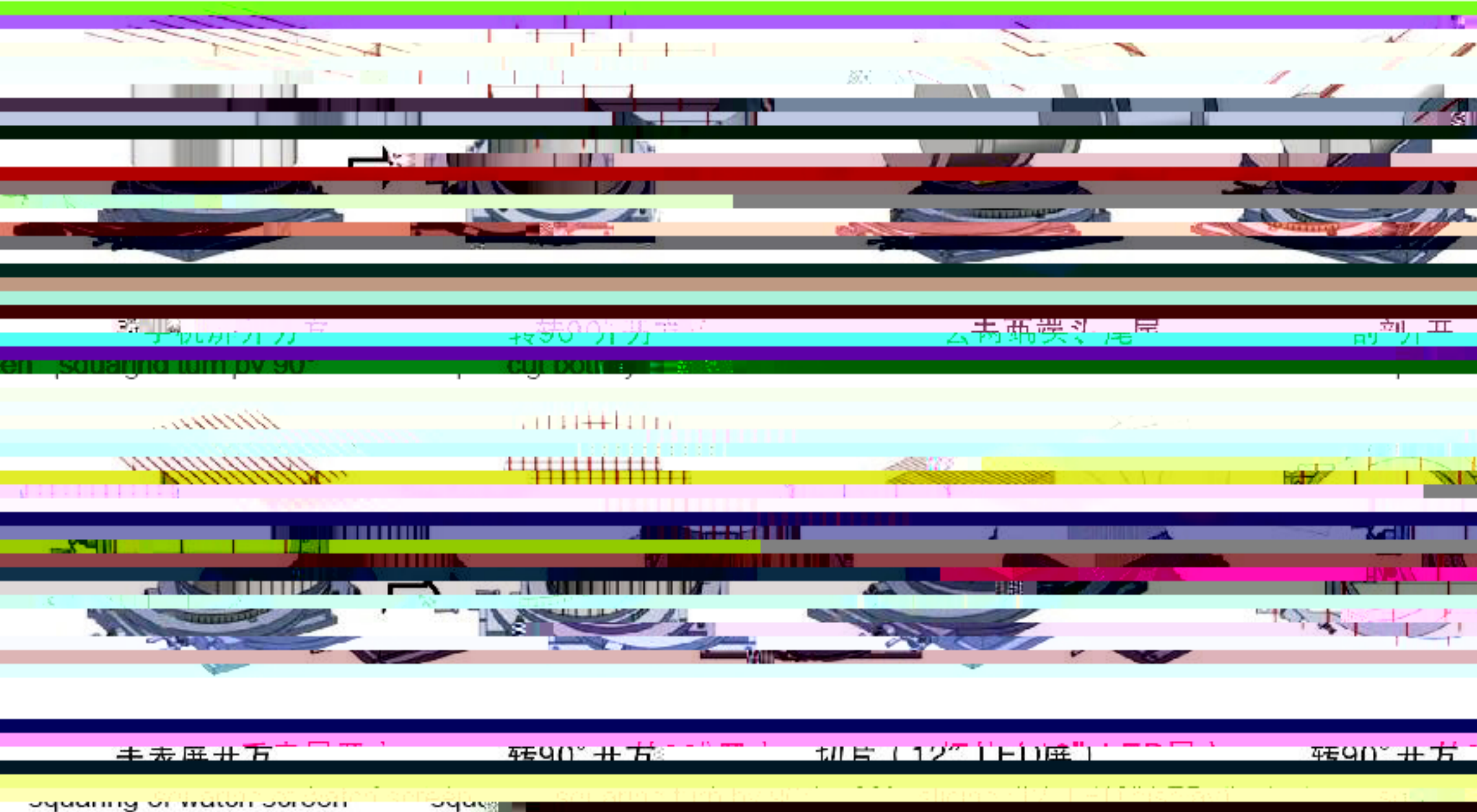
冷却水流量要求 Cooling water

10L/min

周围环境温度 Environment temperature

15°C-25°C

设备切割示意图 Slitting schematic diagram



- 本设备为金刚线多线开方机，主要用于新能源行业蓝宝石的开方、切视窗片以及半导体行业硅棒、多晶硅锭的开方，是新能源的主要配套设备。
- 采用西门子控制技术的机电一体化，15"触控屏。
- 设备布局合理，机械强度高而且热稳定性好；整体外观采用全封闭不锈钢设计。
- 摇摆单元优化了金刚线切割效率，缩短了切割时间，并提高了晶锭的端面质量，减少砂轮数量的设计，更有效地降低线耗、降低材料。
- 模块化组合，上下工作台都可进行360°的旋转调整方向，方便切割任意尺寸。
- 通过调整切割轮上的线宽，方便切割各种尺寸的晶锭。
- 优化切割参数，提高切割效率，降低切割成本。
- 利用操作手柄，可以快速布置线网，缩短了换线时间，减少人员管理成本。
- 采用双工位，多方位切割，以及自动换线功能，应用于蓝宝石的开方以及切片和切割，切割范围宽广。

- This equipment is diamond wire saw squarer, applied in New Energy industry, processing of sapphire ingots, cutting windows, silicon rods and used in semi-conductor industry, silicon rods and monocrystalline silicon rods and polysilicon rods, which is the main equipment for new energy industry.
- Apply integrated PLC of SIEMENS controlling system, 15" touch screen.
- Reasonable layout, high mechanical strength and perfect thermal stability. Overall appearance applies full-closed stainless steel design.
- Swing unit optimizes performance of slicing sapphire, shortening time, and improving lead-face quality of ingots, reducing diameter of pulleys, which increases consumables savings and purity.
- The equipment can not only cut different size of ingots, single line width can be controlled as needed in order to cut upper and lower workpieces, and control angle of cutting.
- By requiring grip of wire on cutting wheel, wire with any size of block.
- Optimize to control tension of control system, high-tension sliding, ensuring quality and efficiency of squaring. Use operating handle, fast layout cable, shortening time of standby and reducing management cost.
- Apply double station, multi-position cutting, automatic wire change, flexible layout and used in squaring, slicing and cutting.