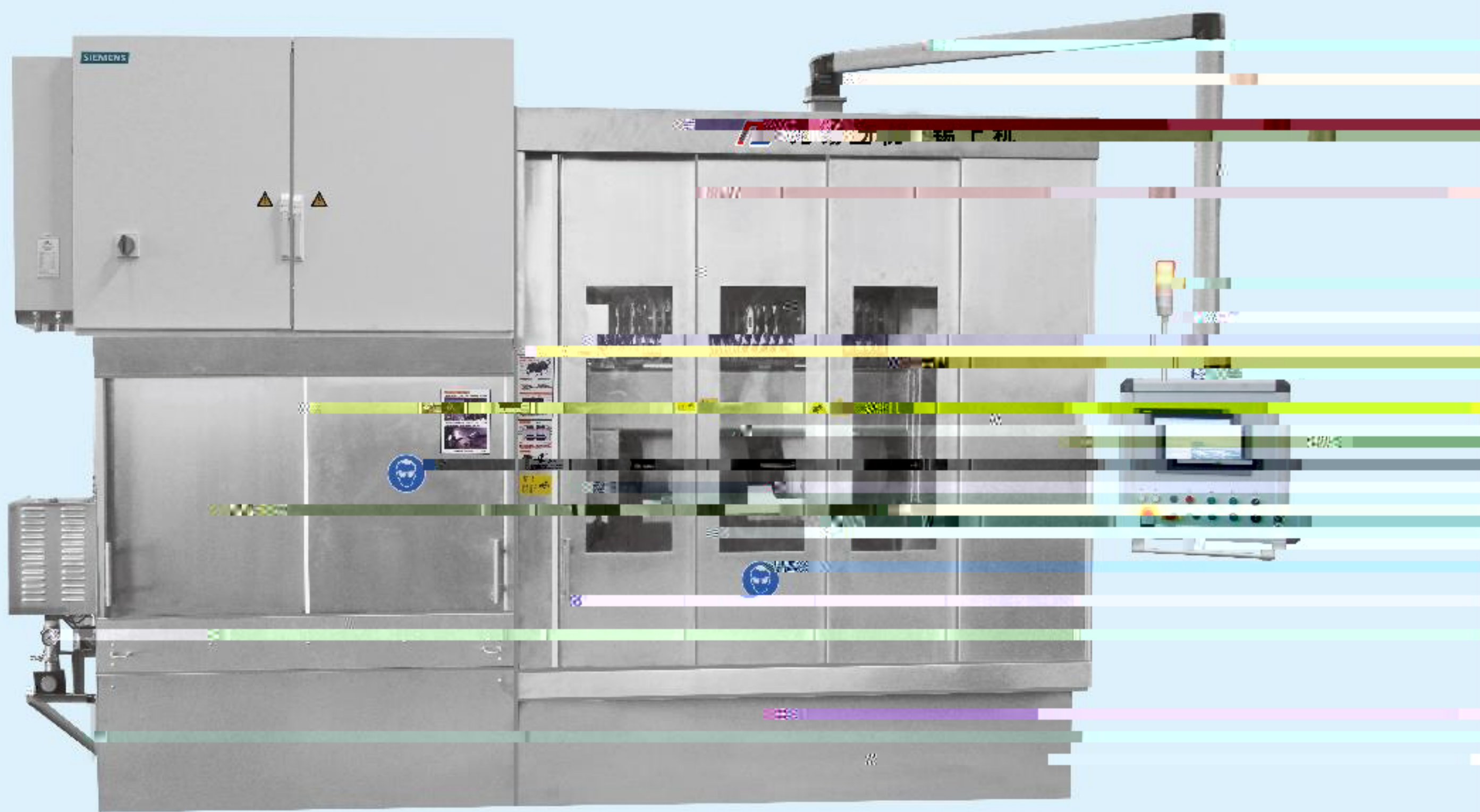




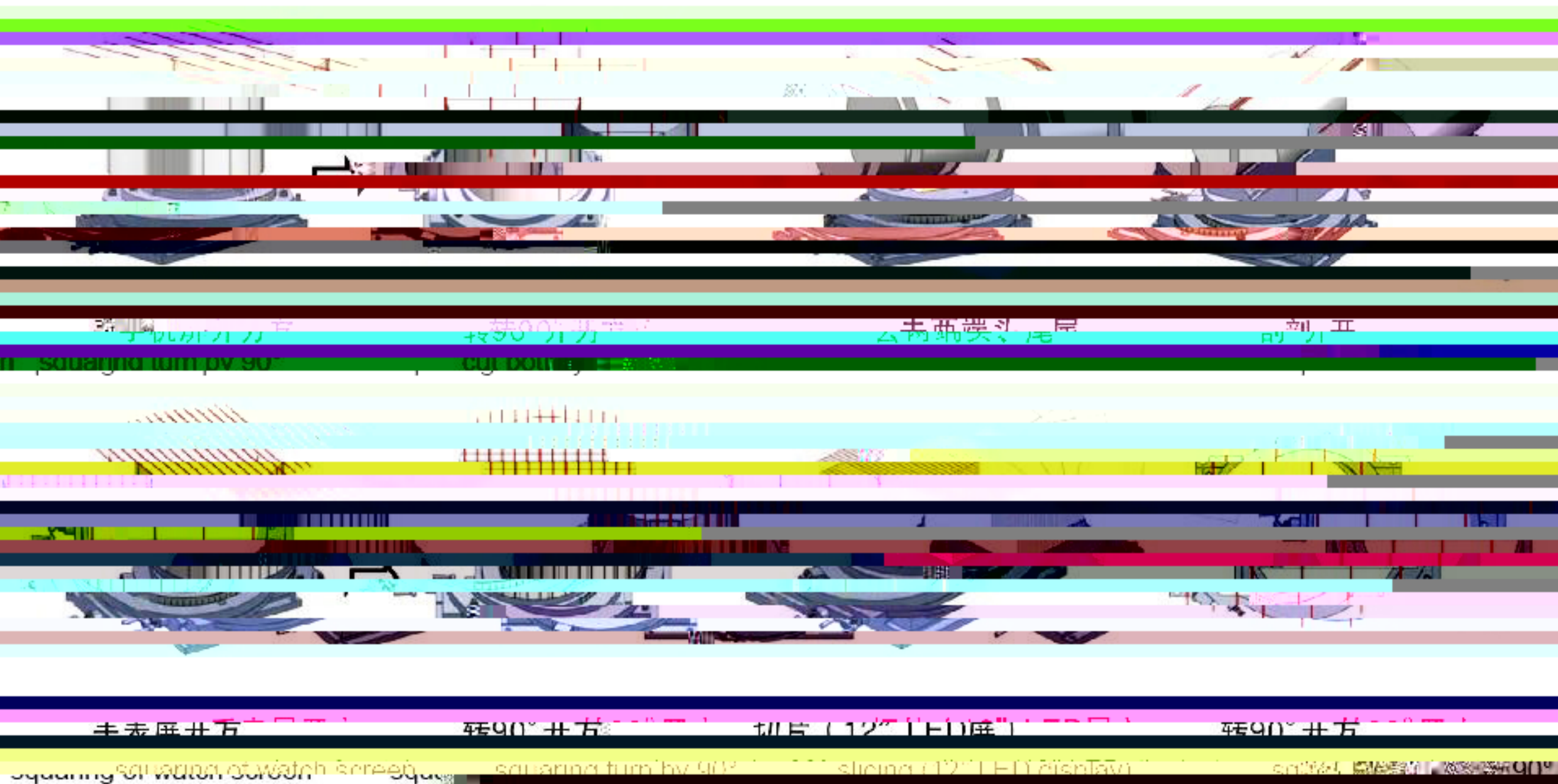
# 数控金刚石开方机

WSK026 CNC cylindrical plain grinding machine for sapphire



加工工件参数Main parameters	
工件规格Workpiece size	Φ500-Φ900 × 300
工件重量Workpiece weight	1250kg (max)
主要参数Main parameters	
金刚石线Diamond wire	Φ0.05-Φ0.15mm
工件与线速度Workpiece speed	根据规格 开方square: 0.5~3mm/min 切片slice: 0.5~1mm/min
线网间距Pitch between wire	20mm (max)
工件转速Speed of worktable	开方square: 0.5~3mm/min 切片slice: 0.5~1mm/min
加速度Acceleration	5-10m/s <sup>2</sup> (max)
线速度Line speed	30-50m/s (max)
摇摆角度Swing angle	±10°
摇摆速度Swing speed	20度/秒 20°/s (max)
工件晶向Workpiece crystal orientation	360° ± 90°
切割方向Slicing orientation	新能源系列开方机双向切割 forward or backward slice, two way exchange of cutting
电源供给及配置Power supply and configuration	
电源要求Requirement of power	电压voltage: 380V 频率frequency: 50Hz
冷却水流量温度Cooling water	10L/min (max)
环境温度Environment temperature	15°C-25°C

## 设备切割示意图 Slicing sketch map



- 本设备为金刚石线多线开方机，主要用于新能源行业蓝宝石锭的开方、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现代化机床，15"触摸屏。
- 设备布局合理，机械强度高而且热稳定性好，整体外观设计采用全封闭不锈钢设计。
- 摇摆单元提供了金刚石线切割平面磨床的传动了轴箱空间，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、磨轮等耗材。
- 模块化组合，上下工作台都可进行360°的旋转调整方向，方便切出任意尺寸。
- 通过调整切割轮上的线宽，方便切割各种尺寸的来料。
- 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，缩短了换线的时间，减少人员管理成本。
- 采用双工位，多方位切割，以及双向切割功能，应用于蓝宝石的开方以及切片和磨片，砂轮切割玻璃等功能。

- This equipment is diamond wire saw squaring, applied in New Energy industry, processing IED sapphire ingots, cutting windows for LED and used in semi-conductor industry, silicon rod and polycrystalline silicon round bar and polysilicon wafers, 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 enlarges performance of slicing sapphire, shortening time, and improving lead-face quality of ingots, reducing quantity of pulleys, which decreases consumables such as wire and pulleys.
- The equipment can not only cut square, but also single line slice can be cut as horizontal and vertical upper and lower workpieces that accept any crystal orientation by adjusting wire slice whatever size.
- By requiring gettin' or wire on cutting wheel, wire never size of block.
- Optimize to control tension or control system, high-tension sicino, ensuring quality and efficiency of squaring. Use operating handle, fast layout cable, shortening time of standby and reducing management cost.
- Apply double station, adjust of vertical and horizontal direction, fast setting. Flexible layout and used in squaring, slicing and cutting.