Super finishing of mono + polycrystalline silicon blocks for solar wafer Grinding Machine MPS 3-134 single mode

Grinding

Machines

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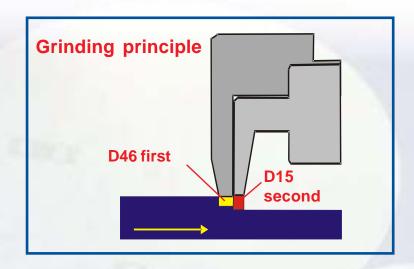


- Stand alone precision grinding machine with two grinding spindles and oscillating table
- Main grinding spindle with combi wheel D46/D15
- Second grinding spindle for simultaneously chamfering the edges of the block.
- Chamfering of the edges and grinding of the faces in the same clamping position (no rechucking)
- Prepared for robot-loading of block
- Automatic handling (loading, unloading, turning) of the block.
- Automatic grinding process
- Integrable into production line

Technical Data	
Block size	125/150/156 mm
Block length	190 - 300 mm
Flat grinding spindle	
AC motor	7.5 kW
Speed	500 -4000 rpm
Combi wheel	D46/D15
Chamfering spindle	
AC motor	2.2 kW
Speed	3915 rpm
Grinding wheel	D15
Block clamping	Vacuum
Block handling	Vacuum
El. connection	10 kW
Water	1.200 l/h (600 l
	per spindle)
Air	15m³/h
Weight	1600 kg
Footprint	3000x 2100 mm
Height	2440 mm

High precision grinding process with two wheels

→ high throughput





- chamfering of the edges and grinding of the faces in the same clamping position (no rechucking)
- chamfering of the edges and grinding of the faces in the same process operation

- Reduction of breakage rates in relation to cell edge roughness
- The high surface quality of the brick reduces the breakage rate of the sawed solar cells
- By grinding the brick surface, the subsurface damage of the solar brick is minimized

