

## ALTEC-13005 MACHINE TOOL FOR CUTTING SEMICONDUCTOR MATERIALS



### Areas of Application

The tool is designed for cutting semiconductor materials into legs. Cutting is made by diamond-coated wires. The wires are placed on a replaceable frame which serves as a cutting tool. The distance between the wires is set by replaceable dimension strips

### Specification

Maximum dimensions of work piece to be cut, mm	50 × 50 × 15
Number of work pieces that can be cut simultaneously	4
Nominal frequency of cutting frames motion, Hz	25
Cross-section of resulting legs, mm	
minimum	0.4 × 0.4
maximum	4 × 4
Number of wires on the frame, minimum	14
Minimum diameter of cutting wire, mm	0.18
Weight, kg	≤150
Power consumption, kW	1.5
Power supply	380 V ± 10%, 50 Hz
Dimensions, mm	1600 × 1000 × 500

### Advantages

The machine tool shows a high performance as it is capable of simultaneous cutting of 4 work pieces at a rate of 0.4–0.8 mm/min. The effect of harmful vibration is minimized. During 8-hour working day, the tool can make 210000 legs of Bi<sub>2</sub>Te<sub>3</sub> based materials, which have dimensions of 1.4 × 1.4 × 1.5 mm

### Stage of Development. Suggestions for Commercialization

IRL7, TRL6  
Manufacture, supply, warranty service,  
and staff training, upon request

### IPR Protection

IPR3

### Contact Information

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