

## **Product Code**

UTC-1035 Semi-Automatic Grinding Machine, 220-240 V 50-60 Hz

UTC-1042 Grinding Wheel

UTC-1043 Cradle for Ø:38-100 mm Cylindrical Specimens

UTC-1044 Water Restraint Panel Set

## **Standards**

EN 12390-1, 12390-3, 12504-1; ASTM C 31, C39, C42, C192

The UTC-1035 Semi-Automatic Grinding Machine provides fast grinding of cylinder specimen ends to obtain plane and parallel surfaces according to EN and ASTM standards.

The ony differance between automatic machine and semi-automatic machie is that the cradle of the semi-automatic machine is moved toward the grinding wheel by user. All grinding process is automatic except the movement of the cradle for semi-automatic machine. The optimum cycle to be applied by user is 5-6 cycle/per minute.

Three units of  $\emptyset 38$  to 100 mm or two units of  $\emptyset 150$ -160 mm concrete cylinders ends can be ground simultaneously with the suitable cradle and water restraint panel. The length of the any specimen must be longer than 70 mm.

The Planeness and the perpendicularity of the test cylinder ends are in accordance with ASTM standards C31, C39, C42, C192, C617 and EN standards EN 12390-1 EN 12390-3 and EN 12504-1. The Planeness accuracy of grinded surface is 0.05 mm. The deviation of perpendicularity of the side with reference to the end faces is  $5^{\circ}$ .

The cradle which specimens are fixed on has automatic bidirectional radial displacement ability. The safe and ergonomic design prevents the user to exposure to water and dust and provides easy access to the water inlet and outlet.

Specimen cradles and water restraint panels can easily be installed without the need for any assembly. Mobility of the machine is achieved with the help of the integral wheels, and all components of the system can be safely accessed for easy maintenance.

The machine is manufactured from stainless steel for resistance to corrosion.

The Semi-Automatic Grinding Machine is supplied complete with

- Grinding Wheel
- Cradle for Ø:38mm to100 mm cylindrical specimens
- Water restraint panel set f (Consist of four panels Ø150, 100, 75 and 50 mm)

| Dimensions       | 730x1200x1500 mm |
|------------------|------------------|
| Weight (approx.) | 280 kg           |
| Power            | 2450 W           |



| The preparation of concrete cylinder test specimen for compressive strength test | EN 12390-1, 12390-3<br>ASTM C31, C39, C192,<br>C617 | The maximum tolerance on<br>the flatness of the potential<br>load bearing surfaces<br>(the ends of compression test<br>specimens)<br>is 0.002 in. [0.050 mm] |
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| The preparation of drilled concrete cores specimen for compressive strength test | EN 12504-1, 12390-1,<br>12390-3 ASTM C42,<br>C397   | The deviation of perpendicularity of the side, with reference to the end faces is 5°   |
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