

Product Code

UTC-1040	Automatic Grinding Machine
UTC-1042	Grinding Wheel for UTC-1040
UTC-1044	Water Restraint Panel Set for Cylinder Specimens for UTC-1040
UTC-1047	Cradle and Water Restraint Panel for three units of 100 mm cube specimens for UTC-1040
UTC-1048	Water Restraint Panel for Ø160 mm Cylinder Specimen for UTC-1040
UTC-1049	Cradle and Water Restraint Panel for one unit of 150 mm Cube Specimens for UTC-1040

Models for 220-240V 50-60 Hz, 1 ph. UTC-1040

Models for 110-120V 60 Hz, 1ph. UTC-1040-N

Standards

EN 12390-1, 12390-3, 12504-1; ASTM C 31, C39, C42, C192, C617

The UTC-1040 Automatic Grinding Machine provides fast grinding of cylinder specimen ends to obtain plane and parallel surfaces according to EN and ASTM standards.

Three units of Ø38 to 100 mm or two units of Ø150-160 mm concrete cylinders ends and three units of 100 mm or one unit of 150 mm concrete cubes faces can be ground simultaneously with the suitable cradle and water restraint panel. The length of the any specimen must be longer than 70 mm.

According to ASTM and EN standards, the planeness accuracy of grinded surfaces of concrete compression test specimens should be 0.05 mm. and also the deviation of perpendicularity of the side with reference to the end faces should be 0,50.

The equipment has selectable advance grinding time functionality by user from 50 to 400 seconds. Optimum grinding time per end of all type specimens is 90 to 120 seconds.

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 frame is manufactured from aluminum to obtain a lighter weight and the stainless steel exterior shell assures resistance to corrosion. UTC- 1044 Water Restraint Panel Set for Cylinder consist of panels for Ø150 mm, Ø100 mm and Ø50 mm specimens. For different sized cylindrical specimens, the water restraint panel should be ordered separately.

The cradle and the water restraint panels should be ordered separately for 100mm and 150mm cubic specimens.

The Automatic Grinding Machine is supplied complete with

- Grinding Wheel for concrete specimens
- Cradle for Ø150 mm to 160 mm cylindrical specimens (connected to the machine)
- Water restraint panel set (Consist of panels for Ø150, Ø100 and Ø50 mm specimens)



The preparation of concrete cylinder test specimen for compressive strength test

EN 12390-1, 12390-3
ASTM C31, C39, C192, C-617

The maximum tolerance on the flatness of the potential load bearing surfaces (the ends of compression test specimens) is 0.002 in. [0.050 mm]

The preparation of drilled concrete cores specimen for compressive strength test

EN 12504-1, 12390-1, 12390-3
ASTM C42, C39

The deviation of perpendicularity of the side, with reference to the end faces is 5°

Dimensions 680x110x1600 mm

Weight (approx.) 260 kg

Power 1850 W