The MonTech CC 3000 Cut and Chip Test provides a simple, quick laboratory method to evaluate cutting and chipping resistance of rubber compounds subjected to harsh mechanical environments.

The Cut and Chip Tester was developed to predict the service performance of passenger, truck, OTR, farm, mining and industrial solid tires, tank tracks and bogey wheels, as well as industrial products such as conveyor belts that are subjected to contacting surfaces containing sharp objects (rocks, gravel, glass, metal, etc.). The test is designed to be quick, inexpensive and furnish a high level of confidence in predictive testing of actual product performance.

The Cut and Chip Test is performed on an cured rubber disc specimen mounted on a rotating spindle. The disc is impacted by a tungsten carbide knife with a precision ground cutting edge. An eccentric cam applies the knife at a specified frequency for a specified time, both of which can be set according to the application requirements.

The CC 3000 is conveniently controlled by a integrated 7" Touchscreen panel with a preselection of 11 different spindle speeds and 7 different chipping cycles providing the operator with quick and easy test setup possibilities. All speeds are digitally controlled by servo motors - for safety the instrument is fitted with a supervised safety door. The motorized cam conveniently lifts the knife support arm at the completion of the pre-selected test time. The resistance to cutting and chipping is based upon the loss of material (mass and reduction of disk diameter) over the duration of the test.

**Sample:**
51 mm Ø, 13 mm (thickness), 13 mm (center hole)

**Technical data:**
- Specimen Size: 51 mm Ø, 13 mm Thickness, 13 mm Ø Center hole
- Specimen Rotation: 180 - 2880 Revolutions per minute
- Test Cycle: 0.1 - 999 Minutes
- Cut/Chip Cycle: 15 - 150 Cycles per minute
- Mass @ Knife Edge: 454 gram (others optional)
- Main Unit (W x L x H): 560 x 400 x 370mm
- Electrical: 200 - 250VAC, 50/60 Hz, 1 ph, 8 Amp
- Net Weight: 49kg
Cut & Chip Tester CC 3000

Consumables, reference samples and sample preparation accessories (optional):

- Set of control samples
  Set of 5 certified control samples including test certificate

- Set of Tungsten carbide knives
  Set of 5 certified Tungsten carbide knife inserts for the CC 3000

- Precision scale with 1mg or 0.1mg resolution
  For weighing of samples before and after the testing process

9-cavity cut and chip mould:
Mould dimensions 296 x 296mm x 50mm, Precision machined from Stainless steel
Nine cavity three piece mould with centering pins and handles
Specifically designed for cut and chip samples with 51 mm Ø, 13 mm Thickness, 13 mm Ø Center hole

Dirt removal and cleaning:
In the standard configuration the CC 3000 is equipped with a integrated stainless steel tray for collecting any rubber dirt or residue from the working area that is produced during testing.

Optionally the CC 3000 is also available with an automatic cleaning unit. This system consists of a special hopper mounted below the working area and a special vacuum cleaning device extracting all dirt and rubber particles immediately. The cleaning unit is controlled by the Touchpanel and automatically switched on during the testing sequence.