Ray'Ran



Auto-cycle Notching Cutter

RR-NC

The shape tolerance of notches in impact test specimens has a substantial effect on the accuracy of Impact Toughness results. A world leader by design, the Ray-Ran Auto-cycle Notching Cutter is therefore a must-have tool for producing accurate notch profiles that deliver a consistent stress concentration in Charpy and Izod test specimens, in accordance to ISO 179, ISO 180, ASTM D256, ASTM D6110 and more.

At the heart of the machine is a custom-built adaptive Microprocessor Control Unit with LCD screen for displaying the feed and cutter speeds. Cutter speed ranges from 350 to 2500rpm and can be easily adjusted using the integrated membrane keypad and stored in the memory feature of the microprocessor. With a minimum feed rate of 0.06mm/rev, it is possible to machine even high mechanical performance polymers easily.



The anti-vibration guide rail system optimises profile accuracy and the multi-sample loading feature of the vice can accommodate up to 16 4mm thick test specimens, all accurately cut within approximately 20 seconds. The quick auto-return feature ensures the vice is always in the correct place for loading and unloading the test specimens and the microheight adjustment, notch depth comparator and sample setting gauge ensure that the cut notch depth is accurately controlled. To enclose the working area for operator safety, an electrically interlocked polycarbonate guard is fitted, ensuring the machine cannot run while the test area is being accessed.

The Dual Tooth Cutting Wheels used on the Auto-cycle Notching Cutter are designed to reduce cutter load on the sample being notched. They are tungsten carbide tipped, optically ground and diamond lapped to very close tolerances. The most common cutter wheel profile used with the apparatus is a 0.25mm radius V notch.

Cutter wheel profiles of 0.1mm and 1.0mm radius as well as 0.8mm and 2.00mm 'U' notch cutter wheels are also available. Non-standard and special notch requirements can also be provided for.

Technical Specification

- Advanced dedicated microprocessor control
- Easy to read LCD
- Touch membrane keypad
- Memory feature
- Cutter speed range from 350rpm to 2500rpm
- Traverse speed range 0.06mm/rev to 1.0mm/rev
- · Metric and imperial traverse speeds units
- · Anti-vibration linear motion slide
- Multi-sample loading
- Notch depth comparator
- · Notch depth gauge block
- · Easy clean removable waste tray
- Polycarbonate safety guard
- · Electrical Interlock
- Emergency stop button
- Product user manual
- CE declaration certificate
- 1 year return to base warranty
- Notches to International Test Standards, including: ASTM D256, D6110, ISO 179, 180, 8256, DIN 53453

Optional Ancillaries

- Dual tooth cuter wheel 0.01mm Rad V notch
- Dual tooth cuter wheel 0.25mm Rad V notch
- Dual tooth cuter wheel 1.00mm Rad V notch
- · Dual tooth cuter wheel 0.80mm U notch
- Dual tooth cuter wheel 2.00mm U notch

Weights & Dimensions

Net Weight (kg)	15	
Width (cm)	54	
Depth (cm)	33	
Height (cm)	25	

Contact Details

web. www.industrialphysics.com
email. info@industrialphysics.com
email. info.china@industrialphysics.com



