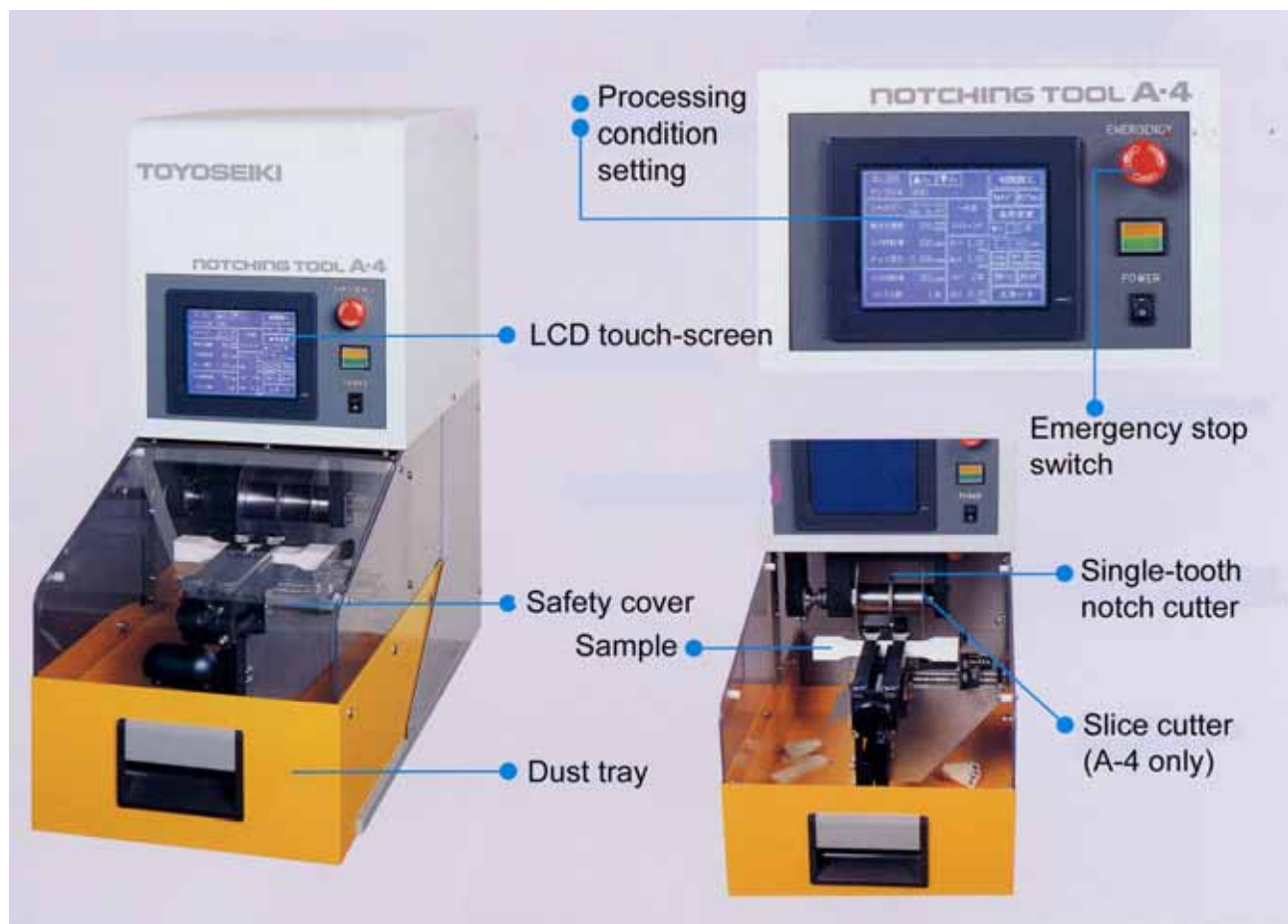


No.628 Notching Tool, A-4 / A-4E

Advanced Notcher for Izod/Charpy specimens conforms to ISO 2818 and JIS K 7144

Notching Tool, A-4..... Slice cutting + Notching

Notching Tool, A-4E..... Notching only



APPLICATION

The Notching Tool, A-4 series are miniature, computerized, numerically controlled milling machine for preparing a variety of notched specimen bars. All operations except mounting and dismounting of the sample are automatic. It automatically positions, cutter according to sample and notch dimensions.

The instrument employs a precision servo motor control system with a touch screen control display. Safety interfaces protect the operator from accidents. The cutter speed and table travel speed can be optimized for the sample material. (*Fixed cutter speed for A-4E*)

The instrument can store up to 99 (16 for A-4E) user-defined cutting programs. Bars can also be automatically cut from the ISO universal test specimen (*A-4 only*).

FEATURES

1. All operation except mounting / dismounting of sample are automatic. Notching and slicing are automatically performed. (Notching only for A-4E)
2. Allows simultaneous processing of ISO multipurpose sample slicing and cutting. (Notching only for A-4E)
3. Employs pulse motor which allows cutting at high precision of 0.01mm
4. LCD touch-screen setup, operation and display; memory recall of 99 user cutting programs (16 for A-4E)
5. Automatic detection of zero-height (sample bottom) reference point
6. Safety cover locks during cutting; automatic safety inter locks and emergency stop
7. Double notching processing also available using optional double notch-holder

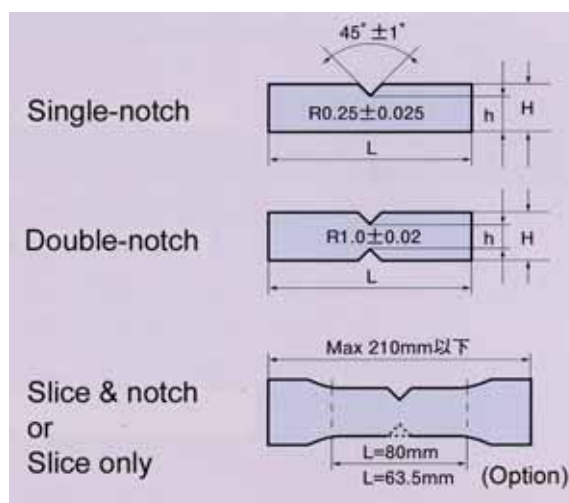
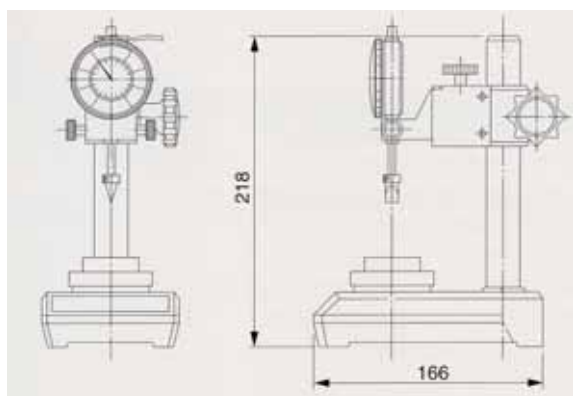
SPECIFICATIONS

| | A-4 | A-4E |
|-------------------------------------|--|---|
| Notching system | Single-tooth, Milling type (conforms to ISO 2818, JIS K 7144) Automatic operation except sample mounting & dismounting | |
| Processing items | Single notching Slice cutting Double notching (Option) | Single notching Double notching (Option) |
| Notching capacity | Length: 50-210mm Height: 3-15mm Thickness: Max. chuck clearance 100mm (Correspond to 4mm x 25 pcs.) | |
| Notch height setting | Digital setting, increments in 0.01mm steps | |
| Notch height setting motor (Z axis) | Pulse motor, precision ball screw | |
| Table slide motor (X axis) | Pulse motor, ball screw, speed adjustable (50-1200mm/min.) | |
| Cutter motor | AC servo motor Speed adjustable: (200-900rpm) | Synchronous motor Fixed speed: (50Hz:300rpm, 60Hz:360rpm) |
| Notch cutter (V type) | External diameter $\Phi 75$ mm, Angle 45° , Tip-radius 0.25mm High speed tool steel single-tooth disk type (1 pc. attached as a standard accessories) | |
| Notch cutter speed | Max. 165m/min. | |
| Slice cutter (Specimen end cutter) | Diameter $\Phi 100$ mm, Thickness 1mm, High-speed tool steel (2 pcs/set attached as standard accessories) | ----- |
| Slice cut length | 80mm (for ISO multipurpose sample) 63.5mm (Option) | ----- |
| Safety devices | Safety cover open...Automatically stops Cutter rotation and table emergency stop switch Leakage breaker (30mA) | |
| Electrical | AC100V, 50/60Hz, 8A (Other voltages also possible) | AC100V, 50/60Hz, 3A (Other voltages also possible) |
| Dimensions & weight | Approx. 30(W) x 70(D) x 70(H)cm, 65kg | |

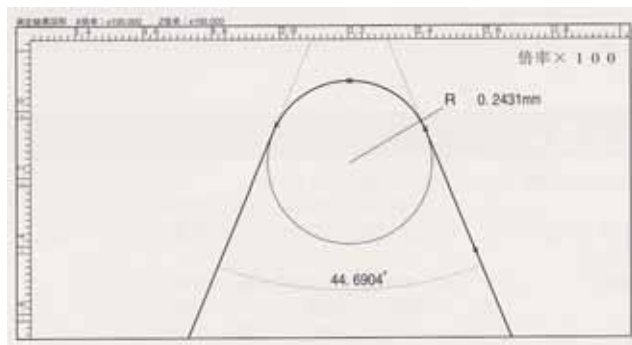
OPTIONS

| | |
|---|--|
| 1 | Notch height gauge, model N |
| 2 | Available notch cutters (1) Single-tooth V notch cutter, Normal metal (45°, 0.25mmR tip), model 1V75SK (Standard) (2) Single-tooth V notch cutter, Carbide (45°, 0.25mmR tip), model 1V75WC (3) Multi-tooth V notch cutter, Normal metal (45°, 0.25mmR tip), model 175SKH (4) Single-tooth V notch cutter, Normal metal (45°, 0.1mmR tip) (5) Multi-tooth V notch cutter, Normal metal (45°, 0.1mmR tip) (6) Single-tooth U notch cutter, Normal metal (1.0mmR Tip) (7) Single-tooth V notch cutter for “double notching”, Normal metal (45°, 1.0mmR), model 1W75SK |
| 3 | Available slice cutters (1) Normal metal slice cutter (2 disks/set), model S10SK (Standard) (2) Carbide slice cutter (2 disks/set), model S10WC |
| 4 | Available slice collar (1) Slice collar for 80mm long slice (38mm x2, 4mm x1), model SC80 (Standard) (2) Slice collar for 63.5mm long slice (29.75mm x1 , 8.3mm x2, 4mm x1), model SC63.5 |
| 5 | Centering holder for “double notching” (for 10mm height), model WN10 |

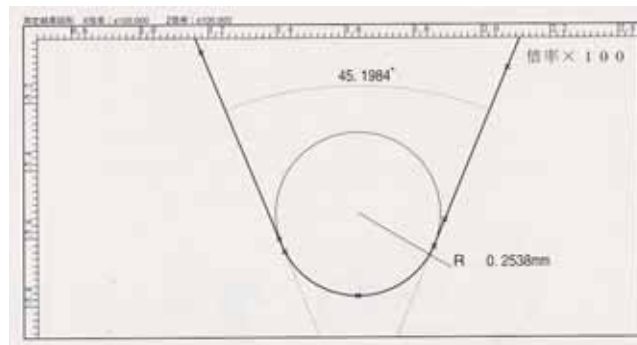
Notch height gauge



Notch cutter tip dimension is inspected by Digital Contour Measuring Instrument



Dimension of single-tooth cutter tip shape



Dimension of notched ABS sample shape