

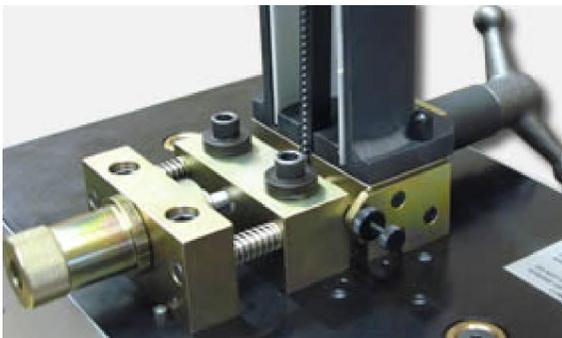
MOTORIZED CHARPY

Blacks motorized broaching machine is a self-contained floor mounted unit, specially designed for cutting Charpy and Izod 'V' and 'U' notches in pre-machined standard 10mm square, sub-size and 0.45" diameter specimens. This machine is simple to operate and of robust construction, with large removable panels to provide access for routine maintenance. The design of the machine provides a comfortable working height. The cutting operation is achieved by drawing a specially designed multi-toothed broach across the specimen. The broach is drawn into the machine by precision twin lead screws via a geared mechanism to ensure the broach cuts perpendicular to the specimen clamp, limit switches are fitted for end of stroke travel. The lead screws are matched with the travel nut to ensure minimum-operating clearances, while spring loaded safety guards ensure swarf and debris cannot enter into the lead screws and nuts.



Guards:

The machine guards totally enclose the drive motor and operating mechanism. A broach guard is fitted to comply with safety regulations; limit switches prevent motor operation when the guards are open.



The sample is secured in the machine by the clamp. A light coating of cutting oil (RTD recommended) is applied to the broach and the lower push-button/switch is operated which draws the broach through the specimen to produce an accurate notch profile. After the notch has been cut, the sample is removed, the broach raise push-button/switch operated, which raises the broach and the broach teeth



CNB31 FIXED SPEED MOTORISED CHARPY NOTCH MACHINE

✓ Notches can be cut in carbon steels, easily machined low alloy steels, non-ferrous and plastic materials.

Fixed Speed Drive:

Once the notch depth has been set and the specimen clamped in position, the machine operation is activated via lower and raise push- buttons. An additional stop button is fitted for emergency use.

The machine operation is controlled by the lower and raise push- buttons, which forward and reverse the machine motor, resulting in the broach cutting and return strokes being at a fixed speed. The motor has thermal overload protection to protect the drive mechanism.



CNB33 VARIABLE SPEED MOTORISED CHARPY NOTCH MACHINE

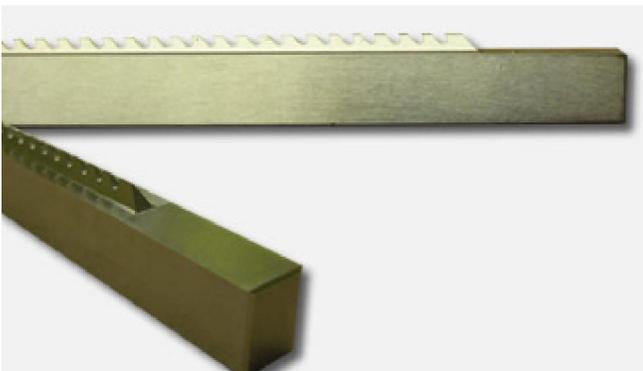
✓ The variable speed control allows adjustment of the broach cutting speed, so more difficult materials can be broached and to give extended broach life between sharpening.

✓ Notches can be cut in carbon steels, more difficult to machine alloy steels, stainless steels, non-ferrous and plastic materials. The variable speed drive and our hard cut broaches allow a wider range of materials to be cut, including stainless steel or more difficult to machine alloy steels.

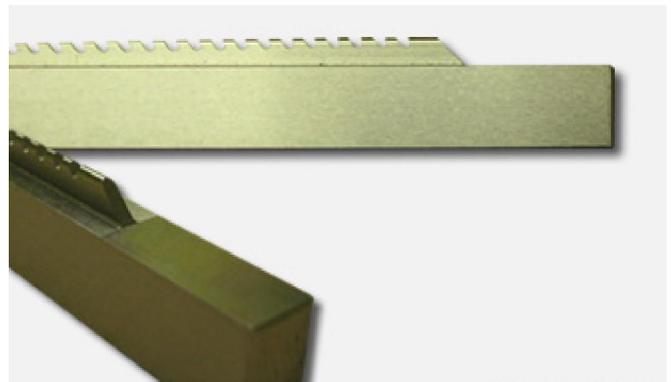
Variable Speed Drive:

Once the notch depth has been set and the specimen clamped in position, the machine operation is activated via a lower and raise switch. A graduated knob controls the speed the broach cuts and the broach return speed is factory set at a constant fast speed. A stop button is fitted for emergency use.

The motor is controlled via a variable speed, frequency converter thyristor drive and the pre-programmed P.L.C. ensures motor overload does not occur to protect the drive mechanism.



V Notch Broach



U Notch Broach