



3000 Series Automatic Cutting Machine for trimming and cutting *thin walled* (bent) tubes for applications in Aerospace & allied industries



Design features

- Canopy access is rapid
- Vice design for easy change of precision profile jaws
- Top of cut/bottom of cut for efficient cutting and wheel wear compensation
- Cutting speed adjustment

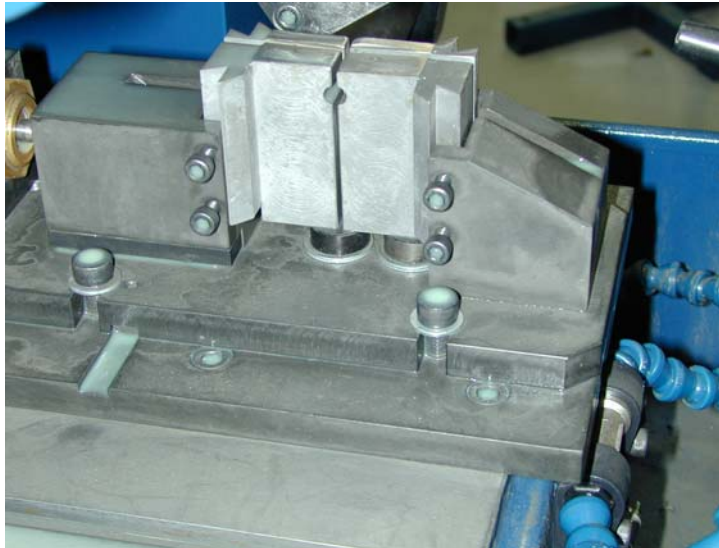
Introduction

This is a modification of the 3000 series Microfine automatic cutting machine designed to trim or cut thin walled tubes, bent or straight. These tubes are commonly found in the Aerospace and allied industries and need to be cut without distortion and with minimal burrs. They are typically Inonel, Stainless or Titanium

The cutting head is powered by a 2.2KW 3 phase motor. The raise/ lower system for the cutting head is a air/oil With the downfeed rate adjustable over a wide range. The pneumatic vice is designed for handling thin walled tubes without marking them.



An external coolant circulation system can be used to spray coolant into the cutting area. The canopy is designed for rapid access to the cut tube once the cutting is finished.



Vice design

The precision profile jaws are made to the user requirements. They are hardened and ground and hold on both sides of the cut position. They have a dovetail fitting for rapid and precise location in the vice. The back plate of the vice acts as a grinding datum for the jaws. Jaw sizes up to 40mm / 1 ½ in are available

Control Panel - Head Positioning – Depth of Cut



The front control panel has the usual controls for start motor, start coolant and start cycle. In addition there are controls to position the cutting head between cuts just above the tube diameter and to limit the down stroke of the head to just below the tube. In this way the cutting time is reduced and compensation can be made for the wheel diameter as it is being worn down.

The cutting cycle is controlled by a PLC program

Ordering Information

- 8-310-001-00 3000 series cutting machine for thin walled tube 380-415V 3ph
- 8-310-002-00 3000 series cutting machine for thin walled tube 208-220V 3ph
- 8-310-003-00 3000 series cutting machine for thin walled tube 460V 3ph
- 7-310-301-00 Set of profile jaws – specify diameter
- 7-310-480-00 End stop
- 7-310-490-00 Inverter for wheel speed variation
- 7-310-552-00 Spark chute/extraction manifold for dry cutting



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