

Videx Weld Stud & End-Turning machines from coil

The new Videx VC-MCCT series are performing multiple operations at the same time and replace traditional automatic lathes in production of straight parts with turned ends.

The machines are equipped with 2-3 turning stations that turn, chamfer and drill the edges to virtually any requested length and diameter.

The VC-MCCT will pull the wire from an uncoiler or get it from an in-line drawer. Then it will straighten, cut to length and turn the edges, face, drill and chamfer.

Each one of the turning stations can performs up to 4 operations at the same time like facing, drilling, chamfering turning and calibrating the diameter.

The cut-to-length parts move from one station to another by a quick servo operated transfer system. All stations work at the same time to save time and complete the part as quick as possible. While the first station turns the part for example, the second station may drill or face the next part. The parts stay in each station as long as it needs to complete the operation and this time period, as well as the transfer e is controlled from the main computer screen.

Each one of the stations can be designed to perform also other operations such as heading, flattening, marking, etc.

The machines will accept wire directly from an in-line drawer or will pull drawn wire from an uncoiler.



The wire straightening is a critical stage because achieving a very precise diameter tolerance requires the parts to be very straight. This is achieved by the Videx oscillating straightener that is equipped with 4 (!) pairs of feed rollers and 3 straightening shoes.



The length tolerance and repeatability are also extremely important for getting an even shape on both ends. Therefore, the wire always hits a positive stop before the cut-off takes place, assuring a length repeatability of ± 0.1 mm (.004").

During cut-off the straightener recoils against a spring load and travels back, so it never turns on one spot along the wire. This feature is critical for hi-tensile wire, because in stationary shear machines the straightener turns around the wire 3-8 revolutions during cut-off, creating an unavoidable weakening point which reduces the wire elongation and tensile strength. This weakening is usually unseen but the parts made on stationary shear systems will always be weaker than expected by the wire grade.



The cut bars which are precise in length and very straight accumulate in a magazine before they move to the transfer system.

The transfer system grabs the parts from the magazine and moves them separated into the first station and then from this station into the second and third stations.



The last station in the machine may be either an inspection machine or a thread rolling machine, in case the parts should be threaded.

An important "bonus" to the customers, the machines can be supplied as "dual side – dual purpose" machines. When supplied as dual side, they can be used as standard straightening and cut machine with high degree of straightness and length accuracy.

