

A clean-cut case

Laser Surface Velocimeters for cut-to-length control at tube factories

Online, high-precision, laser-based velocity and length measurement by Polytec's Laser Surface Velocimeters reduces the manufacturing costs, improves quality and increases yield in tube mills around the world.



Mueller Copper Tube is the UK's biggest copper tube manufacturer and operates the most modern and environmentally efficient plant of its type in Europe. Mueller purchased and installed three

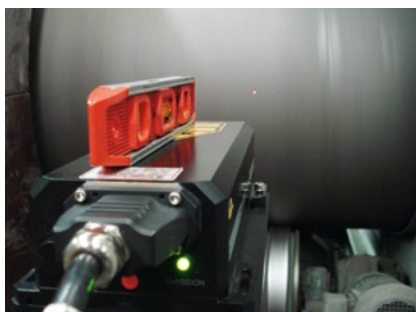
LSV Laser Surface Velocimeters to control cut-to-length of copper tubes. Before discovering the advantages laser velocimetry, Mueller used encoder wheels that would slip and wear introducing substantial

errors into the cut-to-length process. After making the transition to non-contact laser velocimetry, there have seen demonstrable improvements in yield. With a 0.05% cut-to-length accuracy, laser velocimeters are becoming increasingly more important due to rising costs of copper. Additional savings are secured by using the LSV, a measurement system with no moving parts, virtually eliminating maintenance and associated labor costs.

The Borusan Mannesmann tube factory, located near Bursa in Turkey, has used a Polytec optical speed and length sensor already. New meetings took place with their management to furnish all their production lines with LSVs. Erdemir is another leading Turkish tube and metal producer who uses a Laser Surface Velocimeter. Successful tests for cut-to-length control were run at Borusan Izmit factory, where they produce large diameter tubes.



Two of the installed LSV Laser Surface Velocimeters for cut-to-length control at Mueller Copper Tube in Bilston, Great Britain.



LSV installations at Borusan Mannesmann and Borusan Izmit tube factories in Turkey.