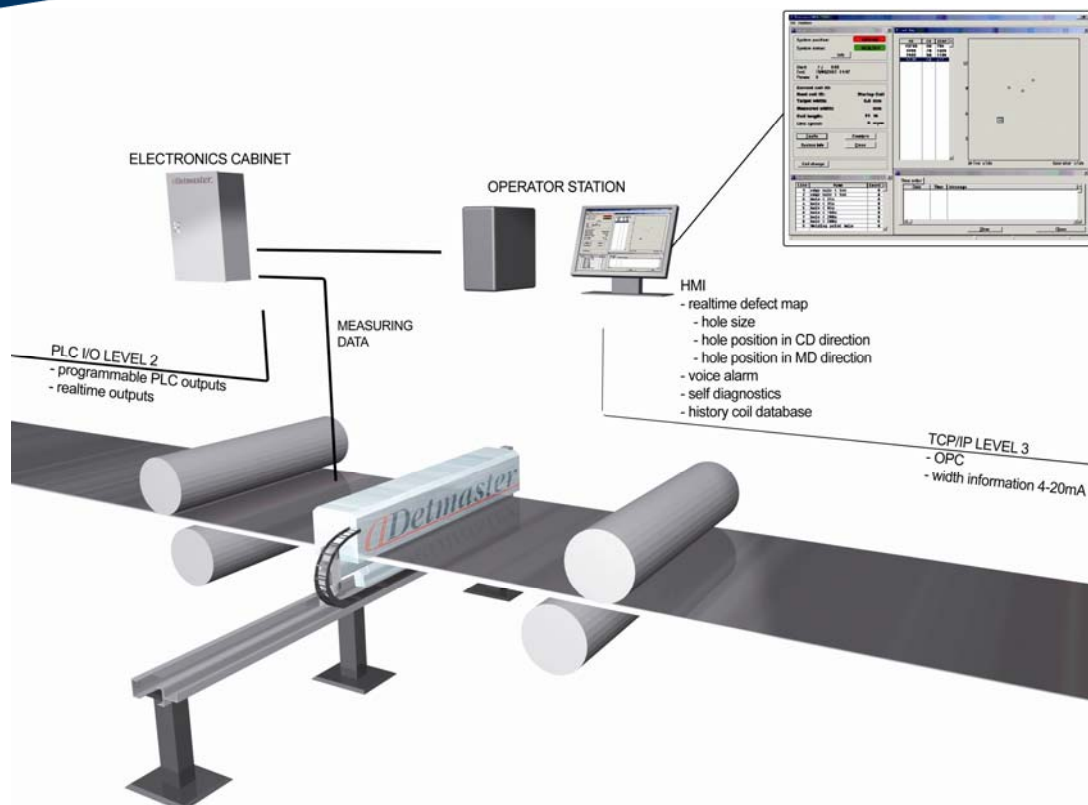


APPLICATION REPORT

02.12.2003



DETMASER MPH PINHOLE DETECTION SYSTEM ON A PRECISION SLITTING LINE

In October 2003 Detmaster MPH pinhole detection system was installed at Avesta Polarit's Stocksbridge Works on a brand new stainless steel precision slitting line, which produces primarily material for razor blade manufacturing.

The MPH system detects pinholes from diameter 10 μm up and enables categorisation of different size pinholes to own size classes up to millimetre scale. The operator of the MPH system may determine range for each pinhole size class. Furthermore, the system provides a coil report, which indicates location and size of each individual pinhole in a concerned coil. Along with pinhole detection the system measures simultaneously the width of a strip with an accuracy of ± 1 mm.

The MPH system was installed between the feed roll and slitting head right after the decoiler where the strip runs at maximum speed of 500 m / min. The system does not include any mechanical edge followers, thus enhancing the reliability by excluding actively moving mechanical parts close to a strip. Instead of such disadvantageous edge masks the system includes active optical edge detection method, which enables the system to tolerate remarkable side movement of a strip.