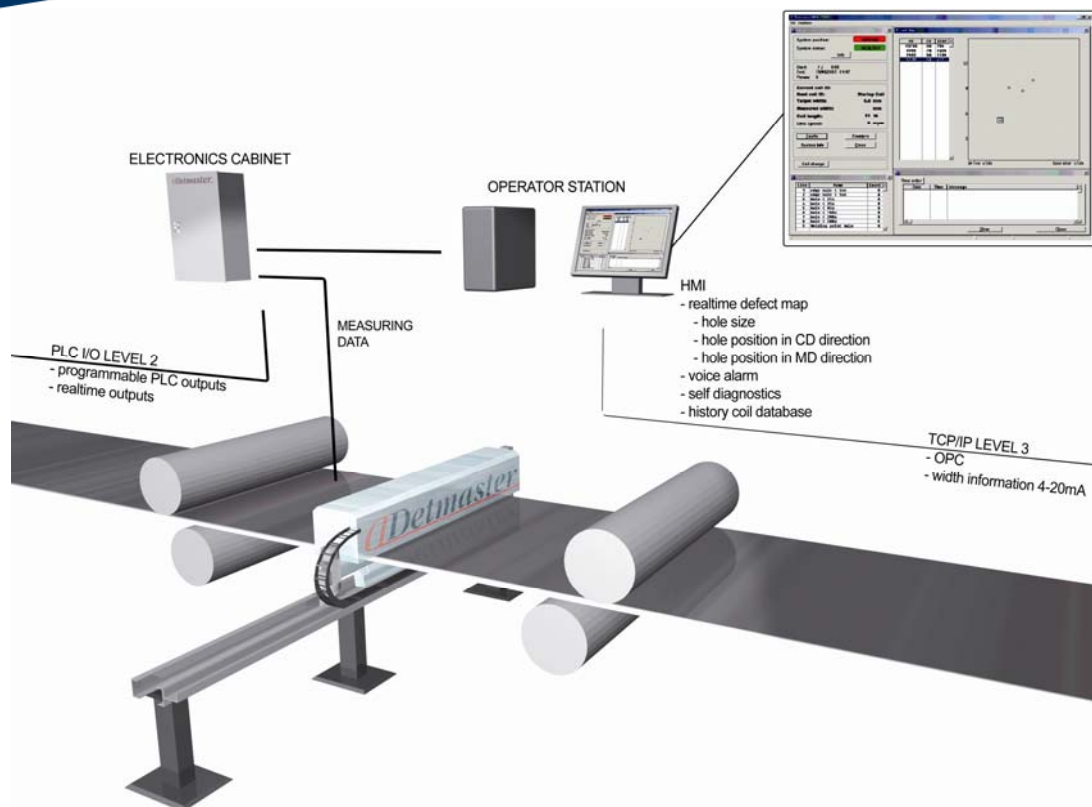


APPLICATION REPORT

10.06.2003



DETMASER MPH PINHOLE DETECTION SYSTEM ON A CONTINUOUS ANNEALING LINE

In March 2003, Detmaster MPH pinhole detection system was installed at Posco Pohang Works on No. 2 CAL of the No. 1 cold rolling mill, producing raw material for a tinplate line. The MPH system replaced the previous pinhole detection system installed on the same location with enhanced detection capability of 10 μm pinholes.

The MPH system was installed before the exit strip accumulator where the strip runs in vertical line position with maximum speed of 670 m/min. The system does not include mechanical edge followers, thus enhancing the reliability by excluding actively moving mechanical parts close to a strip. Additionally, inspection frame includes automatic pullout control from the operators' control room from where the inspection frame can be pulled away from the measurement position when needed e.g. to carry out maintenance tasks.

The MPH system was integrated with the mill information system, supplying detected information via TCP/IP to operators' control room. Thanks to added analysis capabilities, the system automatically recognizes weld holes and eliminates undesirable holes from being informed around this. In addition to TCP/IP, system also shares information to mill PLC.