



POSCO Credits ISRA VISION

ISRA VISION Parsytec's contribution to the metal industry continues as the world's leading supplier of surface inspection systems. Once again, Korea based POSCO, one of the world's largest steel-making companies, has commissioned ISRA with the installation of two additional inspection systems.

For its Gwangyang steelworks, steel producer POSCO placed an order with ISRA VISION Parsytec, which includes replacing two existing Parsytec systems on two continuous annealing lines, having proven their worth over many years. With advanced technology and improved inspection performance now available, the older systems became outdated and required replacement.

Two advanced SURFACE MASTER systems equipped with state-of-the-art matrix camera and DUAL SENSOR technology will replace the existing inspection systems. POSCO's positive experience from using the existing Parsytec systems was considered an essential factor in this decision.

SURFACE MASTER enables excellent, individual solutions for metal surface inspection with the highest performance record. The comprehensive inspection system, which enables precise quality decision making, also boasts extraordinarily high availability as well as very easy integration and operation. The tried-and-tested, robust sensor configuration, with matrix camera system, takes care of bright field and dark field inspection of the entire coil surface in one line.

The unparalleled DUAL SENSOR, which is used on the second line, is truly remarkable. By combining line and matrix cameras for the inspection of the top and bottom sides of the steel coil, the systems ensure outstanding detection rates, even in the case of very low-contrast defects. The solution offers consistent and reliable inspection and analysis results, so even the smallest topographical defects are detected.

ISRA's advanced and highly sophisticated classification technology offers premium classification, a fundamental prerequisite for achieving highly accurate detection rates. Multi-level classifiers arranged hierarchically ensure reliable detection and classification of all surface defects. Thanks to this technology, it is possible to make quality decisions with an accuracy of up to 100%.

The Detection Tuning Tool allows for an extremely fast start-up of the system.



Automatic system tuning only takes a few minutes to ensure "best-in-class" inspection for defects with minimum errors, while previously used manual parameter tuning took weeks or even months due to the

difficulty of making an optimum manual setting that achieved reliable 100% defect detection with the lowest possible number of pseudo errors.

By using the technologies offered by the world's leading supplier of surface inspection systems, POSCO not only takes advantage of the best possible results in surface inspection with an ultra-fast setup time, but is also able to reduce its return on investment to a tiny fraction of the total operating time.

Tokyo Steel Orders New Danieli Caster



After supplying the 420-t DC furnace, ladle furnace and degassing unit at Tahara works, Danieli CentroMet technology was chosen again for long-products casting.

On October 30th, 2015, Tokyo Steel Manufacturing Co. chooses Danieli Engineering Japan to supply a new continuous casting machine, to be installed in their Okayama Plant. The new machine (CCM N.4) will be added to the DC Electric Arc Furnace shop, to produce billets and blooms for structural steel grades, in cross-sections from 170x170mm to 250x310mm, and product lengths from 2.8m up to 7.5m.

The caster will be engineered and manufactured by Danieli CentroMet. Design features will include five strands, 10-m main radius, Hy-Power mould oscillators, secondary air-mist cooling with five independent zones, a rigid dummy bar for fast restraining, and modular withdrawal and straightening units. The core of the new caster is the Danieli-patented Eco Power Mould, a technology that can achieve outstanding

performances in terms of casting speed and cast product quality. The Eco Power Mould the latest design evolution of the Danieli Power Mould family has further improved the cooling capacity and reduced cooling water requirements, while incorporating lighter copper components, resulting in significant savings in equipment costs.

The Eco Power Mould technology will allow Tokyo Steel to achieve the required productivity rate of 220 tons/hour in any casting conditions and for any product type.

Danieli Automation will supply all the electrical and automation systems, including the state-of-the-art 3Q package. The 3Q applications were developed specifically for the steel industry to guarantee safe, quick and consistent control of production. Some key components that will be applied to the new CCM are real-time solidification modeling, real-time quality assessment, in-line operator assistance, advanced multi-touch operator interfaces and comprehensive web-based reporting.