

Hot Strip Mill Inspection

Using SmartView Surface Inspection in Hot Strip Mills provides more accurate, real-time information allowing an immediate response to problems. Bad material can be identified earlier instead of passing it on to downstream value-added processes. SmartView offers more value to the Hot Strip Mill by reducing scrap, increasing yield, and reducing customer returns.



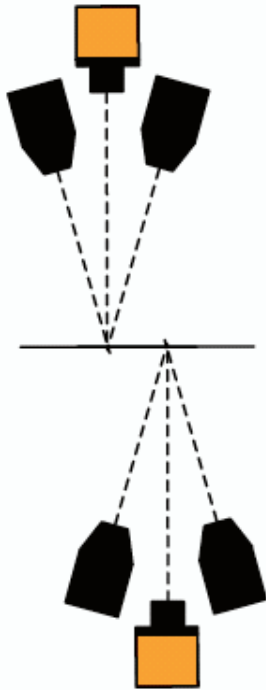
- Accurate and reliable detection of repeat defects enables the determination of the source of the defects. Roll changes are quickly performed as soon as they are required.
- SmartView requires less space than other systems. Our cameras can see the bottom surface of the strip between the existing rolls. This eliminates the need to remove a roll which can become problematic for runout table operation.
- Monitoring the amount of scale provides real-time information relating to the performance of scale removal earlier on the line.
- Downstream processes become more efficient with the installation of a SmartView Surface Inspection System. Edge Crack detection and location information can be used to protect cold mill and pickling processes. In the same way, the early detection of heavy mechanical damage can protect the work rolls in downstream cold mills.
- Surface Quality Monitoring software allows real-time evaluation of work roll deterioration by monitoring surface roughness.
- Streaming Video provides a full width, full resolution image of the top and bottom Strip surface as it is being produced and records the entire coil for future viewing. Integrating defect detection with Streaming Video technology creates a visual record of the coil and process conditions.

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VIEW[®]
METALS**

Hot Strip Mill Defects

Configuration:

This is a typical Hot Strip Mill configuration. Variations can occur due to local environment or space limitations.



Through-Field Reflected
Top and Bottom View



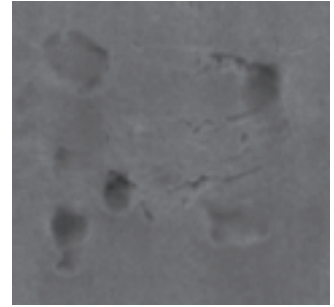
Lamination



Edge Cracks



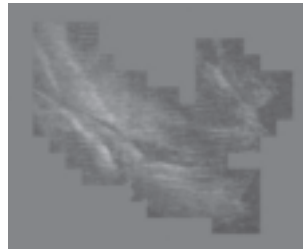
Folded Edge



Roll Marks



Gall



Roll Imprint



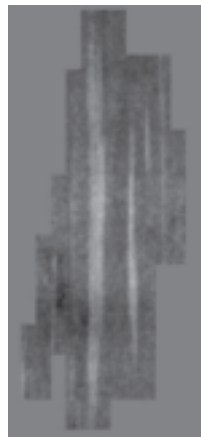
Bottom Divot



Mold Powder



Shell



Scale Grain



Scratch



Secondary Scale

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