

Web Imaging HDI800
Optimized quality management for paper
production lines

Web inspection – an indispensable tool for ensuring product quality



Whether it's reducing costs, improving productivity or increasing customer satisfaction, web imaging plays a critical role in helping mills worldwide meet their goals. ABB's Web Imaging HDI800 gives papermakers the leading-edge tools they need to identify web defects and correct them promptly, before they lead to unscheduled downtime or product rejects.

Our newest solution, the Web Imaging HDI800, offers you the latest state-of-the-art tools for the identification of web defects and for taking corrective actions early, before unscheduled downtime or receiving customers complaints.

Mills use ABB's Web Imaging HDI800's many performance-enhanced features for smarter, more accurate and more integrated web imaging. This provides papermakers with 100% monitoring of their paper production for all paper grades, 24/7 and without interruption.

Early problem detection

Web Imaging HDI800 not only allows you to certify the quality of your product, but also to fine-tune your process and make corrective production and maintenance decisions before problems occur. Your benefits include:

- Non-stop 100% quality inspection
- Less rejects and customer complaints
- Improved productivity and process control
- Early warning for preventative maintenance
- Extensive reporting tools
- Full integration with other systems

Keeping it smart and simple

World's leading defect detection and classification system

The heart of the Web Imaging HDI800 is its advanced defect detection and classification system. The system's operator interface, with a design based on customer feedback to be intuitive and easy to use, gives you immediate access to detailed information and images of all the important flaws in your process.

The study of these images, and comparison with similar images supplied by the system's growing history database, offers you a powerful tool to establish whether the problems are due to impurities in raw materials, problems in wet end chemistry or equipment failures.

Your mill's long-term overall efficiency will improve as your history database grows and your personnel learn to define defect classes more precisely to meet your specific needs. In short, the Web Imaging HDI800 takes you to the level of detail you require – no more and no less.

Clear display, easy adjustments

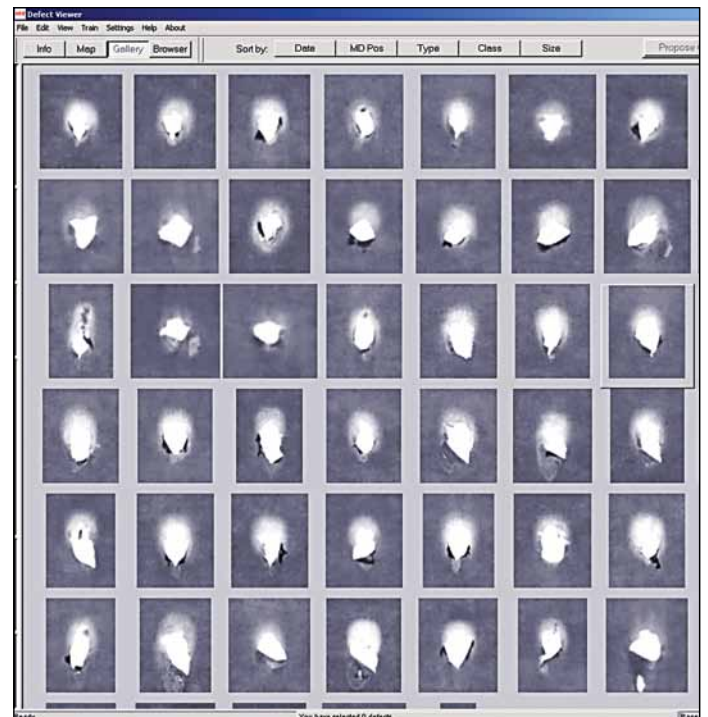
Using the Web Imaging HDI800's new classifier technology, you aren't limited to rule-based searches. Operators can easily organize and display defect images in meaningful clusters. These clusters can then be used to precisely adjust the parameters of your papermaking process.

Easy viewing and integration

- Easy to view individual images or image clusters
- Convenient access to classification information
- Easy integration with new common interface technology

Smart clustering

- Automatically organizes defects into meaningful groups
- Becomes more accurate as your history database grows
- Software options enable enhanced classification and analysis of special paper grades



Proven technology



Experienced and proven, ABB is the pioneer in web inspection and has delivered imaging solutions to more paper machines than any other supplier. ABB draws on more than 30 years of experience in web inspection to create advanced and reliable technology.

A unique defect detection and classification system makes the Web Imaging HDI800 a powerful tool for eliminating imperfections. Among its many advanced features, the HDI800 has the paper industry's smallest hardware footprint with no off-machine processing, the only adaptive illumination control and the highest mean time between failures. To capture even the smallest flaws, it has smart and highly accurate cameras and new detection algorithms.

Industry-leading features for more accurate measurement

Compact architecture

The Web Imaging HDI800's tight and efficient design saves space in your mill. Its compact size also lowers your installation and maintenance costs.

Smart digital cameras

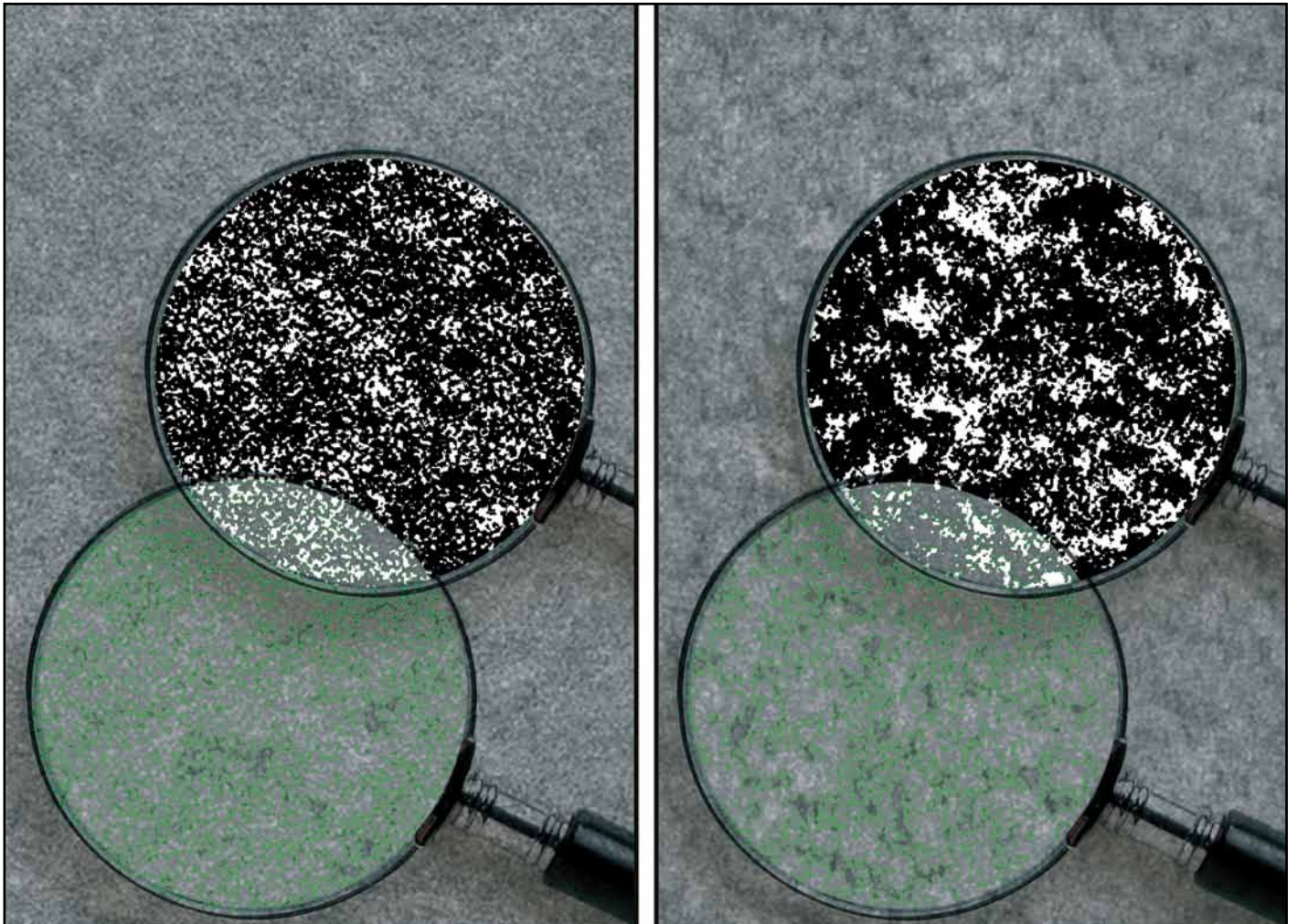
Using smart digital camera technology and dual stage control, the Web Imaging HDI800 creates crisp, high-throughput high-resolution images. The adaptable cameras provide mills with a wide range of measuring options. Papermakers also benefit because they need fewer spares, the cameras are easily scalable and the equipment is calibration-free.

Automatic light intensity control

The Web Imaging HDI800's automatic light intensity control has been specifically designed for paper mill environments. This ensures accurate imaging over time – regardless of variables such as source aging, dust build up or opacity changes – and also less need for resetting parameters.

Optical online measurement

The unique platform of the Web Imaging HDI800 makes it easy for adding optical quality measurements based on mill-specific needs. Floc based formation, coating evenness, wire marking and watermark pattern measurements makes it possible to monitor the quality of the paper constantly and take immediate action.



Open and integrated

Easy integration with other systems

The Web Imaging HDI800 integrates smoothly with all ABB products, making installation plug-and-produce. Since the HDI800 integrates with ABB's common user interface technology, your personnel can monitor operations from a single location.

The system also integrates with the ABB Automatic Braking System, giving your mill a powerful tool for maintaining maximum re-reeler/winder efficiency and swiftly correcting web defects.



Multitude of applications, short payback time

Immediate savings

The Web Imaging HDI1800 has a track record for providing mills with short payback time. Papermakers immediately begin saving because they have dramatically less machine damage, rejects and lost production time.

The ABB Web Imaging HDI800 comes with a full lifecycle management plan, ensuring that you receive optimum performance and excellent service response throughout the lifetime of your equipment. ABB also provides support while your mill makes the shift to new technology at the end of a lifecycle.

Full range of services and applications

Our comprehensive services range from training and installation through preventive maintenance and performance service – both onsite and remotely. These include:

- Installation and commissioning
- Training
- Technical support
- Spare parts and repairs
- Preventative maintenance services
- Migration and retrofits

The Web Imaging HDI800 covers a complete range of coated and uncoated applications, including:

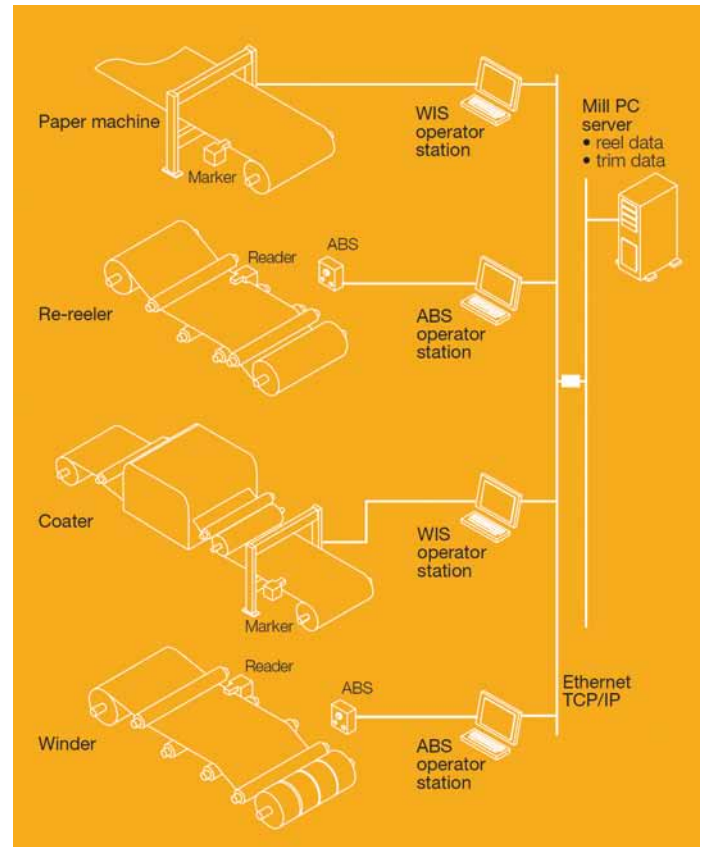
- Newsprint
- Specialty
- Basestock
- Fine writing and printing
- Lightweight coated
- Premium coated
- Liquid packaging board
- Food board
- Tobacco

And applications for non-paper grades such as:

- Metals
- Nonwovens
- Glass fiber mat

The best feature of the Web Imaging HDI800 is its short payback time. Start estimating your savings using the formulas below:

- Break time x margin / h
- Off spec quality x margin / ton
- Lost speed x time x margin / h
- Machine damage costs + lost production margins



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