



The Power of Advanced Tissue Production

Reduce Waste, Improve Quality, Increase Throughput



ISRA
VISION

Increase your tissue with PAPER

Discover the new generation paper & tissue surface inspection:

PAPER MASTER:

The key objective of PAPER MASTER is to make manufacturing more productive and more cost effective. PAPER MASTER offers an outstanding Web Inspection System (WIS) and Web Break Monitoring System (WBM) which can be installed individually or as one system.



Web Inspection System



Web Break Monitoring



→ Can be combined to a unified & integrated system

→ Detects defects even faster

PAPER MASTER: solution for the entire tissue production line

- ✓ Ensures 100% web inspection & defect detection
- ✓ Minimizes sheet breaks
- ✓ Maximizes quality
- ✓ Increases throughput
- ✓ Decreases costs
- ✓ Enables production shift to premium four ply products
- ✓ Improves production efficiency

PAPER MASTER: the answer to your needs

- ✓ Web Inspection System (WIS) to reduce and document defects on the tissue machine
- ✓ Web Break Monitoring System (WBM) to analyze breaks and defect reasons with a ruggedized, intelligent camera: the IntelliCam
- ✓ Optional value-adding software to improve the tissue products at the converter, and beyond



PAPER MASTER -
Web Inspection System

The Web Inspection System (WIS) inspects 100% of the sheet on the tissue machine and provides a photographic image of each defect and accurately classifies the type of defect.

- ✓ Highest detection performance down to microns
- ✓ Fastest high-resolution cameras & image processor
- ✓ Ensuring 100% defect detection at highest production speed of more than 3,000 m/min
- ✓ Outstanding defect classification
- ✓ Accurate inspection for quick decisions: marking, triggering, optimizing

PAPER MASTER - Web Break Monitoring System

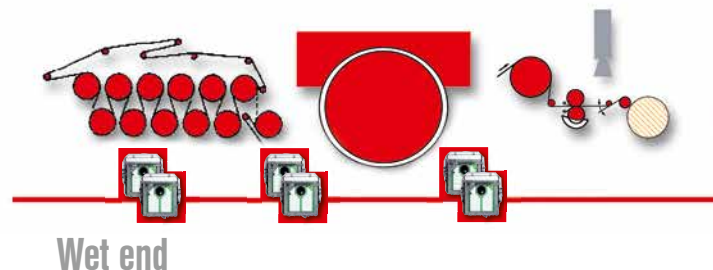
The Web Break Monitoring System (WBM) monitors web breaks and other critical events along the production line and automatically alarms for disturbance. To do so, critical process-relevant positions are observed, recorded and analyzed by the IntelliCam cameras.



IntelliCams WBM with RazorBlade Cleaning

Yankee Protection

Web Inspection WIS

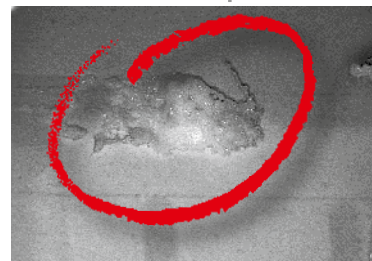


Typical defect during



Step 1

Slime falls from trim squirt



Step 2

Slime spot at wire



What leading tissue

PRODUCTION

Production – Prevention of web breaks

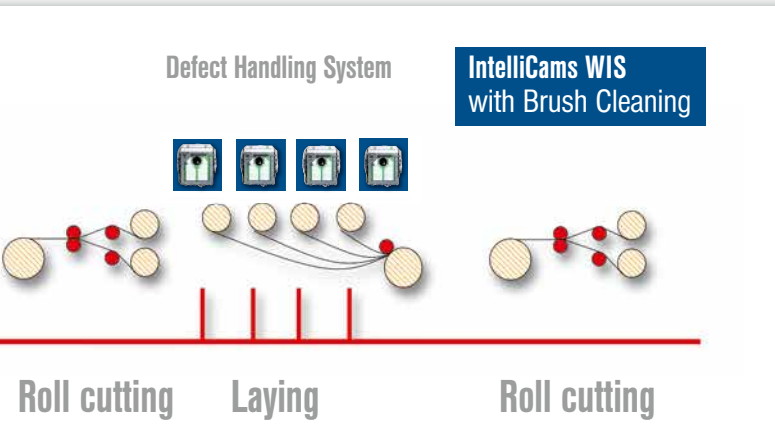
5 breaks/day (5 min. each) > 500,000 €

What are the benefits of PAPER MASTER?

- ✓ On-machine process improvement – Reduced defects on the tissue machine
- ✓ Improve runability - Information to reduce defects and sheet breaks on the tissue machine – fewer machine downtimes
- ✓ Improve converting efficiency – Reduced sheet breaks at converting
- ✓ Improve quality - Objective quality data to develop, measure and validate process improvement



production efficiency MASTER

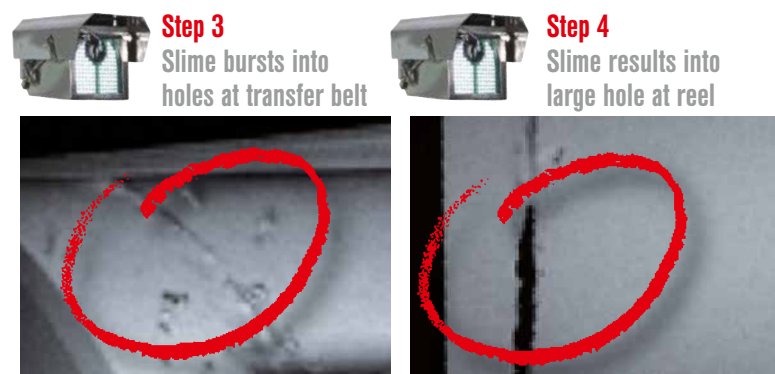


PAPER MASTER - IntelliCam

The unique IntelliCam is a ruggedized intelligent camera concept which delivers data to server and operator monitors without delays. The new technology of the IntelliCam is the solution to handle all challenges during a tissue production and can be installed as an all-in-one system for WIS and WBM.

- ✓ Crystal clear images
- ✓ Excellent video root cause analysis for fast corrective action
- ✓ All-in-one: Compact, ruggedized stainless steel housing including camera, illumination and cleaning
- ✓ Easy to install even in challenging environments with dirt, water, heat and limited spaces
- ✓ Automated Razorblade or brush cleaning
- ✓ Real-time information to reduce web breaks typically by 50%
- ✓ Reduction of machine downtime
- ✓ Increase of process productivity

tissue production:



Optional value-adding software

The standard inspection system of PAPER MASTER already delivers excellent software for classification, reporting, root cause analysis, etc. Nevertheless, optional software can be added any time to further customize the system to personal needs.

producers achieve:

CONVERTING

Converting – Prevention of web breaks:
10 breaks/day (20 min. each) > 500,000 €

Highlights of PAPER MASTER:

- ✓ Classification of defects created by the tissue machine (web inspection)
- ✓ Root cause analysis of defects
- ✓ Determine sheet break cause
- ✓ Converting line control at specific defects to prevent breaks at converting (Defect handling system)
- ✓ Final quality grading (EXPERT5i modules)

Defect handling system, featuring

- ✓ Reduction of web breaks at converting line
- ✓ Slow down automatically to defects at converting line
- ✓ Easy and quick handling of defects

Value-adding software (e.g. Expert5i)

- ✓ Outstanding software for intelligent decision making
- ✓ Efficient analysis & weighting of all relevant quality information
- ✓ Quality grading of every finished roll of tissue
- ✓ Optimization of yield and production

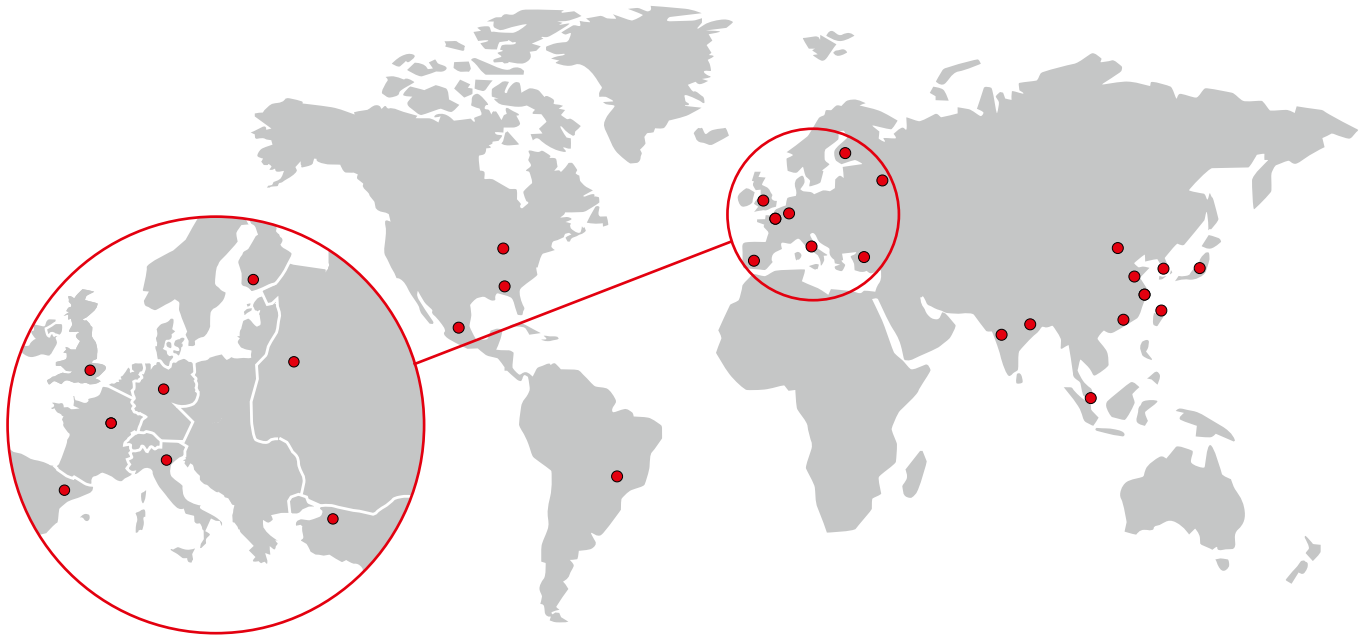
Conclusion

PAPER MASTER is the best available standard solution for the automated surface inspection for the tissue production. It improves quality, lowers costs and increases production efficiency.

Challenge us.



Innovations for Automated Optical Inspection of Paper



**We are the innovators in optical inspection.
Best practice. Best system. Best service.**

For over three decades, ISRA VISION has become a leading manufacturer of highly accurate automated optical quality inspection systems.

More than 10,000 successful applications reference our sustainable experience in the field of machine vision products – and our ability to innovate.

Today our products are operating worldwide in such industries as glass, plastics, foils, print and automation. It is our goal to set system standards for total process control in these industries.

Customers choose ISRA for the ability to develop products consistently to their requirements. More than 900 employees at 25 locations worldwide are working to contribute to your success.

Your global partner for surface inspection.

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We assure that our mission continues beyond our shipping dock. Just challenge our Customer Support and Service Center (CSSC).

We guarantee excellence to our customers – from consulting to service, from tailored solutions to worldwide support. We can make your business more competitive.

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