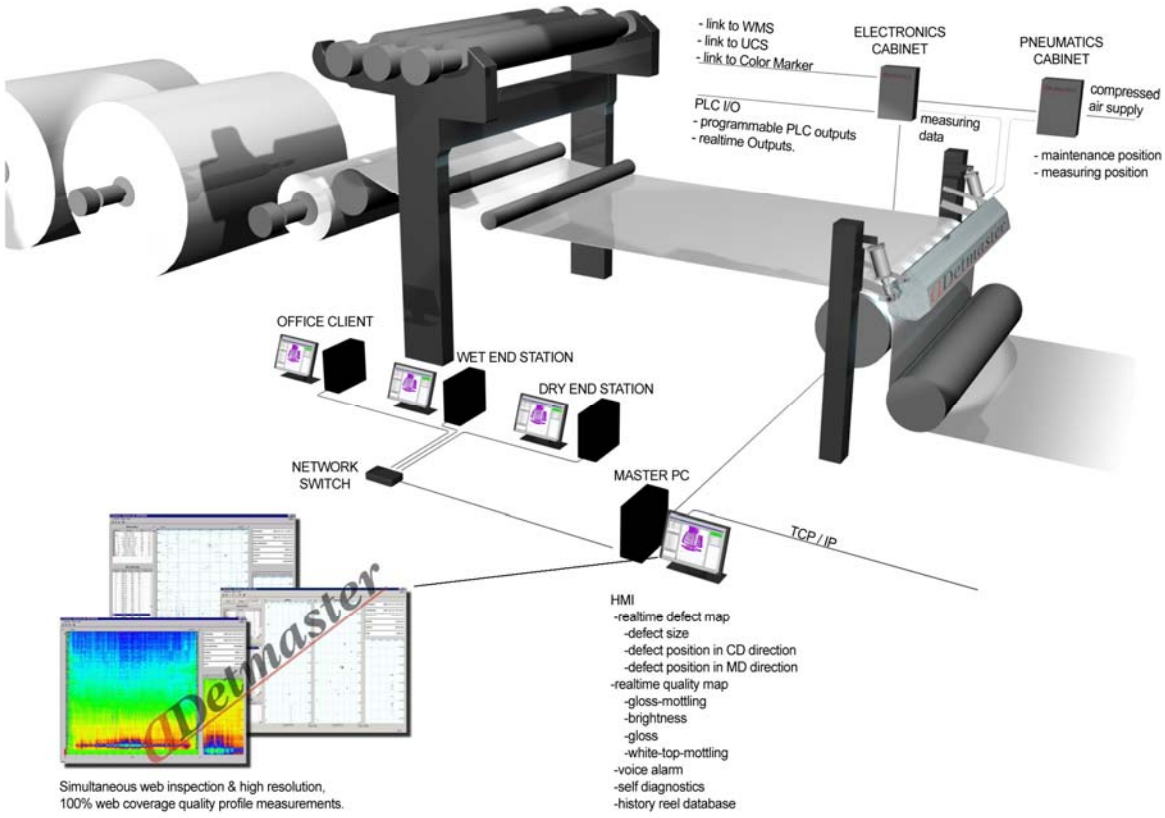
YIELD MANAGEMENT SOLUTIONS

DETMASTER PR–SERIES

WEB INSPECTION SYSTEMS FOR PAPER / BOARD INDUSTRY

www.sr-instruments.com



OVERVIEW

The patented Detmaster PR - series provides brand new high performance solution for paper and board processing lines:

- Blade streak, nozzle streak, butterfly, coating skip, etc. extremely low contrast defect detection
- Optional paper quality measurements such as gloss, brightness, gloss-mottling, white top mottling, etc.
- Simple and compact system structure

Detmaster PR utilizes new and unique multi angle illumination technology that provides enhanced defect detection capability for paper and board applications. The system comprises efficient dark field and bright field illuminations integrated in the inspection beam thanks to the exploited multi-channel illumination method.

All Detmaster systems have been developed in close co-operation with paper and board manufacturers. As a result, superior detection and measurement accuracy, system reliability and low cost of investment and maintaining are available in just one system - Detmaster.

TECHNICAL SPECIFICATIONS

Performance	
Detected defect types:	Blade streak, Nozzle streak, butterfly, coating skip, etc.
Minimum width of detected streak:	0,1 mm
Minimum detected hole size:	1,0 mm^2
Minimum detected spot and impurity size:	1 mm^2 (for black spots and impurities)
Applicability	
Line speed:	0 - 3000 m/min
Web width:	No limitations
Type of measurement:	Multi-angle optical reflectance measurement
Detector Beam	
Sensors:	Multi channel detector modules with high purity silicon PIN photodiodes and DSP signal processing (DSP-processor).
Reflectance illumination:	Integrated dark field and bright field LED illumination. Illumination modes implemented by frequency division method.
Cleaning and cooling:	Automatic with low pressure air
Distance from web:	50 mm
Power supply	
Power consumption:	200 W/m, voltage 110 – 240 VAC, 43 – 60 Hz
User Interface	
Hardware:	PC, 22" LCD Color Display, Mouse + Keyboard
Software:	Windows based including defect maps, defect type and location listings, trends, historic data, self-diagnostics, alarms, user defined threshold levels
Mill interface	
Isolated digital outputs:	10 user definable
Isolated digital inputs:	8
Mill way connections:	TCP/IP (optional)
Analog outputs:	4CH 0 - 10 VDC 4 / 20 mA (Optional)
Dimensions	
Space requirements:	MD: 500 mm, above web 650 mm, for single-side installation MD: 500 mm, above web 650 mm, below web 650 mm for double-side installation
Electronics cabinet:	H 1000 mm, W 600 mm, L 250 mm
Standard Operating Environment	
Operating temperature:	+10 °C - +50 °C
Humidity:	30...90%, non-condensing
Options available	
Various types of integrated optical paper quality measurements:	E.g. gloss-mottling, brightness, gloss, white top mottling.