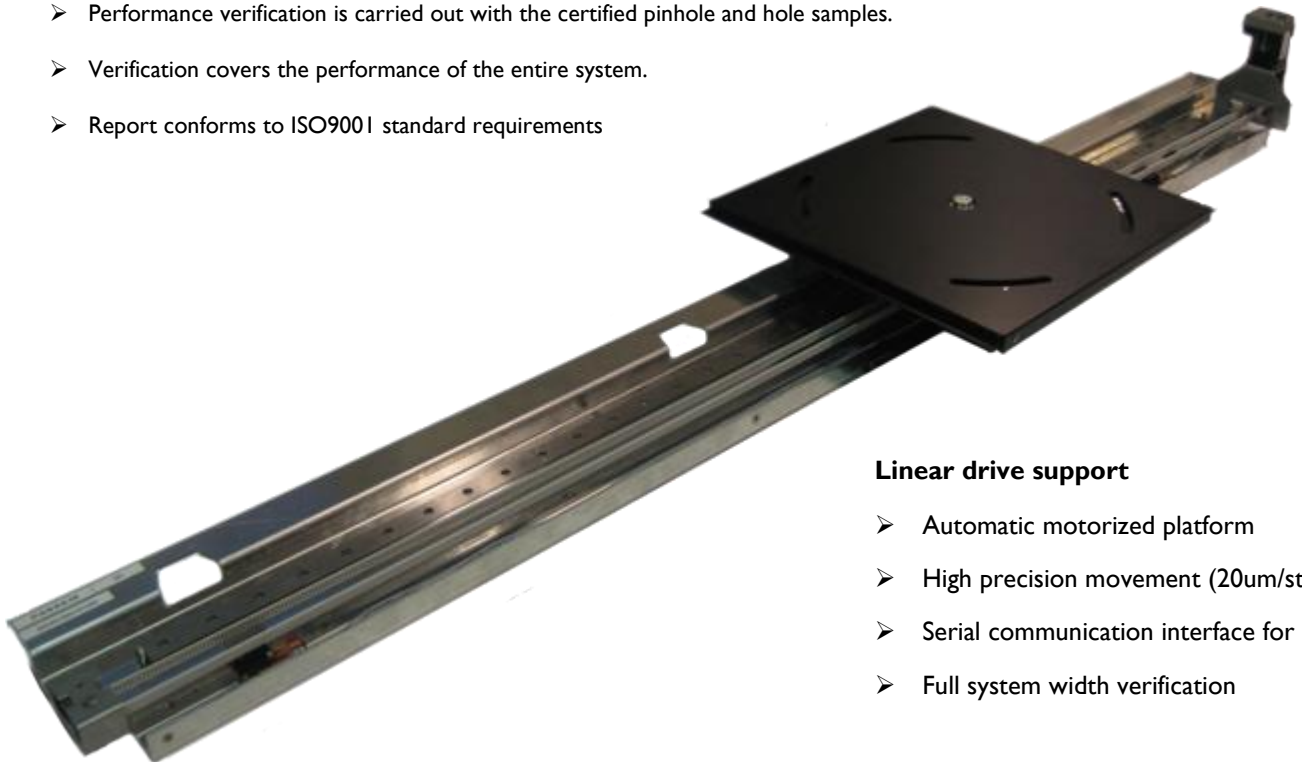


Automatic Performance Verification Tool for Detmaster MPH-ONE system

21.9.2023

The concept of automatic performance verification tool

- This dedicated verification tool enables performance verification in conditions, which simulate the actual production line speeds.
- Test procedure is fully automatic. Full system scan is done within 10 minutes.
- Performance verification is carried out with the certified pinhole and hole samples.
- Verification covers the performance of the entire system.
- Report conforms to ISO9001 standard requirements



Linear drive support

- Automatic motorized platform
- High precision movement (20um/step)
- Serial communication interface for PC control
- Full system width verification

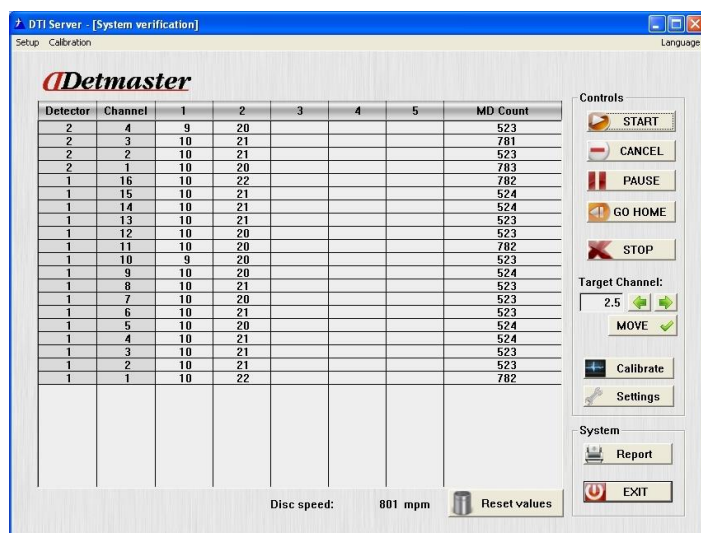
Verification Disc Unit

- Rotating disc in a safe enclosure
- Disc includes certified pinhole and hole samples
- Rotating speed adjustment 0 - 800rpm (strip speed)
- Max 1 pinhole sample/disc



The Detmaster MPH system performance verification takes place at the production line by utilising the roll-out frame of the system. The procedure may be carried out at any time since it does not interfere the ongoing strip processing.

Automatic performance verification system user interface



The screenshot shows a printed measurement report. It includes a header with 'SR-Instruments Oy', '29/01/2010 10:38:27', and 'SR LAB'. Below the header is a table with columns for Detector, Channel, Hole 1, Hole 2, Hole 3, Hole 4, and Hole 5. The table contains 20 rows of data. At the bottom, it says 'Page 1'.

Detector	Channel	Hole 1	Hole 2	Hole 3	Hole 4	Hole 5
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0
1	1	7	0	0	0	0

An advanced user interface with one-touch operation. Complete system check is carried out within 10 minutes. Real-time statistical window shows the detection rate and measured pinhole and hole size performance in micrometers.

Measurement report is available in a text form and in a fixed A4 template.

Report may also be printed as pdf file. Dated and filed reports assure operational quality.

TECHNICAL SPECIFICATIONS

Performance

Maximum number of pinhole samples:	1
Minimum diameter of detected pinhole:	15 µm
Maximum diameter of detected hole:	No limitations

Applicability

Disc speed:	0 - 800 m/min
Disc linear movement accuracy:	20 µm/step

Software

User interface:	Automatic test sequences with one-touch operation. On-screen statistics of measurement results.
Reporting:	Full measurement report in fixed format to be printed or saved as pdf file. Measurement results are also saved in txt format.

Components:

PC:	Standard laptop PC with RS-485 serial communication, software license.
Linear drive unit:	Motorized linear movement table, fitted installation in the system c-frame.
Rotating disc unit:	Portable rotating disc with certified pinhole samples included.
Cables:	Communication cables for linear drive and serial communications.