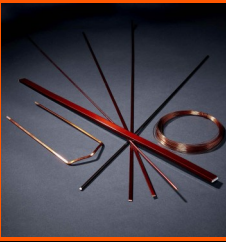
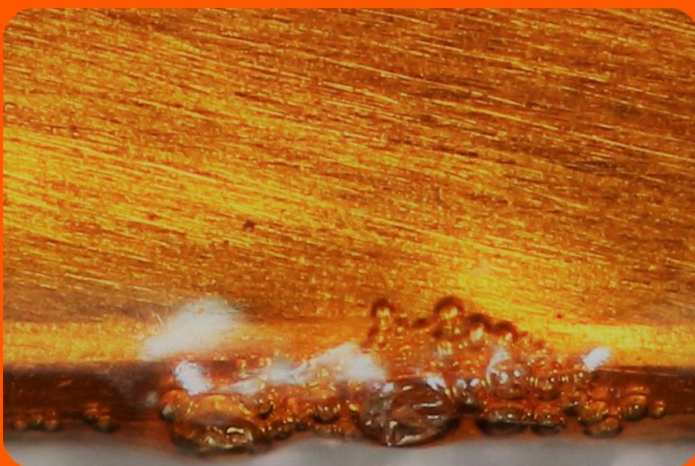
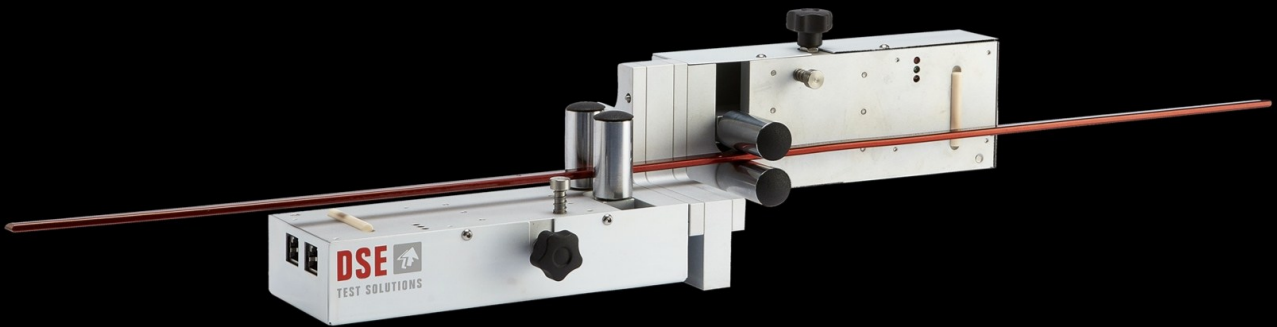


DSE BDU Blister Detection Unit



Data sheet BDU



BDU in-line Blister Detection for flat wire

- Four side Blister Detection in one measuring unit
- Monitoring HVC and Blister in the same displayed window (Dual View)
- Available as stand alone measuring unit or combined with HVC continuity tester
- Documentation for both continuity and blister detected in one file
- Storing of data on local PC or central server
- Reduction of scrap
- Improved efficiency

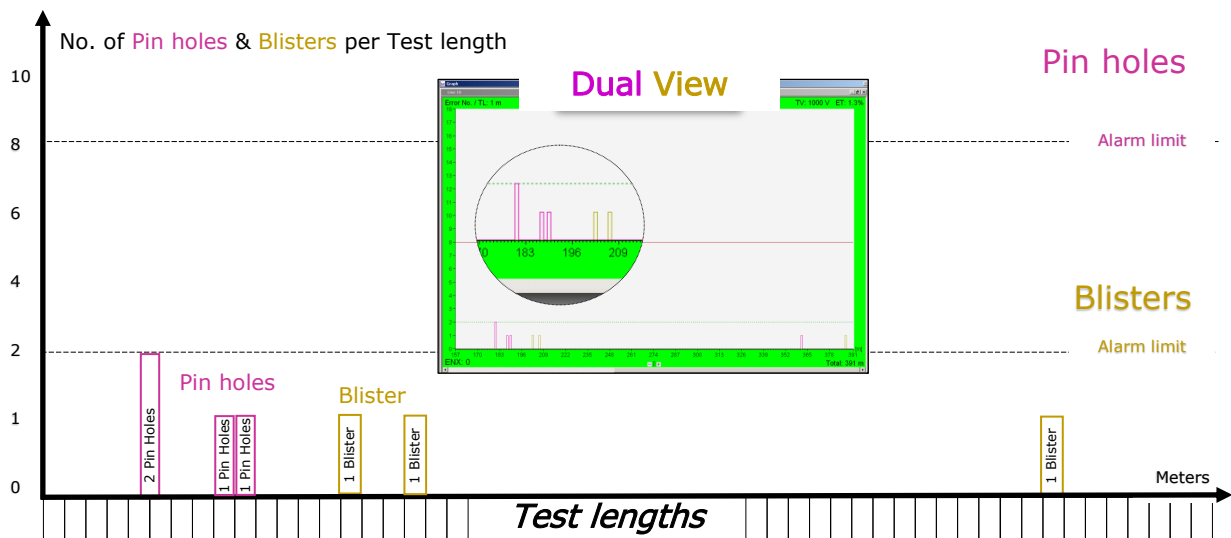


Basic operation principle

The Blister Detection Unit BDU operates dynamically by detection of changes in distance between the set of wheels. A high precision motion to Voltage converting device develop by DSE is detecting even the smallest changes. The BDU is optimized for accuracy, low need for maintenance and high repeatability over time.

The BDU system can be added to our current HVC system, or operate as a stand-alone testing system.

Complete information in one view



In the software the detection thresholds (sensitivity) can be set individually for both the High Voltage and the Blister detection.

Furthermore the Dual View function provides inline information about the coalition of the two kinds of errors which helps the operator in tracing the source of the errors.

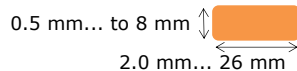
The test results from both the BDU and HVC are collected and processed by the processing module. A label printout allows the manufacturer to mark or label each spool of produced wire. Connection to central server enables calculation of thorough production statistics.

Technical specifications

Dimensions range

Height: From 0.5 to 8.0 mm (0.02 to 0.315")

Width: From 2.0 to 25.0 mm (0.078 to 0.98")



Blister size limits

Blisters >50 µm can be detected for 4 side of the wire.

Threshold for BDU: 50 µm to 490 µm in step of 10 µm.

Line speed: < 35 m /minutes

General data

Dual unit for 4 sides:

- Supply Voltage: 24 Volt
- Dimensions (DxWxH): 420 x 140 x 100 mm (16.5 x 5.51 x 3.94")
- Ambient temperature: 10-35°C (50-95°F)
- Net weight: 1.8 kg

PM-Processor Module

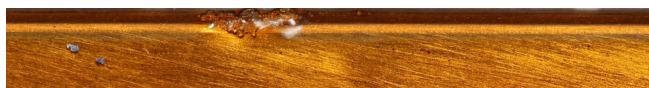
The Processor Module controls both the High Voltage electrode systems and also the Blister detection unit. It collects, evaluates, and compresses all data and transfers the results to the PC.

PM2 Module features

LED indicators for the following functions:

- Insulation Error
- Blister / HVC Threshold II
- High Tension
- Meter counter

- Compact Twin channel option
- I/O interface, including 24 Volt power supply to the electrode systems (HVC measuring head and Blister detection unit)
- Opto-isolated outputs for warning/alarms.
- Prompt signal when error detected
- Information display on the front panel
- Serial RS485 interface (internal from A-B)
- Humidity: 0-80% no condensation
- Weight: 2.6 kg single ch. 2,9 kg twin ch.
- Line voltage: 100/230 VAC± 10% 60/50 Hz with protective ground



PC

The system operates from standard PC's with Windows 10 & Windows 11.

Database

Access or Microsoft SQL

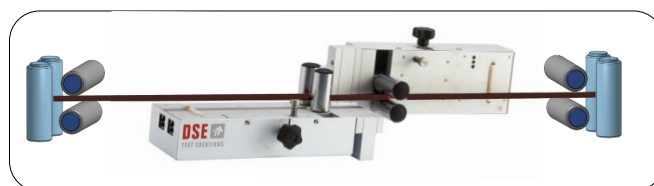
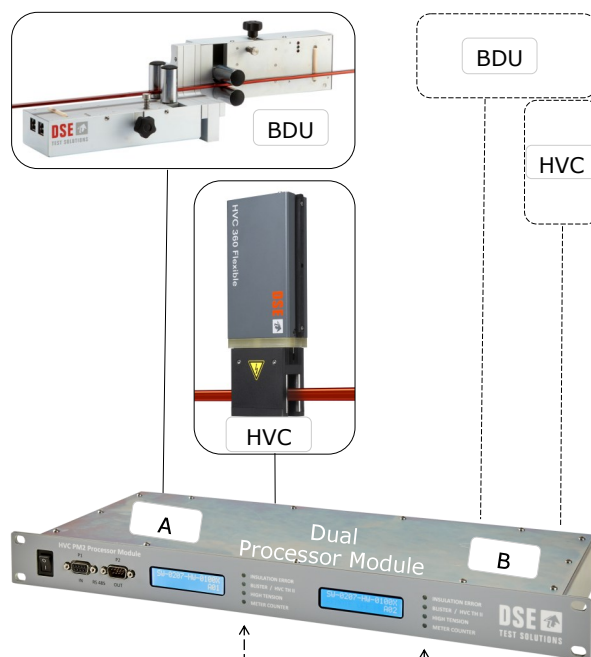


Included accessories

- Cables for BDU Detection head to processor module 10m included per line. Longer cables can be supplied on request
- Cables from BDU unit to PM Module

Optional Accessories

- Latching relay for Alarm output



Note: For most reliable result the wire must be guided and aligned in both direction.





Headquarter in Denmark

Version 05.03.00



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