

## REAL TIME THERMAL PROFILES OF THE WELD SEAM

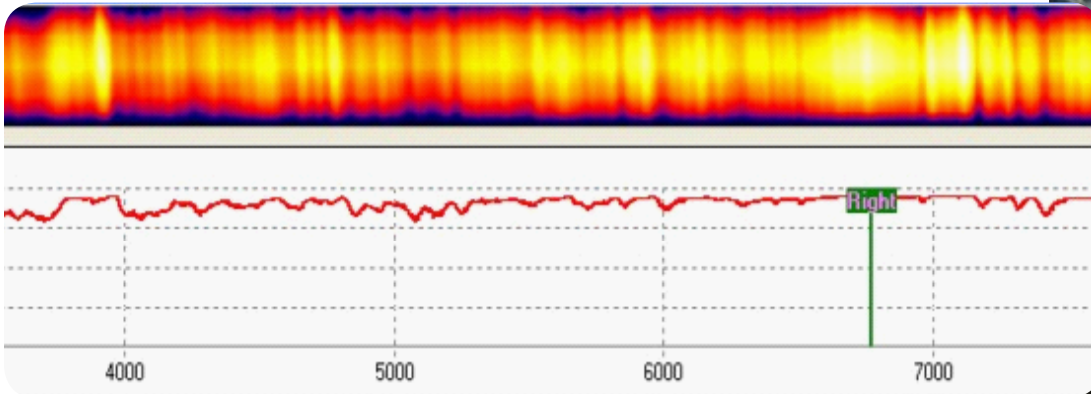
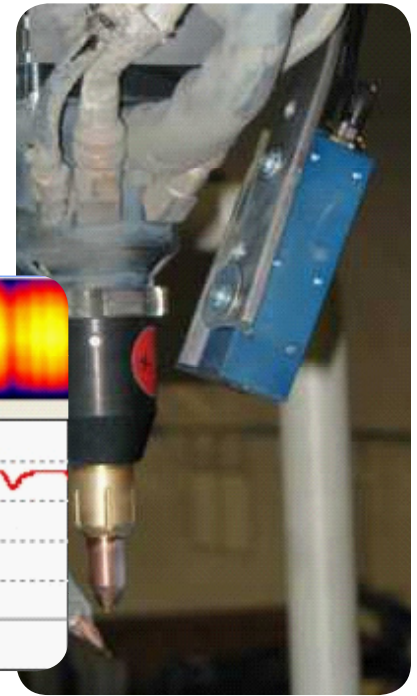
For companies and quality control professionals concerned with weld quality and manufacturing standards, the **Thermal Profile Scanner** captures heat frequencies of the HAZ weld seam as feedback for process and weld quality. Companies responding to the market dynamics, welding automation, productivity and quality are important fabricator drivers. The **Thermal Profile Scanner** provides immediate feedback towards the integrity of the weld.

### Processes

MIG • MAG • TIG • Laser • ERW/HFI

### Industries

Metal Fabrication • Tube • Pipe



With recognized benefits such as:

- Recognition of offset welding, incorrect weld position, seam necking, weld skips,
- Recognition of penetration faults, lack of fusion, porosity, burnthrough, temperature
- Reduced time required for pre-weld setup
- Process and quality monitoring with real-time at the weld data.

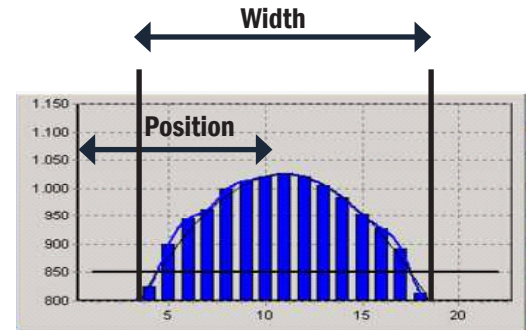
The Thermal Profile Scanner captures information across the weld seam during the solidification and is typically trailing the weld point 20mm-60mm depending upon the process. In principle:

- Temperature profiles are processed in real-time
- Weld discontinuities and integrity are compared to ideal parameters and flagged if the profile passes thresholds or envelopes.



## FEATURES:

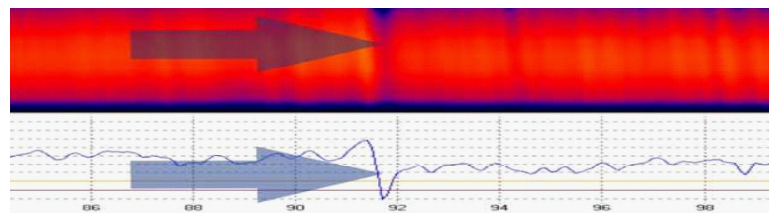
- Rugged design suitable for direct welding environment
- High scan rates providing high information density
- Compact design
- Maps with weld data monitoring
- Outputs to CCS for part marking and provides visuals for operators
- High resolution weld discontinuity detection
- Trend charting and reporting
- Position tracking of weld discontinuity along length direction for continuous processes, ie tube and pipe
- Network ready



## SPECIFICATIONS:

<b>Technology</b>	CMOS HDRC®
<b>Resolution</b>	.05mm ( 50µm - 0.002")
<b>Frame Rate</b>	up to 400 Hz
<b>Trigger modes</b>	external, internal
<b>LAN</b>	10/100 base T
<b>DIO</b>	2 x 24VDC opto isolated / 8 x 24VDC opto isolated (optional)
<b>D00</b>	2 x 24VDC opto isolated / 8 x 24VDC opto isolated (optional)
<b>Protection</b>	Glass free design, Gas shield, Anti spatter, water/air cooling ports
<b>Power</b>	24VDC +/- 25%, max 6W
<b>Dimensions</b>	45mm x 45mm x 75mm
<b>weight</b>	435 g
<b>Certification</b>	CE

## SEAM OFFSET: POTENTIAL FAILURE



Contact us today to learn more about this system or to discuss your specific requirements.

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