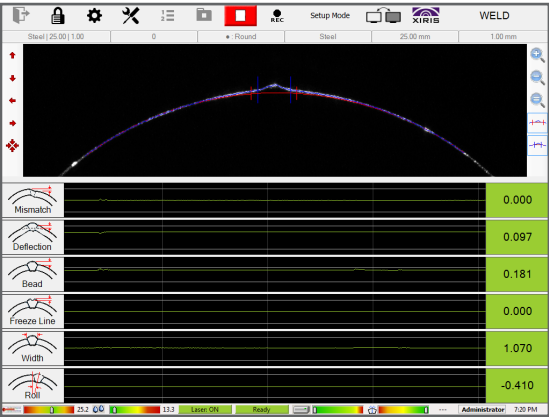
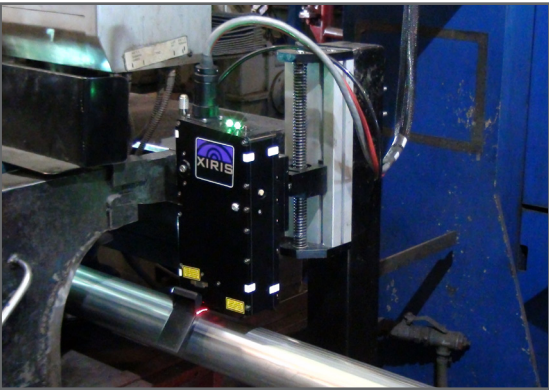
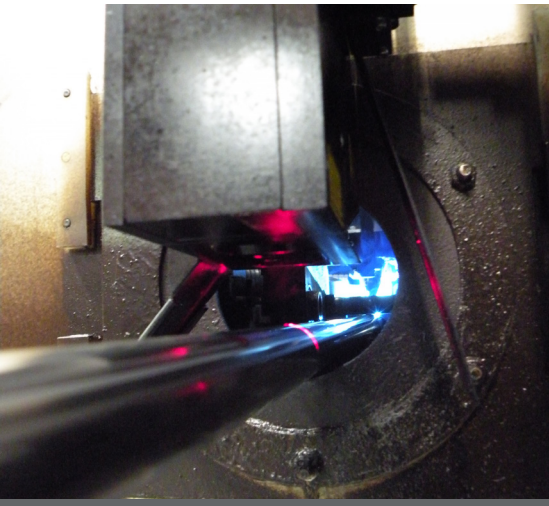


WI-2200/3000 System Performance Characteristics

Product Image										
Sensor Head Parameters	WI-2200					WI-3000				
	SR5	SR12	HR9	HR12	HR22	HR15	HR21	HR35	HR50	HR75
Min. Tube/Pipe Size (OD)	5 mm (0.20")	11 mm (0.43")	5 mm (0.20")	7 mm (0.28")	13 mm (0.51")	11 mm (0.43")	13mm (0.51")	20 mm (0.79")	30 mm (1.18")	50 mm (1.97")
Max. Weld Bead Width	1.6 mm (0.066")	4.0 mm (0.157")	3.0 mm (0.118")	4.0 mm (0.157")	7.3 mm (0.289")	5 mm (0.20")	7 mm (0.28")	12 mm (0.47")	18 mm (0.71")	28 mm (1.1")
Horizontal field of view	4.7 mm (0.18")	12 mm (0.47")	8.7 mm (0.34")	12 mm (0.47")	21.5 mm (0.85")	15 mm (0.59")	21 mm (0.83")	34 mm (1.34")	49 mm (1.93")	75 mm (2.95")
Vertical field of view	1.6 mm (0.06")	4.0 mm (0.16")	1.8 mm (0.07")	2.6 mm (0.10")	4.5 mm (0.18")	4.2 mm (0.17")	5.9 mm (0.23")	8.8 mm (0.35")	16.4 mm (0.65")	19 mm (0.75")
Horizontal resolution	7 µm (0.0003")	18 µm (0.0007")	9 µm (0.0004")	12 µm (0.0005")	21 µm (0.0008")	15 µm (0.0006")	21 µm (0.0008")	31 µm (0.0012")	48 µm (0.0019")	75 µm (0.0029")
Vertical resolution	8 µm (0.0003")	20 µm (0.0008")	11 µm (0.0004")	13 µm (0.0005")	22 µm (0.0009")	21 µm (0.0008")	29 µm (0.0011")	44 µm (0.0017")	82 µm (0.0032")	105 µm (0.0041")
Standard Speed [profiles/sec]	250	250	120	120	120	120	120	120	120	120
Standoff	13 mm (0.51")	13 mm (0.51")	13 mm (0.51")	13 mm (0.51")	13 mm (0.51")	72.8 mm (2.87")	72.8 mm (2.87")	72.8 mm (2.87")	72.8 mm (2.87")	72.8 mm (2.87")

Specifications

	WI-2200	WI-3000
Laser Power	Class 2	Class 3B
Camera and Resolution	Single Chip Monochrome CCD with GigE interface 656 x 492 pixels grey level (SR) or 1024 x 776 pixels grey level (HR)	Single Chip Monochrome CCD with GigE interface 1024 x 776 pixels grey level (HR)
Frame Rate	120 to 400 frames/sec with 656 x 100 window pixels; Images are acquired in a free running mode	Up to 120 frames/sec; Images are acquired in a free running mode
Sensor Head	128 mm (5.0") (W) X 59 mm (3.1") (D) x 244 mm (9.6") (H); 4.0 Kg (9 lb)	180 mm (7") (W) X 100 mm (4") (D) x 265 mm (10.4") (H); 4.4 Kg (9.7 lb)
Sensor Head + Optional Mount Bracket - Size	128 mm (5.0") (W) X 222 mm (8.7") (D) x 346 mm (13.6") (H); 7.0 Kg (15 lb) Universal Mount / Adjust system for easy Vertical & Horizontal set-up	180 mm (7") (W) X 260 mm (10") (D) x 450 mm (18") (H); 7.4 Kg (16 lb) Universal Mount / Adjust system for easy Vertical & Horizontal set-up
HMI Enclosure	Industrial enclosure with 15" Touch Screen LCD, 485 mm (19.1") (W) X 212 mm (8.4") (D) x 340 mm (13.4") (H); 15.5 Kg (34 lb)	
GUI Languages Supported	English, German, Spanish, Portuguese, French, Dutch, Japanese, Chinese. Others on request.	
Cooling Assembly (Sensor Head)	Adjustable Air pressure for coolant inlet: 220 L/min @ 6 bar (8 cfm @ 90 psi)	Water Cooled 2 L/min 15-25 °C (59-77 °F)
Cooling Assembly (PC Console)	Adjustable Air pressure for coolant inlet: 700 L/min @ 6 bar (25 cfm @ 90 psi)	
Machine Interfaces	4 Digital Inputs (24VDC, NPN or PNP), 4 Digital Outputs (24VDC for Dry Contacts), Connection for Marking System (Encoder Inputs / Sprayer Outputs), OPC (Optional)	
Cable	10 m (32.8') standard	
Operating Conditions HMI	Power: 100 –240 VAC, 500 watts, 50-60 Hz., Ambient Temperature: 10-50 °C (50-122 °F)	
Profile Types	Round, V-Shaped, Step, Flat, Asymmetrical, Oval/Elliptical	



WI-2200/3000 Technical Overview

Weld Inspection
for Tubes / Pipes

Description

The WI-2200/3000 post weld inspection system has been exclusively created for the tube and pipe industry to detect quality issues related to the forming, welding and scarfing processes.

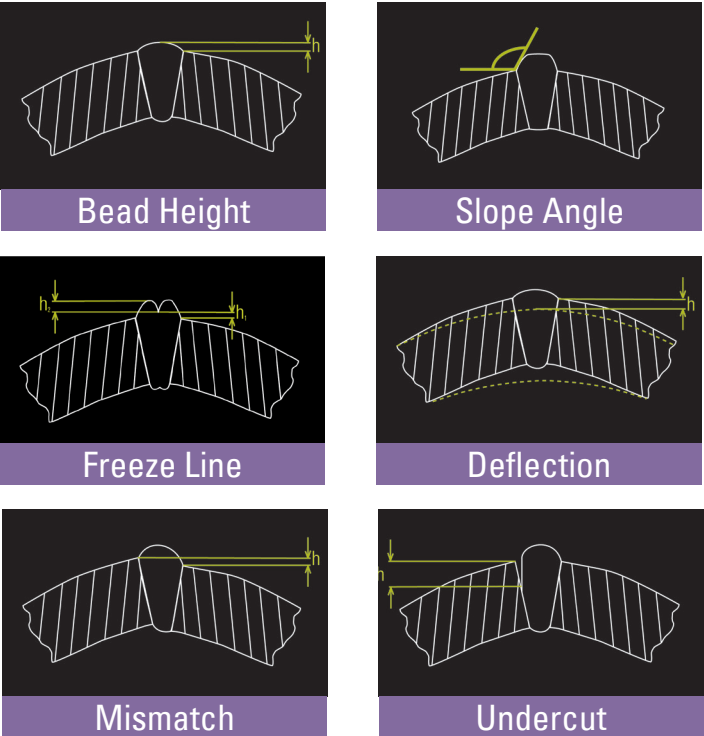
Making welded tube and pipe requires several key variables to be in check for efficient and stable production and to meet the increasing quality demands of the industry. Measuring and monitoring these variables is the first step in controlling them and improving weld quality.

Xiris's proven laser-based vision system technology with high resolution, fast data capture and analysis rates provides real-time detection of defects down to 0.015 mm in size. The system can be a single or double head configuration, to monitor post weld and/or post scarf processes.

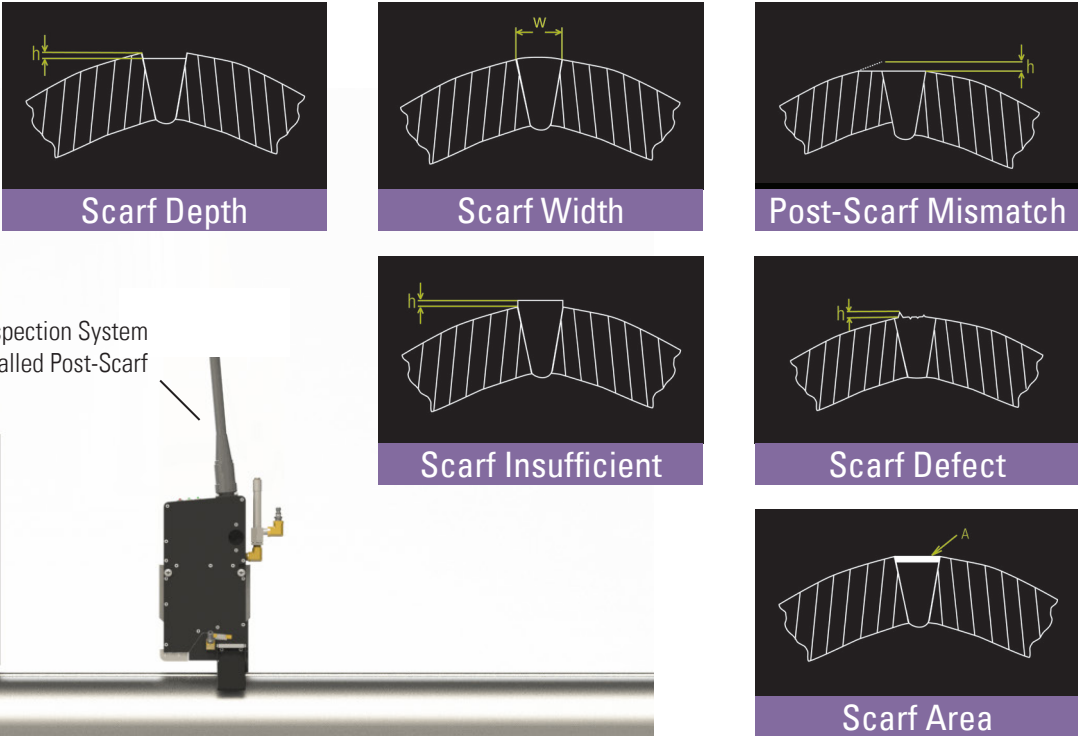
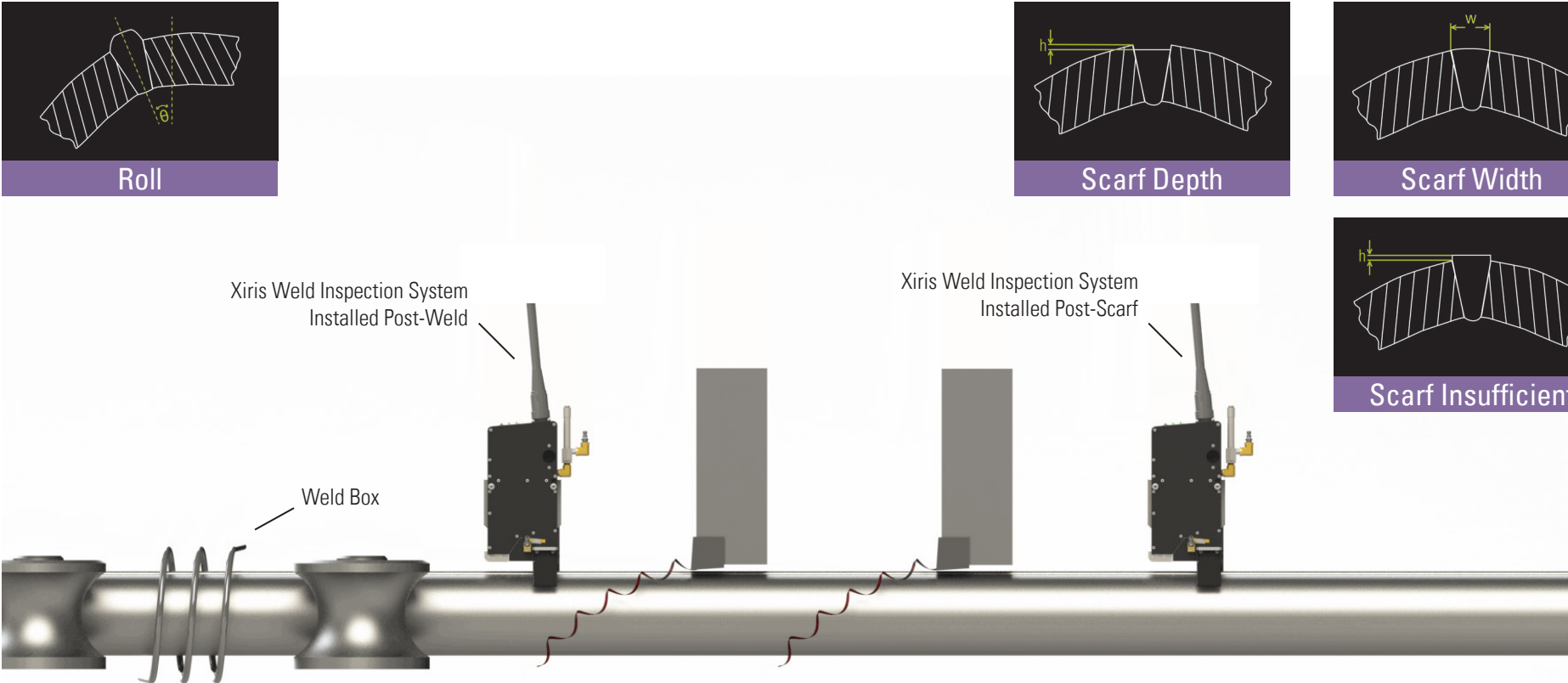
Benefits Of The WI-2200/3000 Inspection Systems

- Simplify and reduce mill set up time with real-time feedback on adjustments.
- Improve weld quality and minimize downtime, with 100% in-line monitoring and direct integration with the mill's marking system.
- Non-contact, non-destructive sensors do not interfere with forming, welding and scarfing process.
- Reduce operating costs with lower: Material scrap, Customer returns, and Product liability claims
- Improved Mill efficiency with real-time process monitoring, trend reporting, warning and alarms.
- Easily fine-tune settings for on-the-fly configurations for continuous production.
- Reduce mill set-up time and increase overall production with unlimited data presets.
- Evaluate shift efficiency, yield, and raw material quality with data logging.
- Safely operate the Sensor Head with four levels of interlocks and quick automatic stopping of the system in case of emergency.
- Powerful software suite with proprietary 3D triangulation algorithm allows for high-speed processing with closely spaced data intervals.

Identifying Weld and Scarf Defects Using Xiris Weld Inspection Systems



Weld Defects



Scarf Defects

WI-2200/3000 Standard Configuration with Options

