

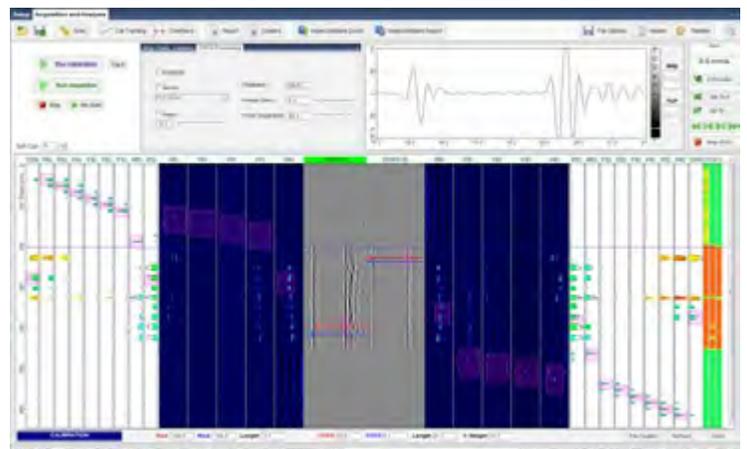
ESTRUEVIEW^{PIPE}∞

The Next Generation of Girth Weld Inspection



Key Features

- Scalable phased array pulser/receiver with 128/128 beam-forming capability
- Digitizing frequency of up to 100MHz with 12 bit amplitude resolution
- Real-time focal law and parameter detail configuration
- Advanced software suite incorporating set-up, acquisition, analysis, reporting and data storage
- Automatic evaluation per specific acceptance criteria, shortening the inspection cycle and increasing productivity
- Digital Signal Processing with advanced flaw sizing algorithms

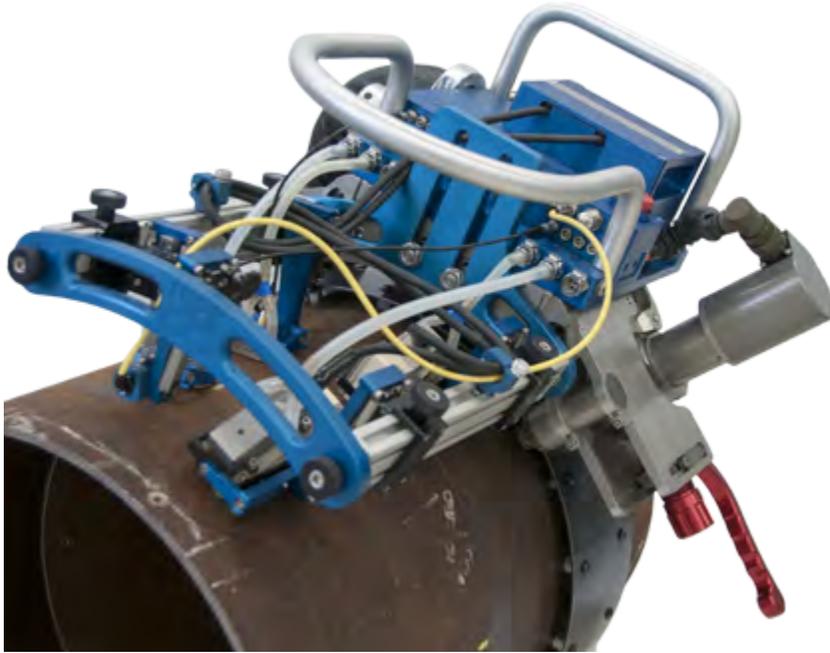


Our Innovation, Your Solution

The TrueViewPipe incorporates the latest technology and software to provide the solution for high speed AUT girth weld inspection. The system was designed to address issues and complaints from technicians within the industry, such as scanner weight and lack of configurability. Enhanced instrument performance with scalable phased array capabilities allows the system to conduct challenging inspections such as those encountered with clad, dissimilar metal welds and heavy wall pipe. The innovative software provides operators with rapid set-up and streamlined acquisition with all the tools needed for analysis, reporting and raw data storage. The TrueViewPipe is the future of the girth weld inspection industry.



TRUEVIEW^{PIPE} MECHANICAL SCANNER



Scanner Features

- System scalability allows the components to be enhanced effortlessly as the demands of the application change and increase
- Lightweight scanner was designed with the technician in mind & weighing only 15kg (33lbs)
- User-serviceable umbilical can be opened for servicing, maintenance and add-ons
- Operates on CRC pipe bands from 6" diameter to flat
- Built to last in the harsh pipeline environment with an environmentally sealed encoder and enclosed remote TOFD pre-amplifier

Scanner Frame Options

The standard frame comes equipped with four easy-to-adjust probe holders attached to rotating rails, minimizing probe skew. If the application demands more array/conventional probes, the optional six probe holder frame is available. A transverse attachment can be purchased which adds an additional 4 probes held in an adjustable transverse pattern. Cable and hose management is addressed with captured clamps that can be positioned to accommodate any configuration.



Motor Controller

The motor controller, like the acquisition unit, is housed in a military grade shock proof rack-mounted case. The unit can be controlled by the acquisition workstation or by an external pendant which gives the operator control over the scanner and couplant delivery system. Critical to every inspection is the ability to quickly respond to maintenance needs. The gear box and motor drive assembly have been designed for quick replacement and serviceability to allow for redeployment in the minimum amount of time.

Acquisition Unit

The ultrasonic acquisition unit is a MicroPulse 5PA, with a 128/128 PA option, and includes 16 high performance conventional UT channels. With numerous optimized performance features this instrument affords un-paralleled results. Extensive control of pulse width, pulse voltage and PRF ensures that optimal array performance is achieved. The instrument offers a range of pre-set filters, extensive DAC options and includes hardware gates and digital processing output options.

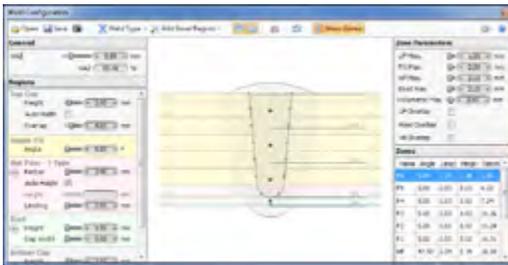


Couplant Delivery System

Couplant is controlled via a single valve on the rig that sets optimal flow rates for the four or more probe assemblies. Couplant is delivered to the scanner by a motorized pump with a solenoid valve making it convenient for automated sequences. The couplant delivery system can be automatically activated when the scanner is performing the calibration or inspection scan sequences or can be overridden by the operator via the pendant.

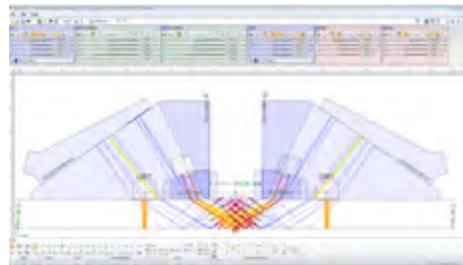
TRUEVIEW SOFTWARE

Setup: BeamTool



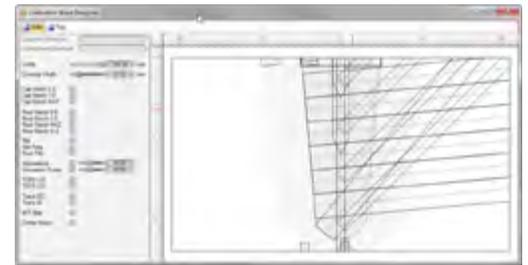
Define Inspection Parameters

Create your technique by defining the weld bevel, zones, probes and all other required information.



Zonal Solver

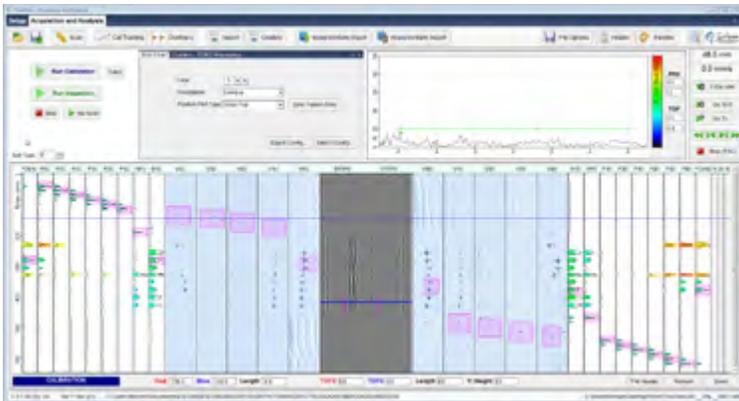
Automatically create individually targeted zonal beams with the powerful beam solver.



Calibration Block Design

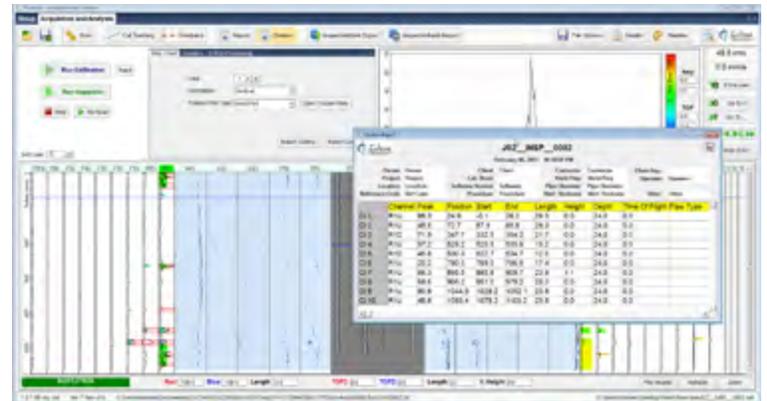
Define target sizes, positions and orientations, which will be used by the TrueView Auto-Setup feature.

Acquisition and Analysis: TrueView



Calibration Mode

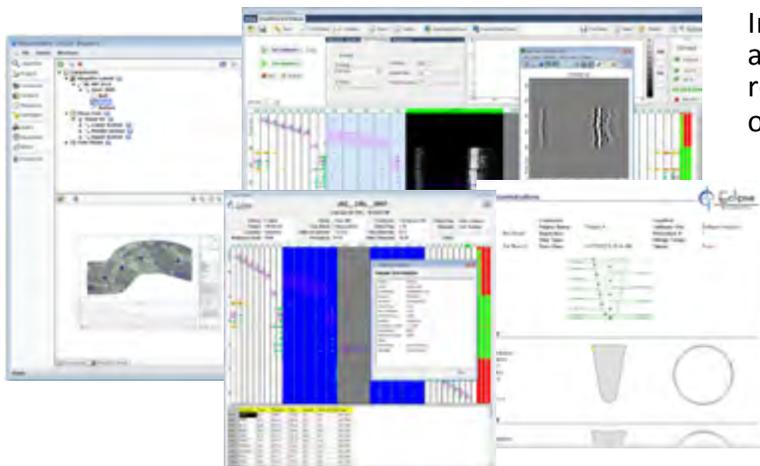
Calibration is assisted by Auto-Setup, Gain Tracking and Encoder Tracking tools that help the operator quickly verify acceptance, and allow auditors to monitor the system parameters.



Inspection Mode

Acquisition configurations and automatic cluster analysis parameters can be customized by the operator to create data files and flaw definitions as required by the procedures.

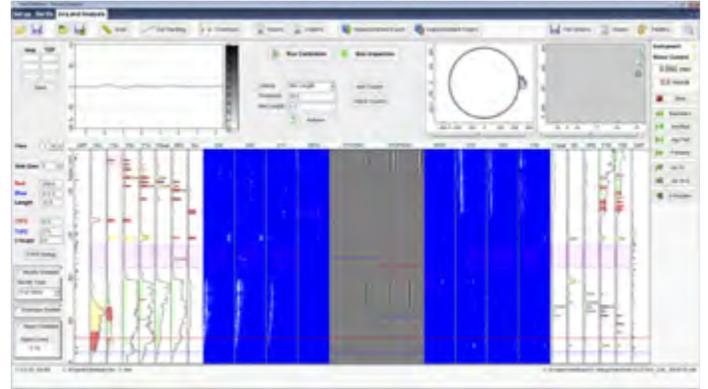
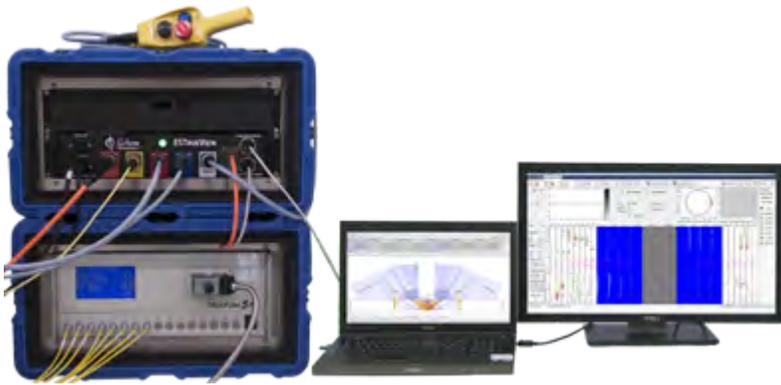
Data Management and Reporting: InspectionBank



Inspection data files and flaw definitions can be organized and securely archived in InspectionBank. Comprehensive reports can be created, saved, and made accessible for offsite review.

All other aspects of an inspection project can be entered and tracked within the InspectionBank system, such as operator qualifications, contacts, assets, equipment, drawings, documents, etc.

TRUEVIEW WORKSTATION

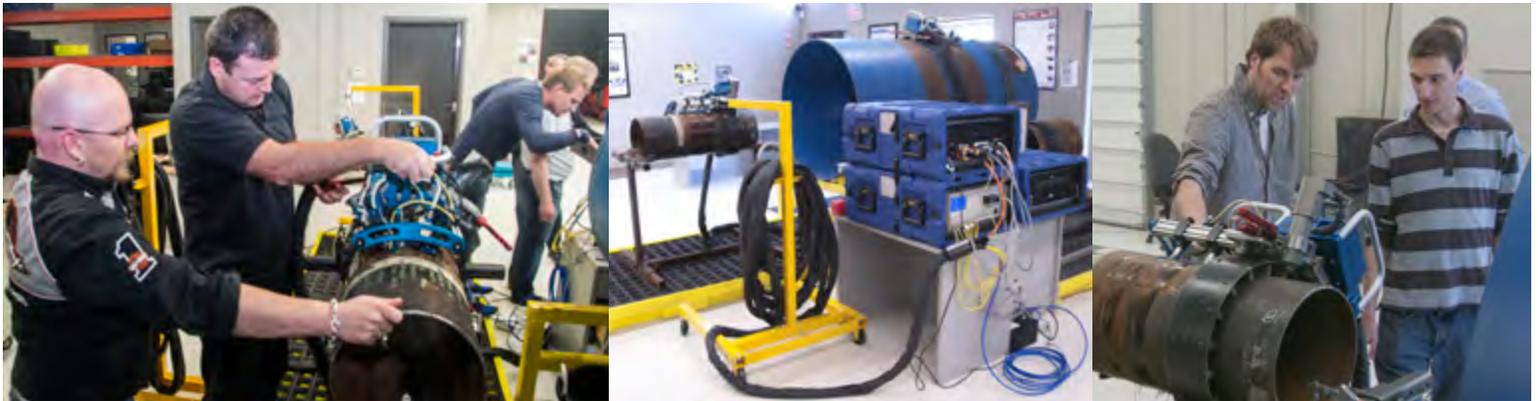


The TrueView mobile workstation includes a powerful Windows 7 laptop and a suite of software tools that operate the motor controller and data acquisition instrument. One or more additional monitors can be incorporated to enhance visualization and streamline the analysis and reporting process. The laptop is connected to the TrueView instrument panel by a single network cable while the optional fiber link will allow the system to be remotely operated, providing increased flexibility. With outstanding performance and comprehensive tracking of all settings, operators are able to focus on production.

SEE THE TRUEVIEW^{PIPE} IN ACTION!

Contact Eclipse to book a live demonstration of the TrueView^{PIPE} at our state-of-the art training facility in Waterloo, Ontario Canada.

On-site demonstrations can also be arranged.



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