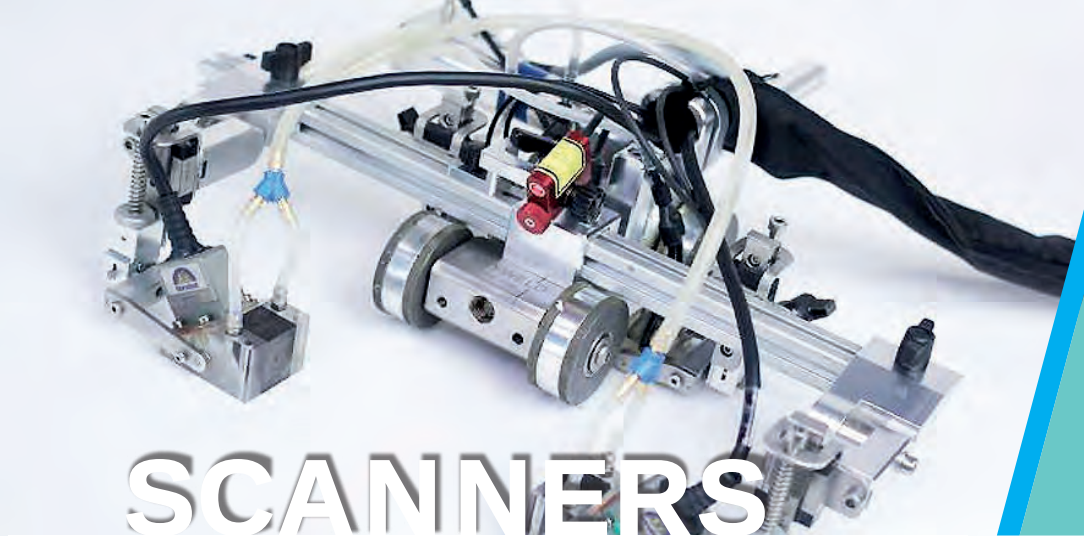


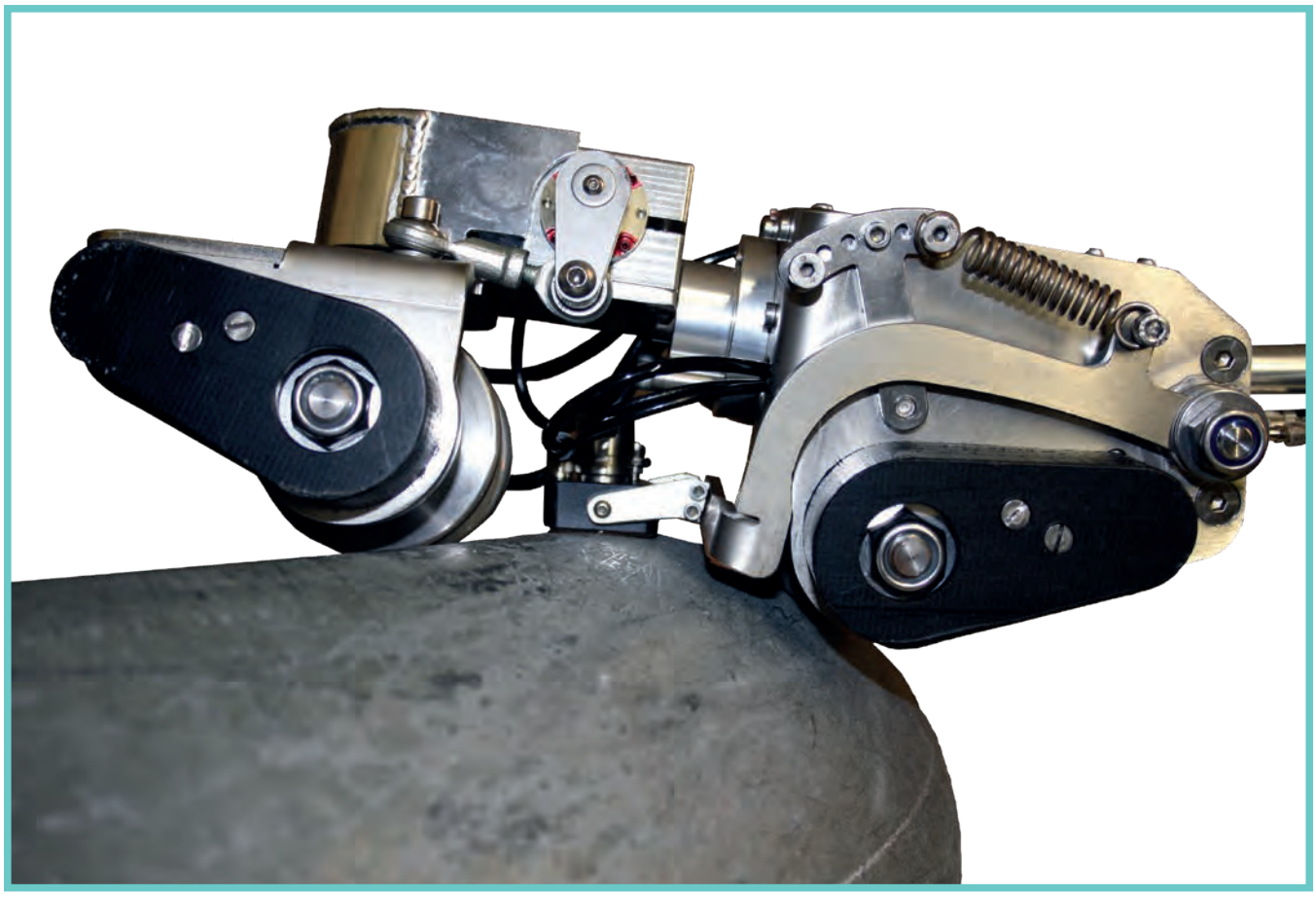
SCANNERS

SCANNERS

SPECIAL SYSTEMS

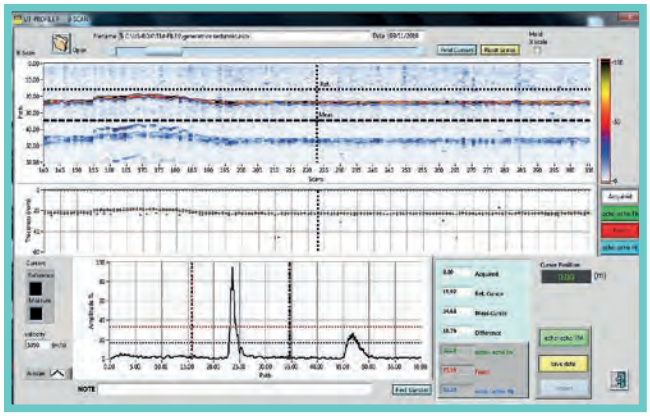
IMG engineers and manufactures integrated systems for automatic, semi-automatic and manual inspection to meet the growing demand for ultrasonic testing.
In addition to the standard products, IMG can manufacture custom scanners and systems according to the customer needs.

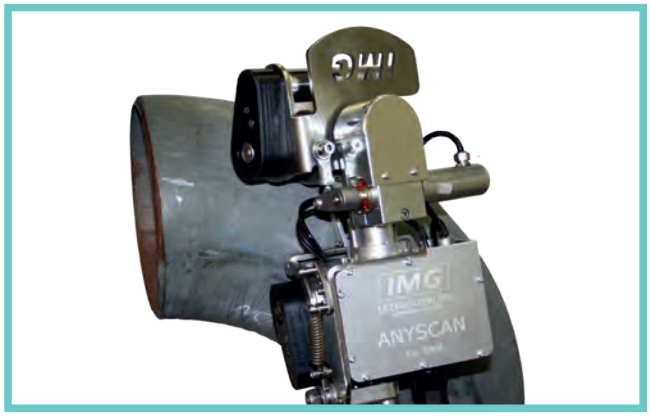
ANYSCAN



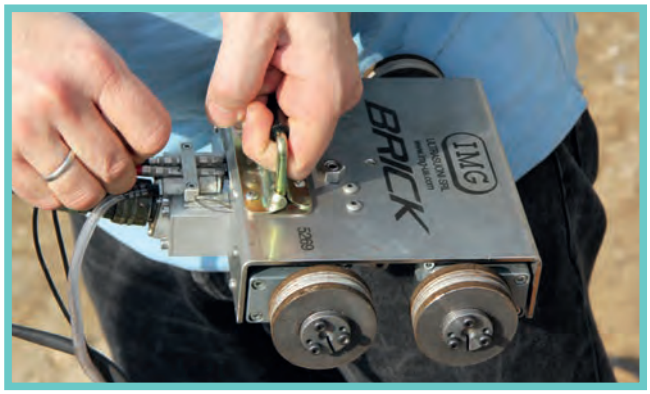
Ultrasonic solution to check pipe thickness under operation conditions, eliminating the thickness of paint or coating: suitable for remote inspection of thickness on non-accessible pipes, scanning on curves, tees, reductions and special test pieces.
It can be used for pipes from 4 in. thickness and up to 90 degrees of temperature. Anyscan is remotely controlled thanks IMG UT PROFILER tool. The 25-meter cable length allows its use on large structures.

- Italian Patent No. 10200891644391
- European Patent No. 09797592.4

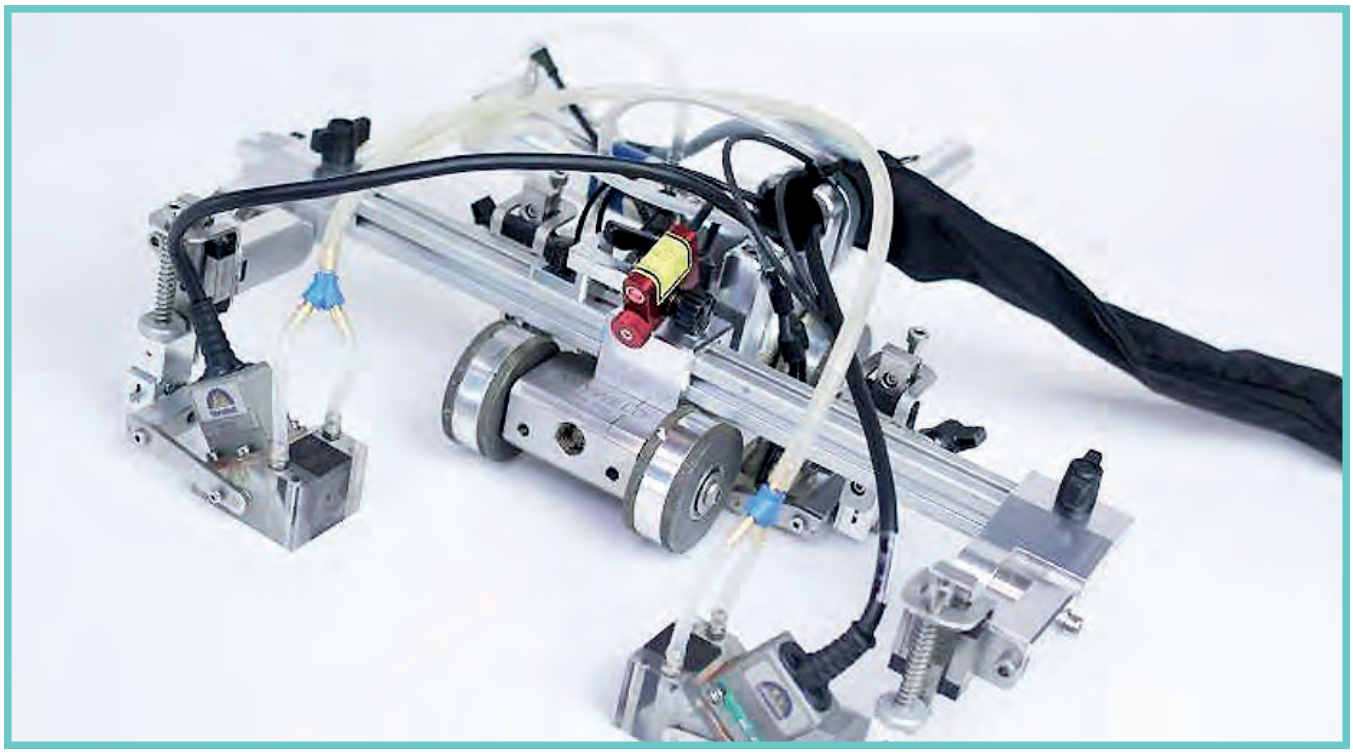




BRICK magnetic crawler has been designed for thickness control on large-size storage tanks without using stairs or scaffoldings because it makes use of ground controls. The robot provides continuous thickness measurements, so that anomalies are detected more easily and quickly. Being connected to the PC, it allows to acquire all data relating different readings, to add notes at any point of the scan at the operators discretion, in addition to reviewing registered B-SCAN profiles.
The data is represented in A-Scan, B-Scan and thickness profile; images can be saved and exported directly into spreadsheets and text files; furthermore, all thickness data related to the position are stored in text files that can be used anytime for reporting purposes.

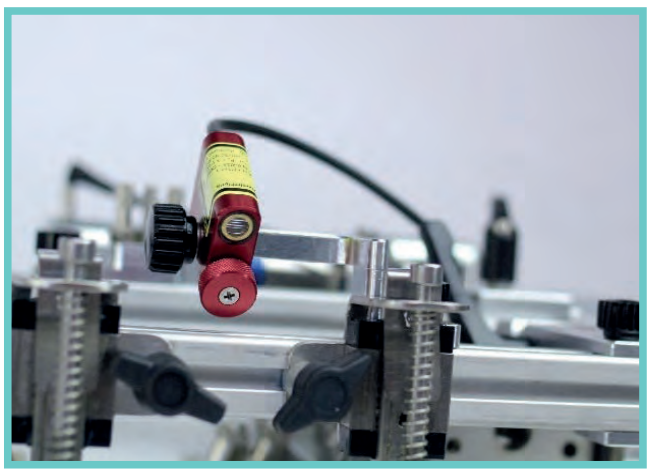


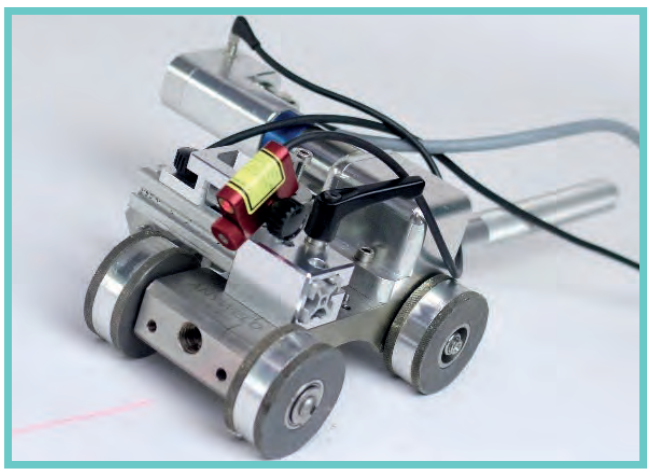
ANYWELD



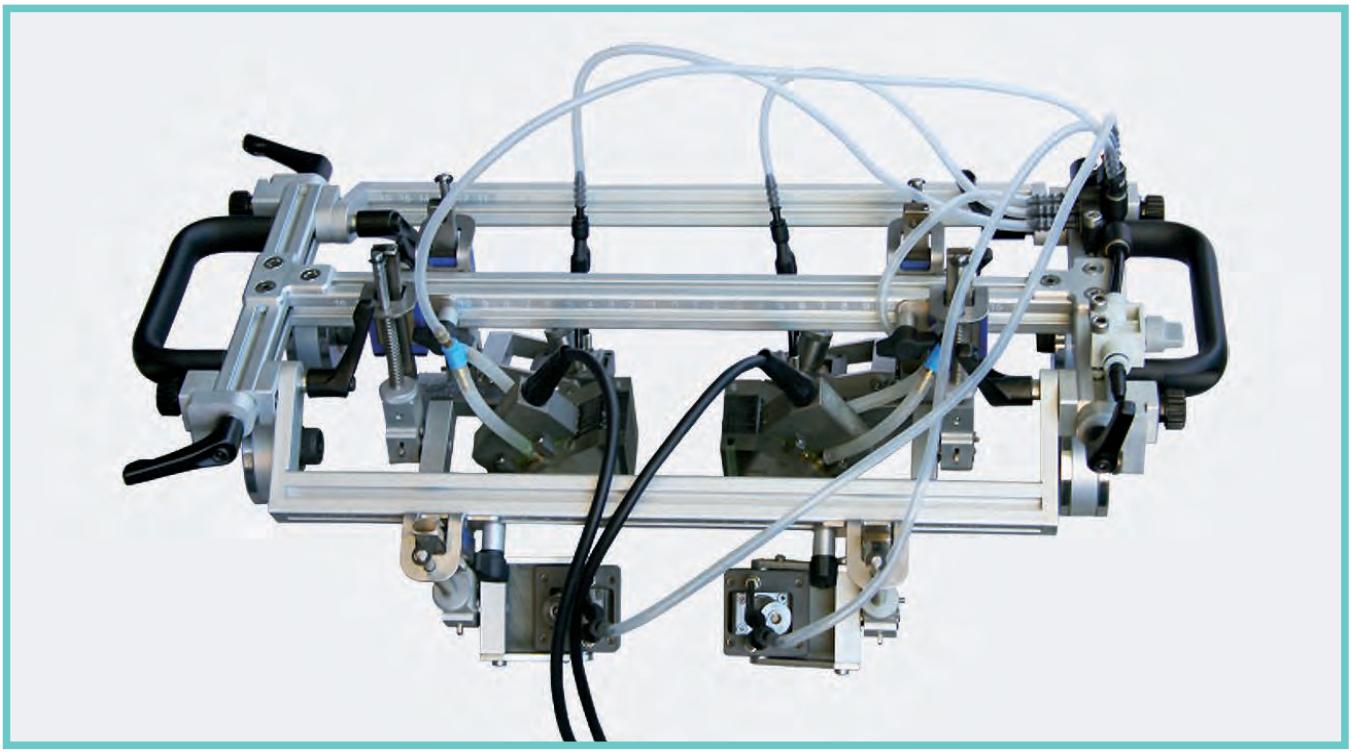
Anyweld is a magnetic wheel scanner designed for almost any type of linear weld inspection with phased array and tofd probes. It can be equipped with up to 8 different probes (10 if using special dual todf wedges). The high modularity allows the scanner to be assembled in 14 different configurations according to the customer requests. Its innovative design allows the scanning of circumferential tube welding starting from 4 “up to flat surfaces.

Its modular design allows the use also for longitudinal welds scanning.
The scanner can also be used on non-magnetic materials thanks to optional chains.
It can be equipped with laser pointer for accurate positioning, saving time in inspection. The external 12v rechargeable battery allows a long duty while scanning. The scanner Anyweld is compatible with all AUT flaw detectors on the market.



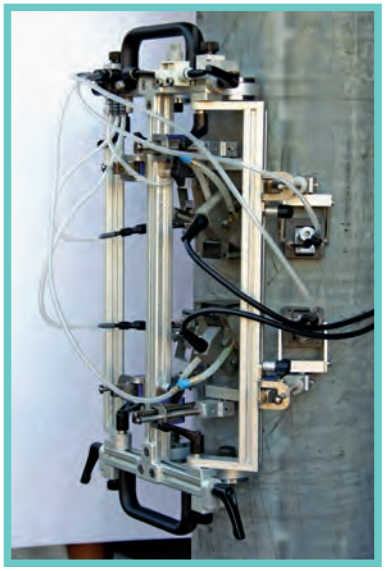


TOFD SCANNERS



The Tofd scanner consists of 3 graduated rods where up to 12 probe holder suspensions can be mounted.
By means of specific supports it is possible to equip the scanner with any kind of probe and an encoder.
Probes are mounted on shoes with anti-wear grains and a water injection kit.

Coupling to the piece being inspected is guaranteed by spring support with tilting movement.
The adhesion of the scanner to wall is entrusted to 4 magnetic wheels and the unit handling is manual.
The inclination of the magnetic wheels allows inspection of longitudinal and circular welds up to 4 inches diameter.



SCANNER FOR RAIL INSPECTION

The crawler for rail inspection is constructed of light alloy and thanks to its scroll wheels is suitable for different rail sections. It is equipped with a third wheel serving as a support for the crawler, being mounted on an articulated rod of variable length to facilitate transport and mounting from either side.
The three probes are spring-mounted in vertical position on a shoe self-fitting to the width of the contact surface, allowing it to be lifted during transport.
It is possible to regulate the flow of coupling liquid of each probe.
A passive mixer is mounted on the crawler. By means of a manual selector, this mixer allows to use the probes individually or simultaneously, with the possibility to adjust the signal amplitude for each probe.

Tandem system with angled beam probes for wheel inspection, capable of adapting to various diameters.

The rotating probe device for the railways axles inspection is fully constructed of aluminium and may be interfaced with any electronic instrument for defects detection.
It may be equipped with 3, 4 or 5 ultrasonic probes. Crystal size, frequency and angle can be arranged at your request.
The coupling to the axles is ensured by a magnet and some springs, maintaining a constant pressure among axle and probes. Furthermore, every probe holder is provided with anti-wear carbides delivering a longer lifespan of the probes.

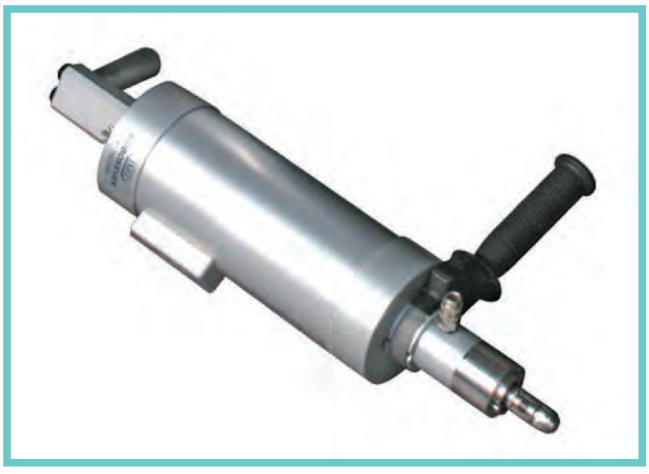
HISCAN

Automatic control system for internal bore welding and fillet welds inspection on tube sheets of heat exchangers.
This system consists of a multi-turn robot with 0.5mm fixed pitch and 30mm maximum scannable length.

Automatic water injection system directly in the tube being inspected. Movement control unit programmable through dedicated software.
Twin crystal probes specifically designed for the inspection being carried out.

System configuration:

- Ultrasonic system specifically designed for IBW and fillet welds inspection.
- Multi-turn robot for helical scanning with 0.5 mm fixed pitch and 30 mm maximum scanning depth.
- Automatic water injection system directly into the pipe being inspected.
- Motion control unit, programmable via software.
- Twin crystal probes, specifically designed according to the kind of welds being inspected.

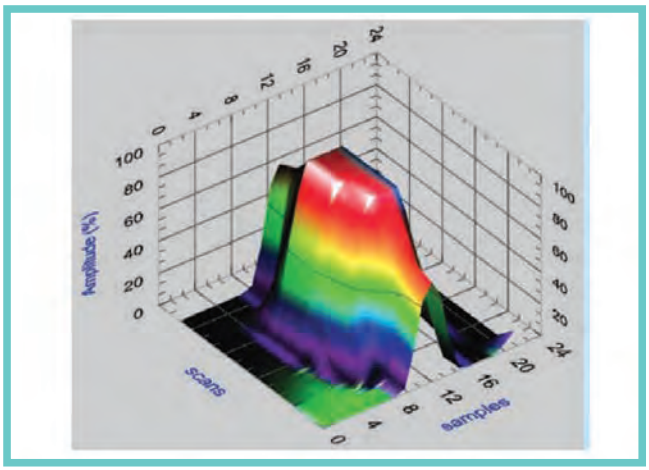


HISCAN

DATABASE MANAGEMENT

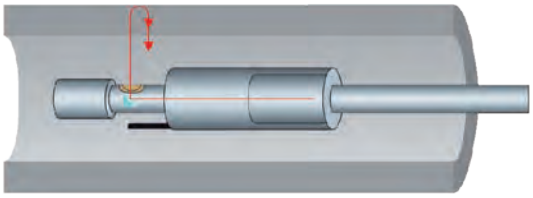
In order to facilitate simple and clear classification, management and retrieval of files, an organized, tried-and-test procedure is identified.
The identification of the inspection activities is possible by entering the following fields:

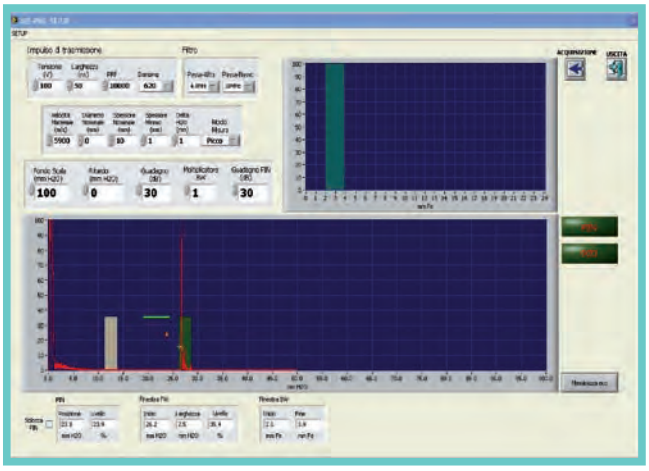
- JOB NUMBER: identification number of the job activity
- FACTORY: identification number of the plant being inspected
- ROW: pipe row number
- TUBE: number of the pipe in the row
- SIDE: side of the tube sheet being inspected (TOP, BOTTOM, INTERNAL, EXTERNAL)

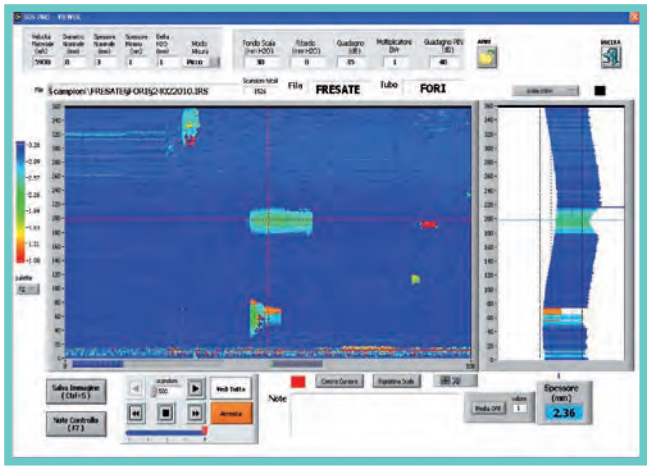


IRIS PRO is an high speed ultrasonic system, designed to be used with any IRIS (Internal Rotary Inspection System) turbine. The high performance of the UT board ensures high accuracy measurements and perfect adaptation to all types of IRIS probes. The software has been designed to meet the requirements of engineers specialized in UT inspection. Simplicity, reliability and superior performance make IRIS the perfect system for field inspection. IRIS can also work with the battery (optional): this ensures an outstanding operational flexibility on the field. The reporting and operation software is customisable upon request, being adaptable to individual needs: data storage and communication can be redesigned on specific requests.

The setup procedure is very immediate. All parameters necessary are shown on a single screen.
The double A-Scan display allows the parameters setting in a few simple steps. The management function of the A-Scans permits immediate and reliable identification of the PIN position and of echoes of internal and external surfaces.







IRIS

INSPECTION AND ANALYSIS LAYOUT

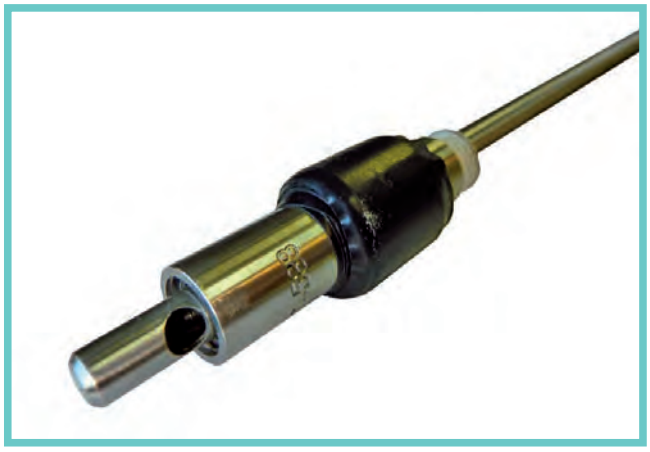
The Side View (B-Scan) can be displayed in black or on a colour scale as for C-Scan.

B-Scan and C-Scan are displayed in real-time at the same rotation rate of the turbine.

Thanks to the high performance of the UT board and the optimized software, IRIS PRO can operate at high rotation speed of turbines (> 50 rpm), ensuring 360 acquisitions per lap. All the main features: Main Gain, Pin Gain, Range, Nominal Tube Diameter, Minimum Thickness, Peak/Flank.

Measurement gates can be modified in real time during the acquisition.

The automatic file generation allows an immediate organization of archives, by reducing the operating time on the field.



5200 SPECIAL SYSTEMS

Low frequency digital instrument to check homogeneity in composite materials. Very robust and safe (IP65), easy to use thanks to the data entry through the touch screen and multiple functions, such as saving of oscillograms (A-Scan) and related calibration parameters.
It works with rechargeable NiMH batteries allowing for 8 hours autonomy.

It can be used for cross-hole inspection thanks to the UMACS unit.
Low frequency control of composite materials:
Concrete - Brick structures - Stone materials - Glass and carbon fibers - Natural stones - Composites materials - Marbles - Granites.
Palifications, cross-hole control with UMACS.
Agglomerates - Grana cheese.