

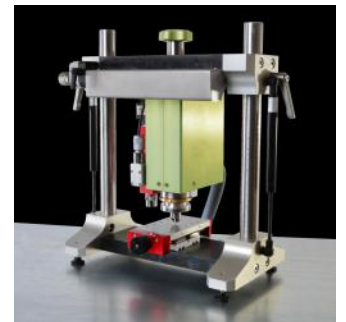
WELCOME TO RiM LaS

RiM LaS is a young organisation and the front runner in introduction of advanced technological products and new innovations in its category and expanding enormously by collaborating with various business establishments across the world who are developing and manufacturing innovative products . We are constantly searching for new ideas and creative innovations for making a positive impact in shaping the future of Indian Industries. At RiM LaS we aim at providing our customers with superior quality products that completely satisfies their need. RiM LaS, offers an array of value added products & solutions, aiming at simplifying customer needs, improving efficiency & optimizing the value proposition offered. Exclusive representation of world-wide established manufacturers gives us the opportunity to find an integral solution .That is what distinguishes us from others.

Our strength lies in consolidation. Our broad product line and wide networks enable us to meet customer requirements in totality. **RiM LaS** offer a wide range of products and solutions in the field of Quality Testing and Field Inspection. We offer a range of high quality innovative brands that represent the best in each of our product categories. These brands have a strong legacy of innovation; these brands are leaders in their respective product category and help our customers tirelessly get the job done.

PRODUCTS

We are committed to be the leading solution provider in the Indian region to provide the most reliable yet cost effective NDT inspection, quality assurance and control related equipments and solutions to our highly value customers.



OUR PRINCIPALS

RiM LaS has been chosen as exclusive National Sales Partner for India from the world's best global technology leaders, to compliment their offerings, to the Customers. We are partnering with technology innovators for Indian Territory who repose their confidence in RiM LaS, by working solely through us.



OUR SATISFIED CUSTOMERS

BHARAT FORGE



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PORTABLE LASER SPECTROMETER (LIS-01)

The LIS-01 Metal Analyzer is designed for operational input inspection of rolled metal products, determination of steel grades, scrap of non-ferrous and ferrous metals and alloys.

The spectrometer provides high speed in determining chemical elements: C, Si, Mn, Cr, Ni, Fe, Mg, Al, V, Cu, Zn, Sn, Mo, Ti, W, Nb, Pd, Ag, Cd, Pt, Au and others.

Areas of Use :

- Input / output control of metals, alloys
- Sorting scrap
- Spectral analysis in laboratory studies



World's fastest
Analyzer

Reads in one
second



Carbon analysis directly in air,
No Argon gas required



Features :

- **Carbon analysis:** The LIS-01 allows to measure carbon concentration in steels without using argon, directly in the air.
- **Speed.** High speed analysis, result in 1 sec.
- **Accuracy.** Provides unsurpassed resolution of 0.01 nm over the entire measurement range.
- **Portability.** Small dimensions and weight comparable to a hand held power tool.
- **Reliable.** Unlimited operating life, compared to X-ray fluorescence spectrometers (XRF).
- **Built-in grade library.** Based on the results of the analysis, the steel or alloy grade is displayed on the screen.
- **CE Value.** Measurement of carbon equivalent values
- **Camera.** High resolution camera to capture the location of analysis.

The basis	Impurities
Fe	C, Si, Mn, Cr, Ni, V, Cu, Ti, Mo, Co, Al, Nb, W
Al	Si, Zn, Mn, Mg, Fe, Cu, Ni, Be, Ti, Cr
Cu	Si, Zn, Mn, Al, Be, Sb, Ni, Sn, Pb, Fe, Cr
Ni	Al, Si, Ti, V, Cr, Mn, Fe, , Nb, Mo, W
Ti	Mo, V, Al, Fe, Cr, Zr, Mn
Zn	Al, Cu, Fe, Sb



DB: Stainless steel

	Measure	AISI 321
C	0.03 ±0.03	< 0.08
Si	0.72 ±0.08	< 0.75
Mn	1.58 ±0.07	< 2.00
Cr	17.88 ±0.67	17.00 - 19.00
Ni	10.08 ±0.27	9.00 - 12.00
Ti	0.32 ±0.03	0.01 - 0.70
Fe	69.40 ±0.53	50.00 - 85.00
P		< 0.04
S		< 0.03

TECHNICAL CHARACTERISTICS

Source of radiation	Pulsed DPSS Laser 1064 nm
Measurement point size	50 microns
Measurement duration	1.0 sec
Laser emitter safety class	3b
Working spectral range	177-380 nm
Display	5" color touch screen display
Memory	32 GB
Data Transfer	WIFI and Bluetooth
Language	English, German and Russian
Security	Password Protection
Duration of autonomous work	More than 200 dimensions
Power	Replaceable Li-ion battery
Operating conditions : ambient air temperature	-15 to +40 °C

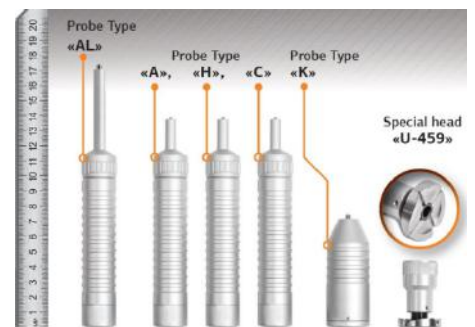
PORTABLE HARDNESS TESTER

Hardness is the mechanical resistance offered by a material. The definition of hardness differs from that of strength, which is the resistance of a material to deformation and separation. Which method of material hardness testing is most appropriate for your application depends on the material you want to measure. We have **Leeb** and **UCI (Ultrasonic Contact Impedance)** portable hardness testers.

- Shockproof, dustproof and waterproof case allows to operate the device in the most demanding conditions
- Bright color graphic OLED display ensures operation at low temperatures under field conditions and poor visibility
- Signalization of exceeding of prescribed readings threshold.
- Highly interactive colour display with Max, Min, Avg, and standard deviation
- User Programmable additional scales
- The memory storage capacity of 12400 in measurement results.
- Data transfer to PC with USB cable and software
- Manufactured according to DIN Standard.

UCI HARDNESS TESTER

- Stable readings independent from force and time of pressing the probe to the surface
- Hardness measurement in hard-to reach areas (position of probe does not influence the result of measurement).
- Ultra-small control area (from 1 mm).
- Control in slots and blind holes from 5 mm (not provided by rival devices).
- Invisible print (Spot/Dent) on mirror-surface.
- Low sensitivity to the curvative of surface, thickness and weight of product.
- Supports probe type 10N, 50N and 100N. Unique probes for special application
- Automatic test sequence Measurements of the hardness of layers starting at 30 microns!
- Suitable for mass testing of work pieces
- Low requirements for the mass and thickness of the work piece; for example, with thin-walled tubes starting at 2 mm wall thickness (1mm also possible by help of coupling paste)



LEEB HARDNESS TESTER

- Wide range of controlled metals and alloys
- Low sensitivity to the curvative and roughness of surface
- Monitoring of hardness change along the surface
- Stable measurements independent from force and time of pressing the probe to the surface
- High accuracy: $\pm 0.5\%$ (based on $L = 800 \pm 4$ HL)
- Measurements in any direction, no need to select angle
- Special & Unique probe design Enables fast and accurate measurements in small spaces
- Unique test indenter increases resource sensor operation to minimum 250,000 measurements
- Supports probe type "D", type "G", type "E" and special head "Z-359"



Probe Type "G"

Probe Type "D"

Probe Type "E"

Probe Type D/E with socket

Special head "Z-359"



CRACK DEPTH METER

This is a High-precision instrument for measuring the depth of cracks exposed on various metals and alloys (incl. stainless steel, aluminum), previously detected by other methods.

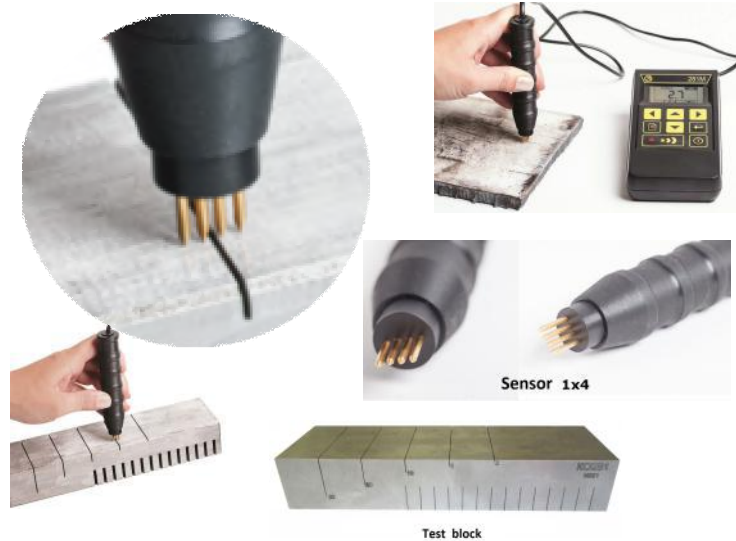
The device is the most efficient in combination with other crack-revealing methods like magnetic particle, capillary or eddy-current.

TYPICAL CONTROL OBJECTS:

- Shafts, rolls, rolling mills, details of constructions machines and mechanisms
- Pipes, tubes, oil-and-gas pipelines
- Pressure vessels
- Energy industry devices

OPERATIONAL ADVANTAGES

- Control of ferromagnetic and non-ferromagnetic materials (stainless steel, aluminum alloys, etc.)
- Wide measuring range - **from 0.2 to 100.0 mm**.
- Low impact of the material electromagnetic properties on the measurement result.
- The device is equipped with various design sensors to control products of irregular shape.
- Mobile spring-loaded contact electrodes of the sensor enable the user to perform measurements on curved surfaces.
- Crack Depth Meter works successfully in field, workshop and laboratory conditions.



Measuring range (crack depth)	0 - 100 mm
Measuring accuracy	10% ± 0.2 mm
Maximum crack width (depending on the sensor design)	up to 3.5 mm
Minimum crack length	5 crack depths, no less than 3 mm
Power supply	Accumulator
Display lighting	Provided
Automatic switch off	Provided
Electronic unit dimensions	160 x 85 x 30 mm
Weight	400 g
Operating temperature range	-5 ... +50 °C
Warranty	1 Year from the day of delivery

COATING THICKNESS GAUGE

Thickness measurement of,

- All kind of insulation, dielectric & Galvanic (zinc, chromium, nickel, cadmium, silver, tin and other) coatings on ferrous and Non Ferrous Metals.
- Special dielectric & metallic thick coatings and plated coatings.
- Coatings on the internal surfaces of Pipes and Cylindrical products.
- Copper Foils n Printed Circuit Board.
- Two Layer Coating.
- Galvanic Coating on Screws and Threads.
- Protective layer of concrete and determination of steel reinforcement position in concrete. Wall thickness of large products from fibreglass and carbon fibre reinforced plastics during manufacture and delivery with one side and two side's access.
- Measurement of groove depth and evaluation of surface roughness after sand blasting or grit blasting.
- Measurement of Air Temperature, Humidity, Metallic Temperature and Dew Point

ADVANCE COATING THICKNESS GAUGE

- TFT colour display with 2.4" diagonal and a built-in Li-Ion battery
- Shockproof ergonomic body with rubberized corners
- Keyboard with functional keys that change their purpose depending on the mode of operation of the device and user-friendly and intuitive interface.
- Additional modes and device settings, Scan Mode for fast measurement
- Wide range of functions for work with statistics
- Large number of new generation wear resistant transducers of wide purpose of application with algorithms that avoid influence of wear on measurement accuracy
- Support for transducers with several calibration characteristics (up to 6 for PH3 series probes, up to 4 for NF-G probes, up to 2 F-G probes)
- Large Memory
- Absence of temperature and time drift of measurement results



BASIC COATING THICKNESS GAUGE

- colour OLED display with 1.7" diagonal, large digits on display
- Device can be delivered with integrated combined small-sized probe for measuring coating thickness on substrates from ferrous and non-ferrous materials
- Increased temperature range up to -30°C
- Possibility of tolerance mode measurement, measuring with averaging
- Device can be delivered with integrated probe or with built-in probe on cable.

NON DESTRUCTIVE HARDNESS CASE DEPTH TESTER

Situation

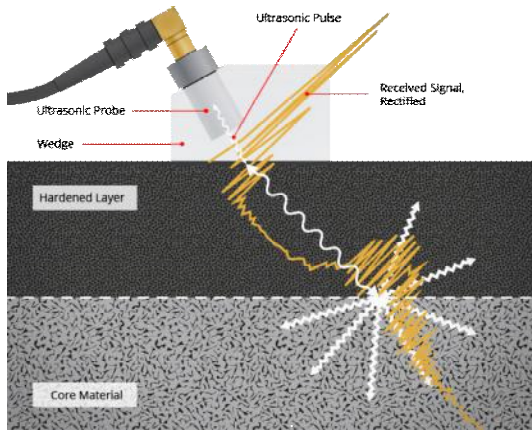
Induction Hardening improves the wear resistance and the fatigue limit of dynamically stressed parts. These mechanical properties are primarily determined by the Surface Hardness, the Hardening Depth and the Residual Stress Depth Profile. The Surface Hardness Depth (SHD) - or the thickness of the hardened layer - is essential for the quality of the Induction Hardening Process. Up to now, random samples using destructive methods were the only way to control the quality of hardening processes. Needless to say, the method was very costly and time-consuming

Solution

In collaboration with the Fraunhofer Institute for Non-Destructive Testing (IZFP), Q NET has developed an ultrasonic method for fast and non-destructive case depth testing. We reduce the effort and the costs of testing and provide fast production control to ensure consistently high quality levels. The testing system is used for optimizing production parameters, reducing downtime after inductor changes, for fast production control and for quality management.

Testing Principle

The testing principle is based on the effect that the hardened layer is almost transparent to the ultrasonic waves while the non-hardened material scatters them back. The back scattering signal is received by the testing probe system, it is processed with IZFP testing electronics and is evaluated in a fully automated way. The results that are shown indicate the depth of the hardened material (SHD). Comparisons show that the results very much comply with the results of traditional destructive methods. The method is suited for testing SHD of > 1.5 mm.



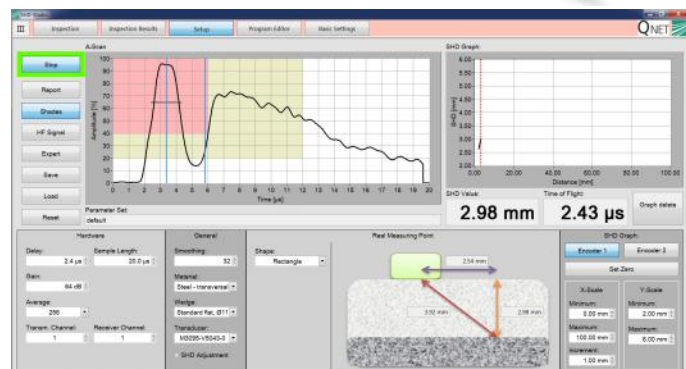
ULTRASONIC BACKSCATTER TECHNIQUE

METHOD:

The test method is based on the effect that the hardened layer is almost transparent to ultrasonic waves while the non-hardened material scatters them back. The backscattered signal received by a probe, is processed by the UT hardware and automatically evaluated by the software. The Surface Hardening Depth (SHD) is calculated and displayed by the software.

ADVANTAGES:

- ✓ Short setup times
- ✓ Simple, uncomplicated calibration
- ✓ Fast and easy scanning
- ✓ High test sensitivity
- ✓ Comfortable sensor handling
- ✓ Sensor adaptable to complex geometries
- ✓ Visualization of the current test point
- ✓ Testing at small radii and undercuts possible
- ✓ Individual report templates
- ✓ Storage of results in data base
- ✓ Analysis and reevaluation of test results
- ✓ Line scans and circumferential scans
- ✓ Automation possible



Testing Software "SHD-Studio"

- Setup mode
- Custom test programs
- Import / export of test programs
- Tools for visualization and analysis of test results
- Individual test reports

FEATURES:

- 4 ultrasonic channels
- Built for industrial use (IP65)
- Portable for mobile use
- Inspection frequencies: 5 – 25 MHz
- Measurement repeatability: ± 0.2 mm
- Testing Software "SHD-Studio"

UNIVERSAL PORTABLE INDENTATION SYSTEM

NEW TECHNOLOGY FOR LABORATORY AND IN-SITU MONITORING OF MATERIAL AGEING FROM MUBATEC

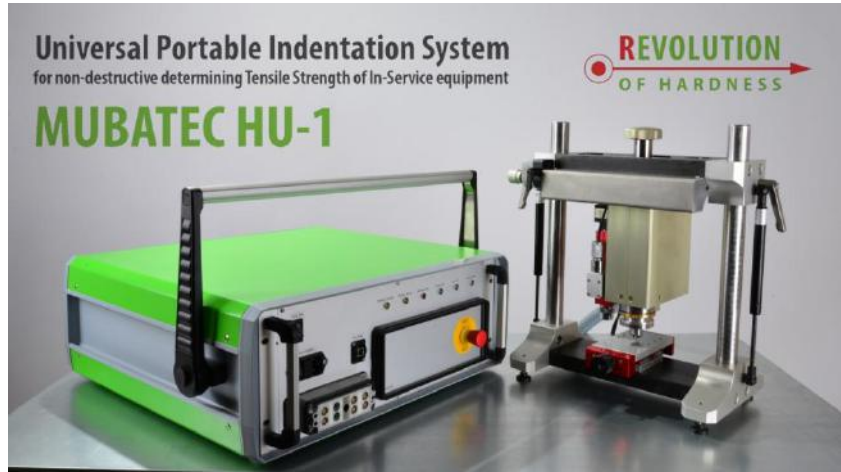
UNIVERSAL PORTABLE INDENTATION SYSTEM HU-1 FOR MEASURING HARDNESS AND DETERMINING TENSILE STRENGTH OF IN-SERVICE EQUIPMENT

Test methods:

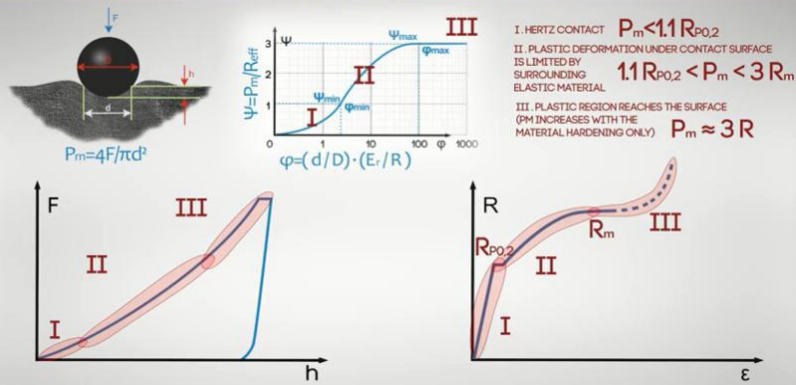
- Vickers Hardness Test
- Brinell Hardness Test
- Instrumental Indentation
- Determination of Stress-Strain diagram and Tensile Strength by National Standard of Russia GOST P56232-2014

MUBATEC HU SOFTWARE

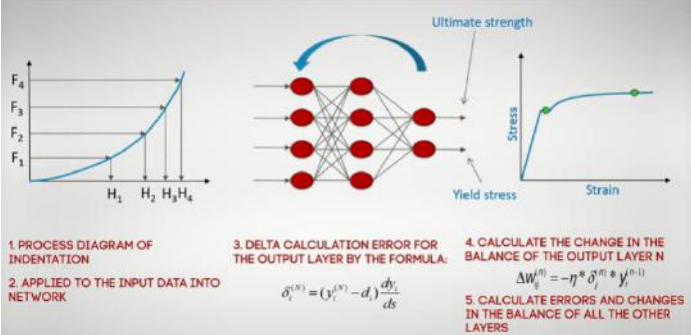
- Control and Data Collection
 - Calculation of Hardness and Mechanical Properties
- Graph:
- Indentation Force (N) Vs Indentation Depth (μm)
 - Stress (Mpa) Vs Strain (mm/mm)



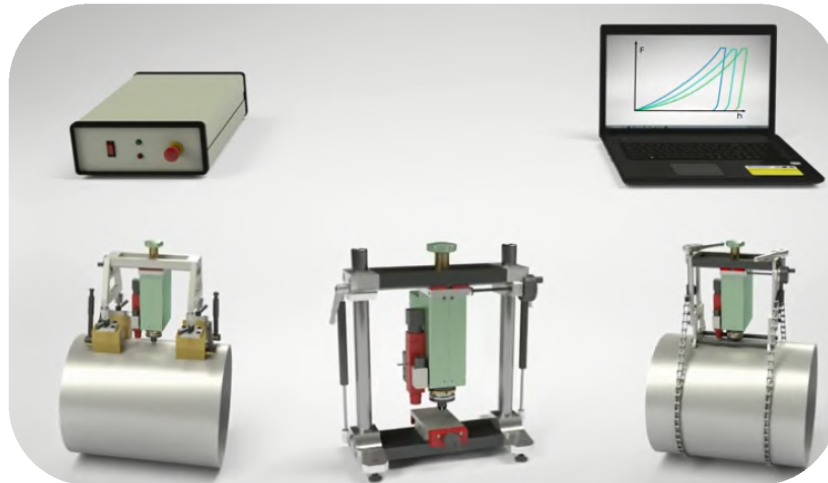
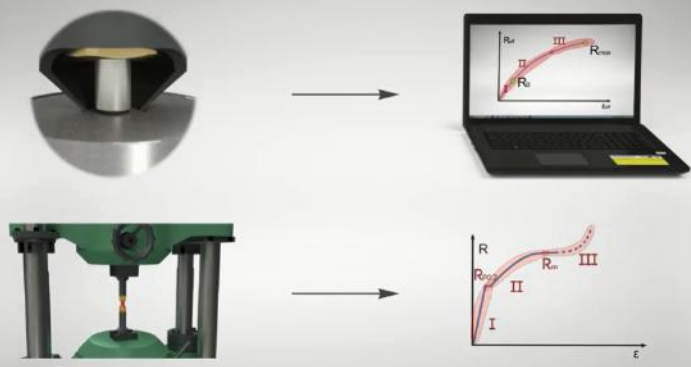
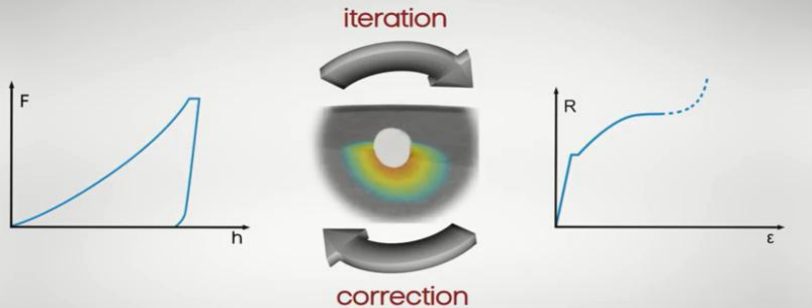
Phenomenological method



Neural Network method



Numerical Calculation method



Magnetic Frame

With magnetic shoes allows to control vessels and pipelines almost all size made from magnetic material

Laboratory Frame

Allows to make tests of samples and small sized and calibrate Portable Instrument indentation HU-1

Chain Frame

With straps allows to control small and middle-sized vessels and pipelines from non-magnetic materials.

TECHNICAL DETAILS

Test Force	2.5kN
Max. Frequency of Tests	0.5Hz
Force Measuring System	Class 1 according to DIN EN 10002-2
Nominal Force	2500N
Displacement measuring system	Class 0.2 in accordance with DIN EN 10002-4
Resolution	0.02mkm
Measuring path	4mm
Speed of positioning	0.01 - 10 mm/s
Speed of loading	0.01 - 1000N/s
Output Interface	USB 2.0 Full speed
Power supply	220 V AC
Internal Power supply	DC 24 Volt, 2Amp.
Working temperature range	10 to 45°C

ULTRASONIC THICKNESS GAUGE

Model: B6 - C Ultrasonic Thickness Gauge with A-Scan and B-Scan

Thickness measurement of products from metals and their alloys, thickness measurement under protective coatings, thickness measurement of non-metallic products (plastic, ceramics and other), which allow use of ultrasonic inspection methods.



Features:

- Colour display (TFT 2.4" 320 × 240).
- Possibility of graphic display of ECHO signal in A-scan mode and scan.
- Possibility of metal thickness measurement under coating (in ECHO-ECHO mode and PROBE-ECHO-COATING mode).
- Possibility of coating thickness measurement (in PROBE - ECHO - COATING mode).
- Automatic probe recognition.

Model: B2 – General purpose Ultrasonic Thickness Gauge)

Purpose The device is designed to measure the thickness of products from metallic and nonmetallic materials (sheets, tanks, pipes, pipelines, bridges, metal containers, transport and other structures, including highly corroded, with incrustation, etc.) during operation to determine their corrosion state of or after the manufacture of energy, tube, engineering, shipbuilding, transportation and other enterprises.



Features:

- High sensitivity, simplicity and ease of operation
- Automatic probe recognition
- Possibility of manual and automatic adjustment of gain
- Colour display.

Parameters	Model: B6 - C	Model: B2
Measuring Range	0.25 mm – 300 mm	0.5 -200 mm
Measurement Resolution	0.01 mm/0.1 mm	0.01 mm/0.1 mm
Measurement Accuracy y	$\pm(0.005T + 0.05)$ in range of 0.25 to 10.0 mm; $\pm(0.01T + 0.1)$ in range of 10.0 to 300 mm	$\pm(0.005T + 0.05)$ in range of 0.5 mm to 100.0 mm $\pm(0.01T + 0.1)$ in range of 100.0 to 200 mm
Coating Layer	2 mm (up to 20 mm Polyethylene Layer by using special Probe)	Not available
High Temperature Application	Up to 350 °C	Up to 350 °C
Probe Operating Frequency	2.25MHz/ 2.5 Mhz/5 MHz/10 MHz/15Mhz	2.5 MHz/5MHz/10MHz
Speed Of Ultrasound Propagation	1000 –9 999 m/s	1000 –9 999 m/s
Showing ultrasonic signals	A-Scan & B -Scan	Not Available
Memory (A -Scan & B -Scan)	500	Not Available
Memory Conventional Data	100000	500