



Ultrasonic Velocity Tester

Upad VX

Upad VX Series: Cast iron special ball rate detection

Upad VX Series ultrasonic non-destructive measurement of sound velocity meter will rate the ball to the limit; provide rapid rate of detection of ultrasound to determine the rate of automobile ball safety components.

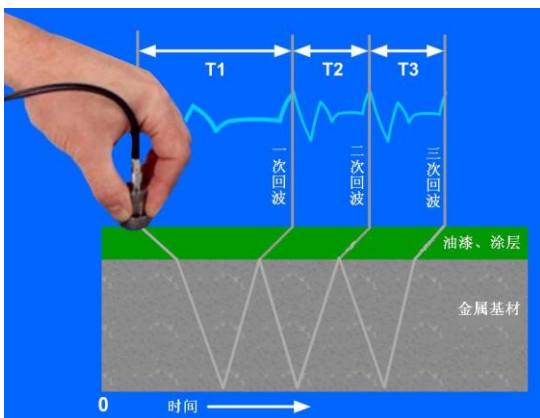
Taking into account the reliability, performance and durability, no matter where you detect, VX Series ball rate meter is your most trusted, most hard working partner. This innovative ball rate instrument will provide a superior user experience. In case there is the next test block, also applies to the creep rate measurement,

Cast iron ball suitable for measuring the rate (creep rate), in line with JB / T9219 standard; sound velocity measurement applies to metals, plastics, ceramics, glass, fiber glass and any other good ultrasonic wave conductor.



No 0	Thic 20.00
File 0	
100%	
L1	
↑ 100	Vel 5695
↓ 0	

Measuring Interface (ball rate 100%, 1)



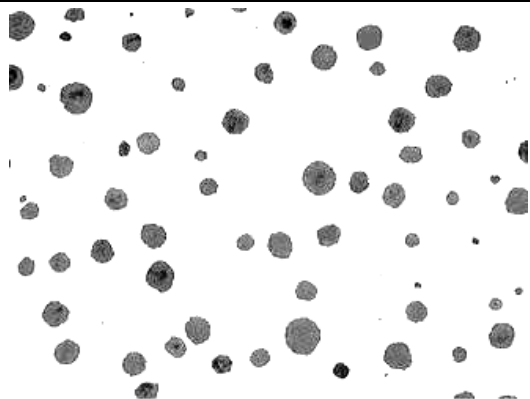
Remove the coating schematically

FEATURE

- **Non-destructive measurement of ball**
Relations with the ball using ultrasound rates, injury-free ball measurements; through the accumulation of a large number of experimental data, optimize ball rate algorithm to improve measurement accuracy.
- **Through the coating thickness measurement**
Powerful penetrating coating thickness measurement function allows you to remove the tedious grinding hard preparatory work, just a little surface treatment coating thickness measurement can be achieved easily
- **Without standard test block, the probe zero automatic calibration**
Advanced real-time automatic calibration technology probe zero, tracking the world's latest technology trends. Relieve you manually calibrate the probe zero troubles, but to solve the probe measurement errors caused by zero drift, ensuring accurate measurement value, get rid of dependence on standard test blocks.
- **U disk storage, plug and play**



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Spherical graphite, a few lumps, balls rate > 95%

USB interface can insert U disk, no drive, plug and play, to achieve the thickness of the report

- 100,000 measured values of large capacity data storage
- Statistics
Online statistics measurement process: maximum, minimum, standard deviation; Data Statistics: Maximum / minimum value, the mean, standard deviation
- Probe connection status indicator / coupling state judge
Connection with a probe status indicator; prompt signal coupling strength; measured value display solid / hollow change, coupled visual indication whether the normal measurement

FUNCTION

- Thickness value measurement accuracy: 0.1 / 0.01mm resolution
Precision measurement circuit to ensure that the entire measurement range are 0.1 / 0.01mm or 0.01 / 0.001inch resolution
- Long Standby: 200 hours, to get rid of the frequency change the battery trouble

OPERATION

- Icon-based menu structure
- Scroll bar indicator
- Large font display / conventional font display freely switch

Performance indicators	
Working Principle	Ultrasonic (Pulse - Echo / Echo - Echo)
Speed of sound	4000-6000m/s
Nodularity	Percentage: 50~100% Rating: 1-6 degree
Detection range	0.75-50mm (According to the grain and the surface condition)
Thickness measurement resolution	0.1mm (> 100mm) / 0.01mm (<100mm)
Indication accuracy	1%

Automatic zero calibration	Achieve real-time calibration of the probe zero zero through a unique automatic calibration technology
V-path correction	Auto
Probe connection status indication	Yes
Coupling state judge	Tips signal coupling strength; measured value display solid / hollow change, a visual indication of whether the normal measurement
Dimensions	165×82×30 mm
Weight	250g (Including batteries)
Work environment	Temperature: -20℃~70℃ Humidity: 5%~90%

Surrounding environment without strong vibration, no strong magnetic field, non-corrosive medium and severe dust.	
Transmit pulse	
Excitation pulse	150 Negative spikes
Receiving system	
Gain	High / Low / Auto
Frequency bandwidth	0.5-15MHz
Display	
LCD Dot matrix display	High contrast 128x64 dot matrix LCD, beautifully printed text, numbers and symbols, high brightness EL back
Measuring refresh rate	Single point measurement 5 times / sec scan mode 25 times / sec



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Measured value / alarm	Group, linear	Working Hours	
Measured value display 3 custom measured value display area, you can choose the online statistics or the speed of sound	USB Breaking the traditional storage model, thickness measurement reports stored anywhere without communication software, to get rid of the shackles of cable	Continuous work (under standard test conditions) 200 hours	
Statistics Online statistics: maximum, minimum, standard deviation Statistics: maximum / minimum value, mean, standard deviation	Input Output	Standard	
Alarm Sound and light alarm threshold	Probe connector LEMO 00 (C5) x2	main engine	Instructor 1
Storage	Communications USB	Probes	Box 1
Data set 1000	Language 中/英文	Battery	Coupling 1
Thickness values 1000/	Unit mm/inch		agent
	Battery		
	Bttery 1.5V AAA x4		

... Our Ultrasonic Velocity Tester meter

Model	Ball measurement	Automatic zero without test block	Measurement Accuracy	USB	Through the coating	Statistical functions	Storage Capacity
Upad VX	V	V	0.1/0.01mm	V	V	Online statistics / Statistics	1000Group

... Our Ultrasonic Velocity Testerprobe

Applications	Model	Frequency	Probe diameter	Measuring range (based on grains and surface conditions)	The minimum diameter
Standard Application	DA301S	5 MHz	10mm	0.75mm~20.0mm	Φ20mm×3.0mm
High attenuation measurements (coarse grain)	DA408S	2 MHz	22mm	Under 50mm	20mm

... Common mechanical properties of ductile iron

uctile matrix	Heat treatment	σ (MPa)	δ (%)	硬度 HB
Ferrite	Cast	450~550	10~20	137~193
Ferrite	Annealing	400~500	15~25	121~179
Pearlite and ferrite	Cast or annealed	500~600	5~10	147~241
Pearlite	Cast	600~750	2~4	217~269
Pearlite	Normalizing	700~950	2~5	229~302
Pearlite and ferrite Chunky	Part of austenitic normalizing	600~900	4~9	207~285
Chunky bainite + ferrite	Part austempering	900~110	2~6	HRC32~40
Lower bainite	Austempering	1200~1500	1~3	HRC38~50
Sorbite	Quenching, 550-600 °C tempering	900~1200	1~5	HRC32~43
Tempered martensite tempering sorbite	Quenching, 360-420 °C tempering	1000~1300	0.5~1	HRC45~50



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Tempered martensite	Quenching, 200-250 °C tempering	700~900		HRC55~61
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