



Ultraschall- Geschwindigkeitstester Upad VX

Messung der Schallgeschwindigkeit, des Kugelgraphits und der Materialdicke mit Upad VX

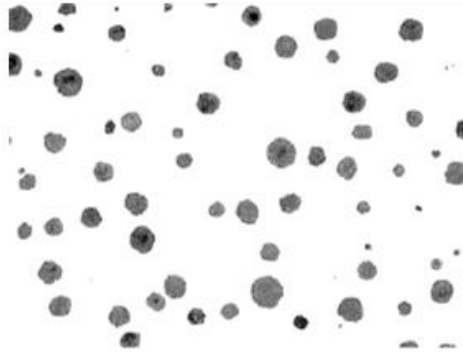
Upad VX bietet eine zerstörungsfreie Werkstoffprüfung für drei verschiedene Anwendungen. Dabei bietet es zahlreiche Vorteile:

- Zum einen ermöglicht es die **Bestimmung der Schallgeschwindigkeit** für Metalle, Kunststoffe, Keramiken, Glas, Glas- und Kohlenfasermaterialien und andere Materialien mit automatischer Kalibrierung ohne notwendigen Testblock. Messbereich 4000 bis 6000 m/s.
- Zudem ist mit dem Gerät die **Bestimmung der Kugelgraphitrate** bei Gussarten mit Kugelgraphit möglich. Die mit der Kugelrate verbundene Schallgeschwindigkeit wird automatisch in zahllosen Messungen erfasst und über einen Algorithmus die Kugelrate im Grauguss bestimmt. Messbereich 0,75 - 50 mm; Kugelrate 50 – 100%, Genauigkeit 1 %.
- **Bestimmung der Materialdicken** unter Beschichtungen. Durch den starken Ultraschall sind keine vorbereitenden Arbeiten durch Anschleifen etc. zur Messung der Materialdicke unter der Beschichtung notwendig. Genauigkeit 0,01 mm (<100 mm); 0,1 mm (>100 mm).

Weitere Vorteile:

- Ultraschall Arbeitsmethode: Puls - Echo, Echo - Echo
- Speicherung des Daten auf einem USB-Stick
- Zahlreiche online Statistiken
- Anzeige der Anschlussqualität
- Anzeige der Koppelqualität
- Hochpräzise Dickenmessung
- Batteriestandzeit: 200 Stunden
- Automatische 0-Kalibrierung
- LCD Display 128 x 64
- Gewicht 250 g





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℃ |

| | |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 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 / |

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measured value / alarm | Group, linear | Working Hours Continuous work (under standard test conditions) 200 hours Standard main Instructi engine 1 ons 1 Probes 1 Box 1 Battery 1 Coupling 1 agent |
| 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 | |
| Statistics Online statistics: maximum, minimum, standard deviation Statistics: maximum / minimum value, mean, standard deviation | Input Output | |
| Alarm Sound and light alarm threshold | Probe connector LEMO 00 (C5) x2 | |
| Storage | Communications USB | |
| Data set 1000 | Language 中/英文 | |
| Thickness values 1000/ | Unit mm/inch | |
| | 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 |
| Tempered martensite | Quenching, 200-250 °C tempering | 700~900 | | HRC55~61 |