

# VEQTER **VORSA**

VEQTER Ultrasound Residual Stress Analyser



## A NON-DESTRUCTIVE, STRESS MEASUREMENT DEVICE FOR QUALITY ASSURANCE AND PLANT HEALTH MONITORING.

- Non-destructive
- Applicable to most engineering materials
- Easy to use
- Sub-surface measurements: 0.5 – 6mm deep
- Fast results: 10s/point
- Ultra-portable: 1 briefcase weighing < 10kg



# APPLICATIONS:

- > "Hot-spot" identification, e.g. weld repairs, machine burn
- > Incident prevention, e.g. uneven loads, stress concentrations
- > Manufacturing process quality, e.g. PWHT, autofrettage, repairs
- > Remote measurements, e.g. pipeline pigs
- > Residual stress mapping
- > Static and dynamic loads, e.g. bridge loads
- > Surface treatment quality, e.g. shot-peening, hardening
- > Timelapse measurements, e.g. through life inspections



Flat surface probe head



Pipe outer surface probe head



Pipe inner surface probe head



Biaxial, flat surface probe head

## VURSA Specifications

Ultrasound wave type	Critically refracted longitudinal (Lcr)
Uniaxial probe dimensions & weight (Diamond type)	58mm x 17mm x 32mm, 50g
Control box dimensions & weight	325mm x 260mm x 115mm, 5kg
Range of gauge lengths	5mm – 40mm
Range of gauge widths	3mm – 10mm
Range of depths measured	0.5mm – 6mm
Time per measurement	< 10 s/point
Software	VURSAsoft – adaptable to requirements
Power requirements	100 - 240V, 1.3A max, 50/60Hz
Options:	<p>Probe heads:</p> <ul style="list-style-type: none"> <li>Arrays,</li> <li>Biaxial stress measurement,</li> <li>Depth specific,</li> <li>Material specific,</li> <li>Shaped to suit component,</li> <li>Waterproof.</li> </ul> <p>Probe applicator:</p> <ul style="list-style-type: none"> <li>Magnetic, Suction Cup, Clamp, Adhesive,</li> <li>XYZ Table, Robotic Arm.</li> </ul>