

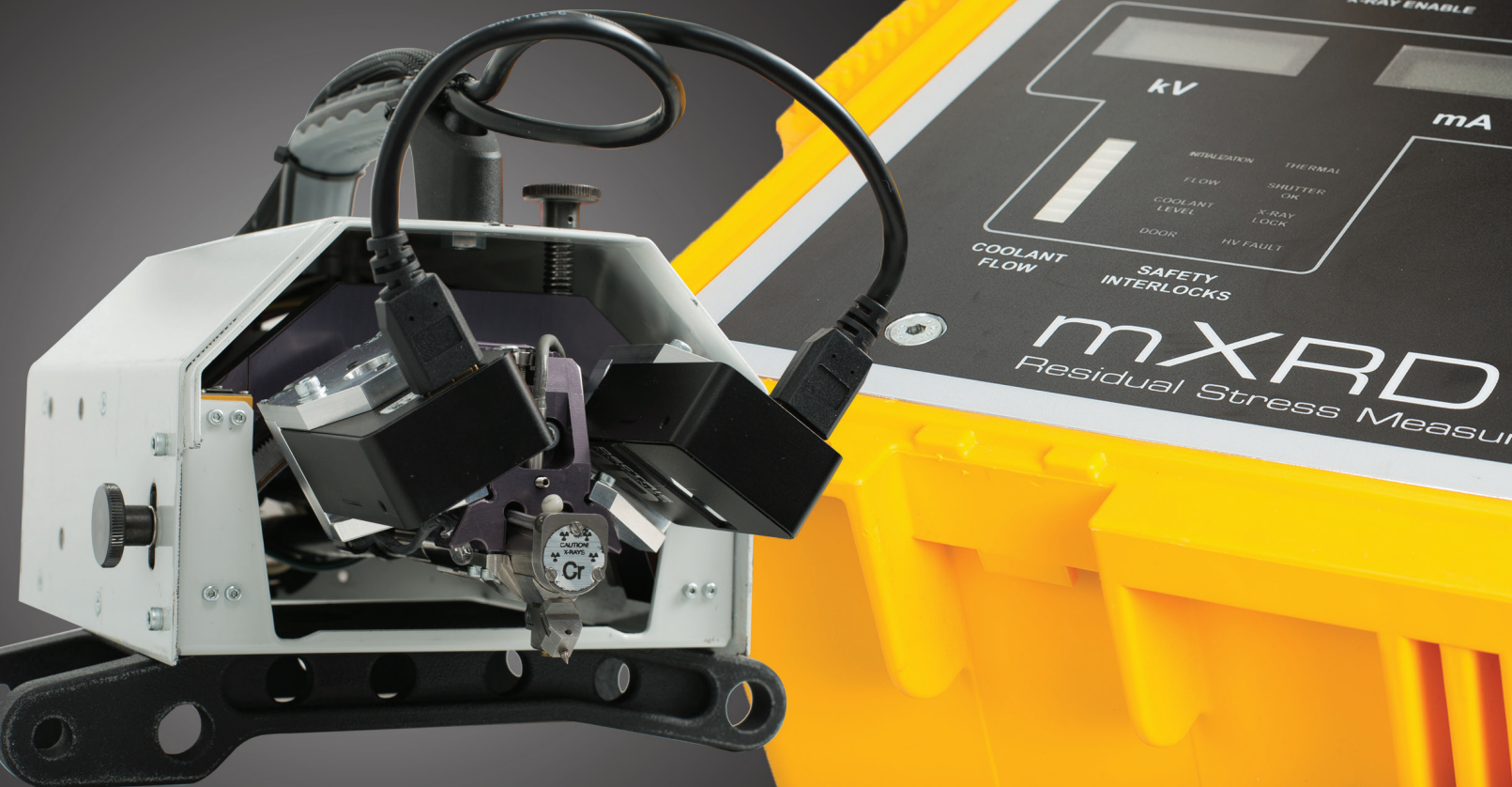
# mXRD<sup>®</sup>

Ultra-Portable X-ray Diffraction  
Residual Stress Measurement System



## TECHNOLOGY THAT DELIVERS ACCURATE RESULTS

- Dual x-ray detectors and a full range goniometer, for  $\sin^2\Psi$  multiple exposure measurement, ensuring full compliance with ASTM E915, EN15305, and JSMS-SD-10
- Collect data from both positive and negative psi tilts to ensure correct shear stress evaluation
- User replaceable x-ray tubes (made by PROTO) to enable measurement on a wide variety of materials.
- Highly accurate and fast results
- System packs into one convenient travel case

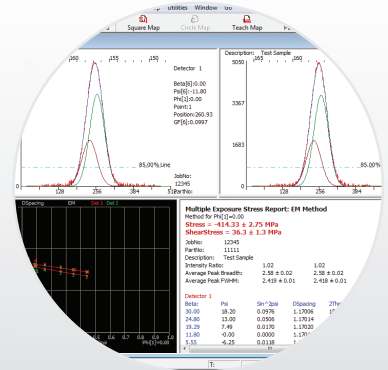
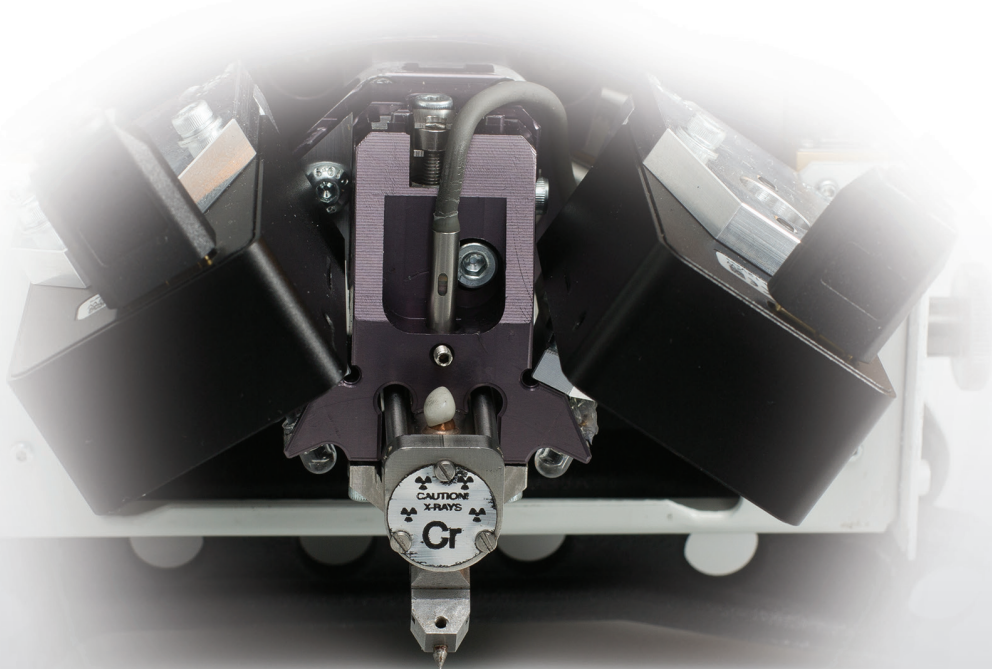


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## FEATURES & CAPABILITIES



**HIGH-SPEED PHOTON COUNTING DETECTOR.** Direct detection of x-rays using silicon strip technology



**PROTO XRDWIN 2.0.** An easy to use comprehensive Windows<sup>®</sup> based data collection and stress analysis package. Features include: linear and elliptical regression, Dolle-Hauk, and triaxial methods.



mXRD SPECIFICATIONS	
Head Dimensions (LxWxH)	260 x 160 x 155 mm
Head Weight	2.6 kg
Power Unit Dimensions (LxWxH)	625 x 500 x 300 mm
Power Unit Weight	18 kg
X-ray Beam Apertures	1.0 mm, 1.5 mm
X-ray Tube Power	40 Watts (20 kV / 2mA)
X-ray Tubes	Ti, V, Cr, Mn, Fe, Co, Cu
X-ray Detectors	Photon Counting Array
Detector Width (2θ)	29.8°
2θ Range	146.8° - 165.2°
Software	PROTO XRDWIN <sup>®</sup>
Power Requirements	90 - 240 VAC, 50/60 Hz
System Compliance	ANSI N43.2, UL, CSA, CE, ASTM E915, ASTM E2860, EN15305, and JSMS-SD-10-05
Options	Magnetic attachment feet, Laboratory stand, Enclosure, Safety Shields, X,Y mapping

PROTO Manufacturing engages in continuous research and development, therefore specifications in this publication are subject to change. Please call for details. Various items and methods in this brochure are covered by patents or patents pending.