

Uses X-ray diffraction to perform non-contact, non-destructive measurements

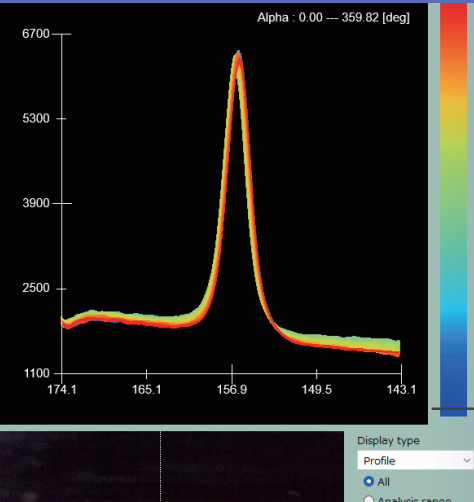
Equipped with a 2D detector, which captures the full Debye-Scherrer ring and ensures more precise measurements

Easy to set up

The  $\mu$ -X360J features an LCD monitor, allowing you to easily see and adjust your sample



Primary benefits of  $\mu$ -X360J



■ R. Stress

$\sigma_x$  -436 MPa  
Dev. 5 MPa

$\tau_{xy}$  Short measurement time  
Measures samples quickly compared to other equipment  
Dev. Measures ferritic steel samples in ~40 seconds

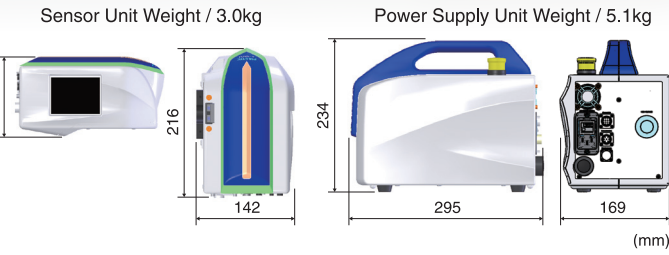
■ FWHM

Ave. 3.20 deg  
Min. 3.15 deg

Lower X-ray power output to ensure operator safety



Size - Weight



Specification

Measurement items	Residual stress, FWHM(included with software), Retained austenite(Optional)
Measurement method	cosa method(Single-incident angle method)
Collimator size	Standard: $\phi$ 1.0mm(Irradiation size Approx. $\phi$ 2mm)
X-ray tube cooling method	Air cooling
Power	AC100- 240V, 50/60Hz, 130W

Countries Using Pulstec's  $\mu$ -X360 Series



**PULSTEC** PULSTEC INDUSTRIAL CO.,LTD.  
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MEMO

※The specification in this document may change without prior notice.

Portable X-ray residual stress analyzer  
 $\mu$ -X360J



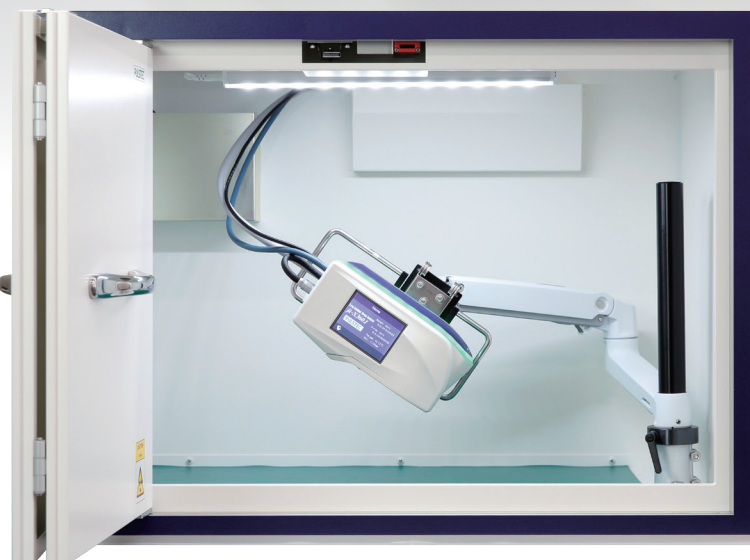
Easy measurements for anyone, anywhere!





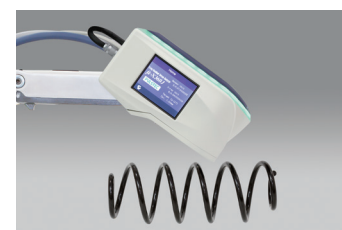
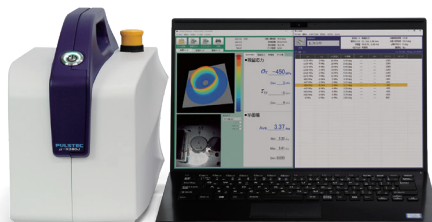
# Features

Safety cabinet with interlock  
Size: W800xD600xH600mm



Anyone

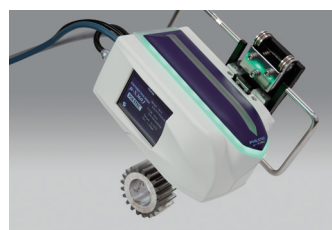
The safety cabinet prevents X-ray leakage



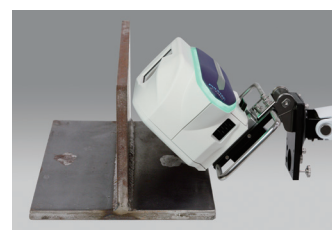
Spring



Crankshaft



Gear

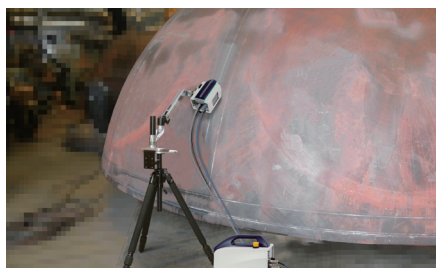


Fillet weld

Anywhere

Non-contact, non-destructive measurement for large structures

Tripod・Flexible arm  
Used for on-site measurements  
Flexible positioning



Check the annealing effects of welds in oil tanks



Check the residual stress in a rolled component after heat treatment



Bridge maintenance

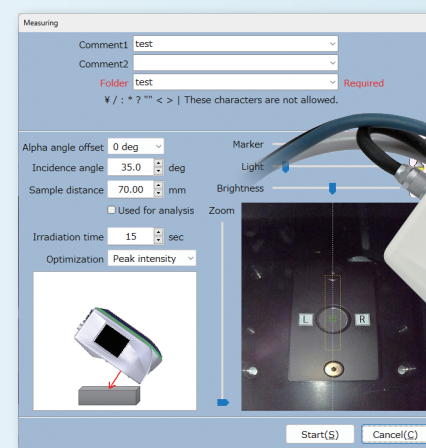
On-site measurements are possible

Compact, lightweight and highly portable!



Easy-to-use software minimal training needed

Anyone can operate after short training!



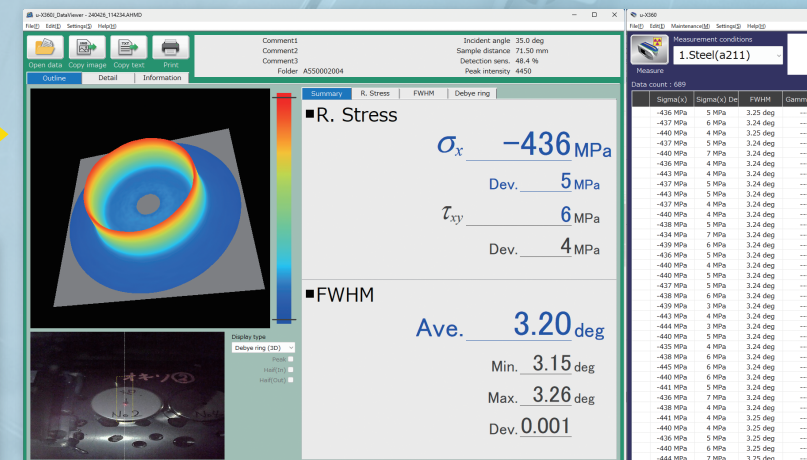
STEP.1 Set the sample

Use the integrated angle gauge to adjust the X-ray incident angle  
Use the CCD camera display to adjust the sample's position and distance



STEP.2 Start the measurement

X-ray is ON  
After a few moments, the results are displayed



STEP.3 Read the results

The software will display residual stress results, the Debye-Scherrer ring, a camera image, and FWHM

## Additional benefits & features of $\mu$ -X360J

We offer various, optional accessories for different measurement applications

Can select according to your specific application!

X-ray unit for exchange

Pulstec offers various X-ray tubes based on sample material  
Available tube options include Cr, V, Mn, Cu, and Co



Collimator

Used to change the X-ray spot size without any special tools

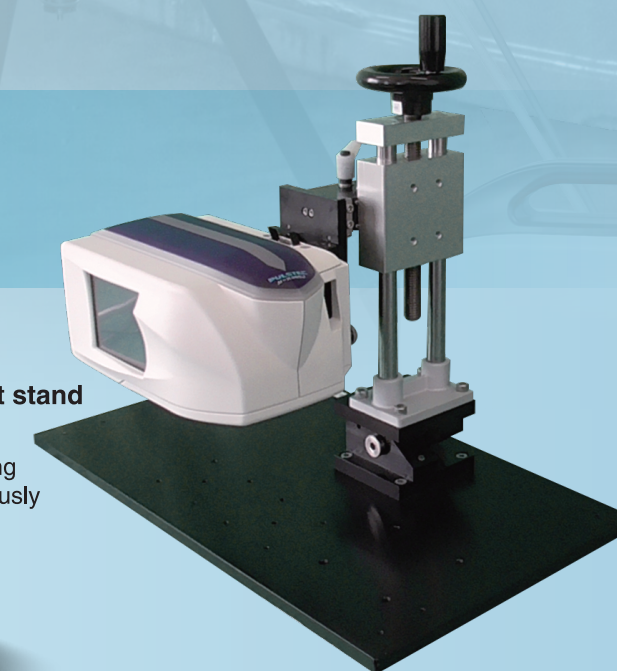


Electrochemical polisher

Used for layer removal on depth profile measurements

Height adjustment stand for the sensor

Helps when measuring flat samples continuously



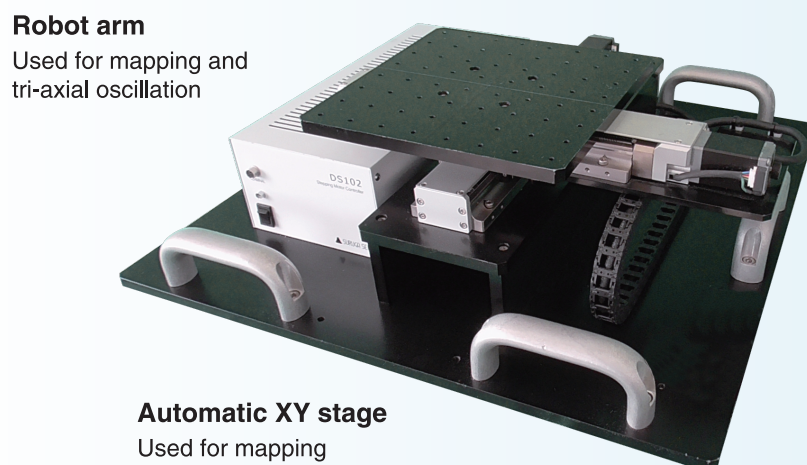
Reference specimens for residual stress & retained austenite

Used for checking measurement accuracy



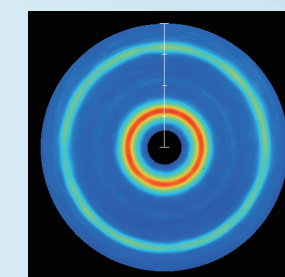
Hand-carry case

This impact-resistant carry-case protects the unit and flexible arm during transport



Automatic XY stage

Used for mapping



Retained austenite measurement

Optional software function that measures the percentage of retained austenite in the sample

