

Non-Destructive Testing

Corrosion Under Insulation Inspections

Assuring system integrity, longevity
and product delivery

[intertek.com/cui-screening](https://www.intertek.com/cui-screening)



Inspecting large amount of piping in a fraction of the time by using advanced live radiographic screening tool to detect Corrosion Under Insulation (CUI)



Our unique non-intrusive screening technique can be applied while being in operation and without the need of insulation removal minimising the disruption of your production and operating schedule.

About our CUI Inspections

Our CUI Inspections use a true non-destructive testing method that uses live video output for real-time radiographic inspection of insulated piping for indications of anomalies like corrosion, moisture, ice, build-ups and more.

Intertek uses OpenVision in combination with our self-developed, support trolleys.

This allows us to inspect long pipelines effectively with easy access and rope access on both vertical and horizontal pipes as well as bends.

In addition, the portability of equipment means that we can inspect and test your equipment and assets that are difficult to access or are in complex shapes and sizes.

With the CUI team a part of the In-Service Inspection Team and using the innovative OpenVision technology, gives the advantage of screening the pipeline and pinpointing areas of interest.

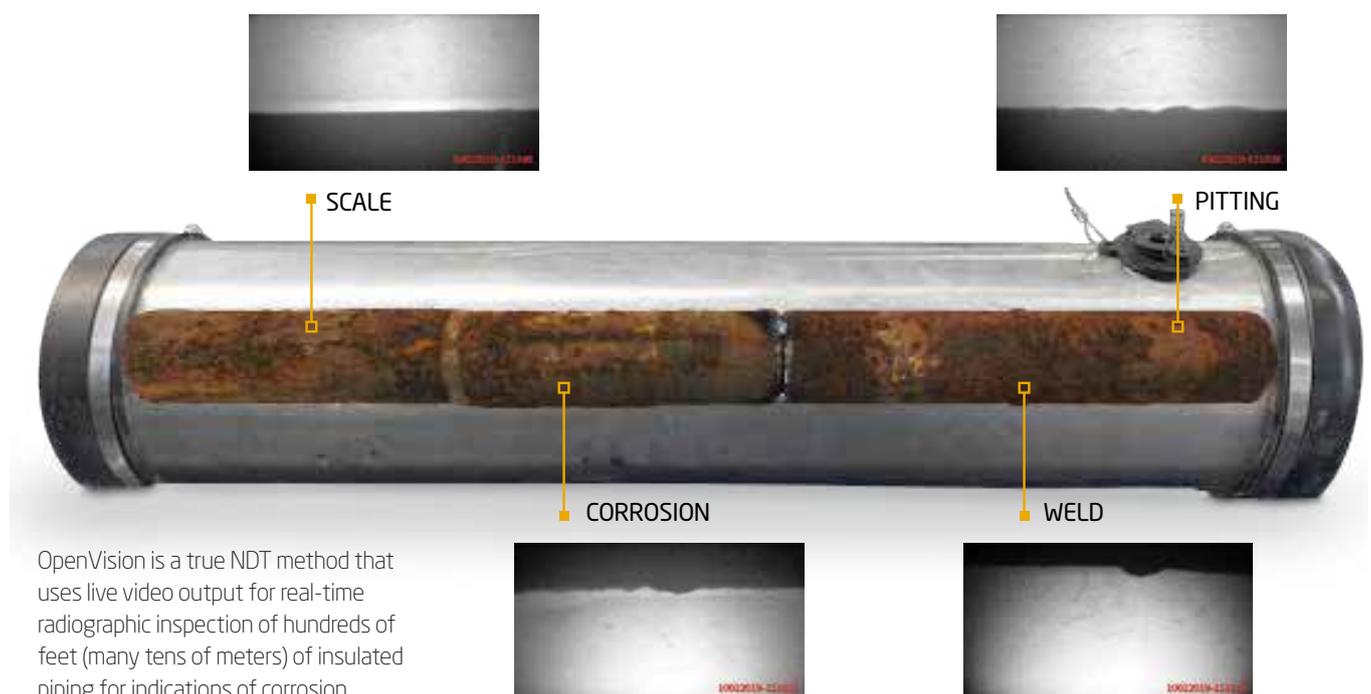
This helps the asset owner decrease the time and cost for scaffolding and changing insulation and cladding while increasing the safety on the asset and reducing the risk profile on the asset.

Each Intertek CUI Inspection Team consists of two NDT RT qualified inspectors who also have additional training from the equipment manufacture.

The Intertek CUI procedure has been developed and revised throughout our 15 years of experience with this technology and built on API and DNV best practices for RBI on different assets.

Benefits

- **Captures Defects** – detects defects as small as 250 micron on insulated piping
- **Safety** – eliminates work in confined spaces and reduces exposure of workers to hazardous environments
- **Faster** – receives inspection results instantaneously allowing for quicker decision making
- **Cost-Effective** – minimises asset downtime with significant savings
- **Minimal Preparation** – requires no removal of insulation, surface paint, coating or jacketing making our service very suitable for inspecting painted structures, parts and components
- **Equipment Highly Portable** – allows sites to become highly accessible
- **Imagery** – records high-resolution still images and videos
- **Wireless & Hands Free Viewing** – shows data in real-time via both viewing options



OpenVision is a true NDT method that uses live video output for real-time radiographic inspection of hundreds of feet (many tens of meters) of insulated piping for indications of corrosion.



Intertek's methodology, OpenVision, highlighted within HOIS/OGTC Guidelines for In-Situ Inspection of Corrosion Under Insulation (CUI)

SPECIFICATIONS

WEIGHT

C-Arm	15 lb (6.8 kg)
Monitor + Handle	2 lb (0.9 kg)
Shipping Weight	50 lb (23 kg)

STARTUP/ SHUTDOWN

Startup	~30 sec
Shutdown	~5 sec

TEMPERATURE

Operating	-20 to 120 °F (-29 to 49 °C)
Storage	-20 to 140 °F (-29 to 60 °C)

X-RAY OUTPUT AT 12 in (30.5 cm)

	Voltage kV	Current mA	Output R/hr (Sv/hr)
Low	40	0.300	50 (0.5)
Medium	55	0.218	80 (0.8)
High	70	0.171	95 (0.95)

IMAGE RESOLUTION

Anomalies down to 250 µm/ 0.01 in

BATTERY LIFE (5 Ah Battery)

3 Hours Continuous Duty Cycle
8 Hours Standby

DISPLAY OPTIONS

HDMI Monitor: 7 in (17.5 cm) LED; 1920 × 1200
WiFi Tablet: 10 in (2.4 cm); 1400 × 900; 2.4 GHz
PirateEye: HUD; 854 × 480

RECORDING CAPABILITIES

Internal: 128 GB
WiFi Tablet: 128 GB
Resolution: 1280 × 720
File Transfer: USB

STANDARDS

ANSI/HPS N43.5 (2005)
ISTA 3A Over the Road Vibration Standard
MIL-STD-810, Method 514, Annex C, Cat 4
REACH/ROHS
FDA Accession #: 1680071-000

