



PECAT[®]



Pipeline Cleanliness Assessment Tool

PECAT[®] :

PECAT[®] is a pigging based inspection tool developed to primarily measure the cleanliness of pipelines particularly prior to high resolution inline inspection and the decommissioning of pipelines.

Utilising state of the art unique sensor and data logging technology (patent applied for) the tool not only measures location and quantity of debris in the line, but can also record the other parameters, such as ovality (caliper), temperature, differential pressure, all in the same pigging run.

PECAT[®] – Why it is needed:

- > To periodically check that lines are being kept clean.
- > To ensure that residual pipeline debris does not invalidate an inline inspection.
- > To ensure pipeline debris does not prevent effective chemical treatment of pipelines.
- > To check prior to decommissioning that a pipeline is free of debris which might cause pollution to the environment.

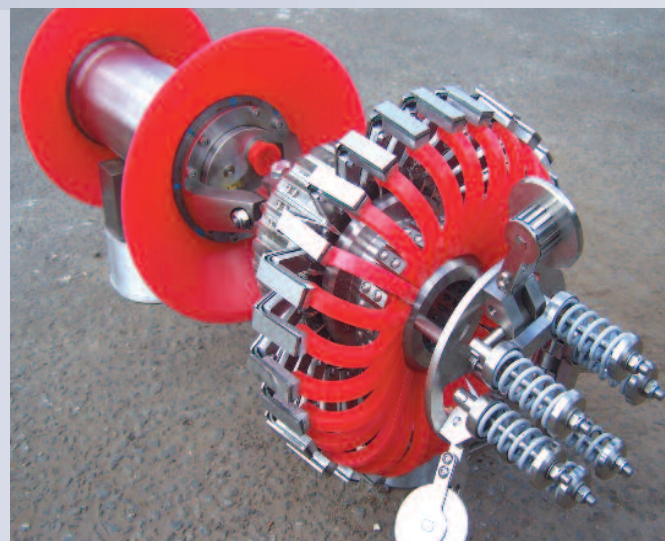
PECAT[®] assesses whether the pipeline has been effectively cleaned and identifies the location and quantity of residual debris in the pipeline.

Benefits of PECAT[®] :

- > Incorporates a caliper system and additional process data logging capability.
- > Makes assessment of cleaning programmes simpler and more effective.
- > Can measure residual debris of 1mm or less.
- > Helps prevent ineffective pipeline inspection programmes by establishing the actual cleanliness of the pipeline.
- > Suitable also for assessment of residual debris during chemical treatment programmes & pipeline decommissioning.
- > Cost effective and accurate pipeline pre-inspection capability.



PECAT[®] - Front view



PECAT[®] - Sensor spider and odometer assembly

PIPELINE ENGINEERING

"Engineered Solutions for the Pipeline Pigging and Flow Assurance Industry"





Technical Specification

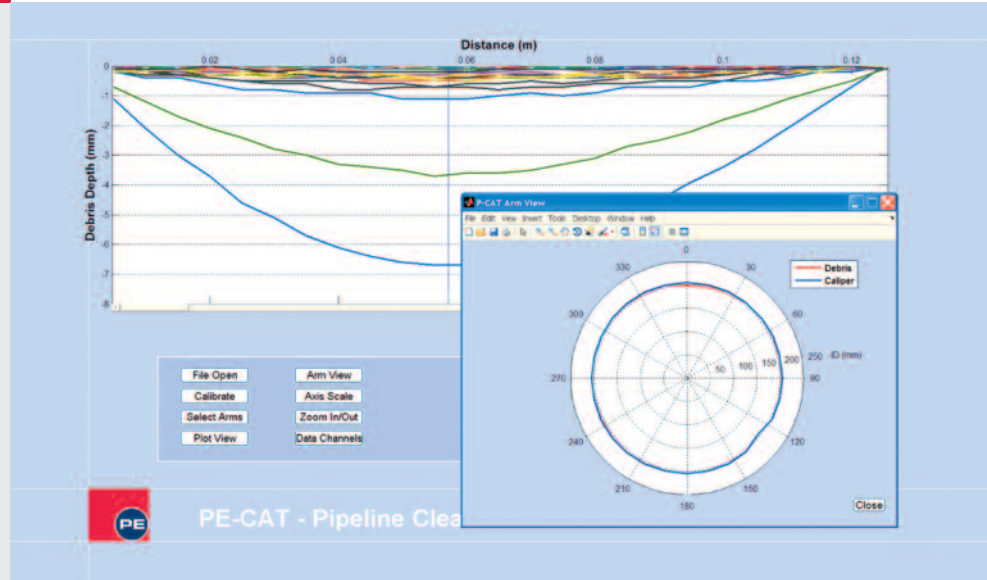
Measurement Accuracy:	$\pm 0.5\text{mm}^1$
Axial Resolution:	5mm
Clock Position:	$\pm 10^\circ$
Line Sizes:	10" – 60"
Velocity Range:	0 – 7m/s
Range:	24 hours ²
Minimum Bend Radius:	1.5D
Crash Bore:	80% OD
Temperature Range:	0 – 70°C
Pressure Rating:	150 bar ³
ATEX Compliant:	Yes
Feature Location:	$\pm 35\text{mm}^4$

¹ For both debris and caliper measurements

² Extended range available on request

³ Extended pressure ranges available on request

⁴ From nearest weld



Data analysis

What PECAT® Measures and Logs

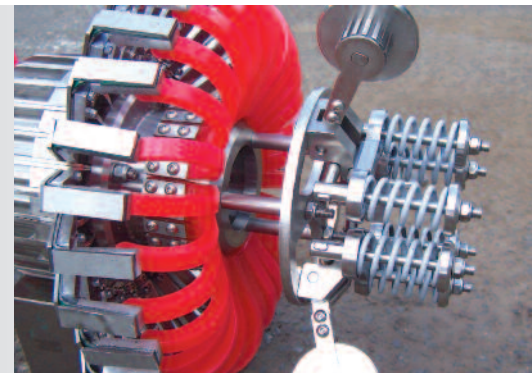
- > Amount and location of wax, scale and other debris build up in pipelines.
- > Changes in pipe diameter.
- > Information on dents, ovality etc.
- > Temperature profile.
- > Differential pressures.
- > Other measurable parameters.

PECAT® - Operation and Data Analysis:

PE has a team of service engineers who manage and carry out all site operations. PECAT® service support includes:

- > Assessment of pipeline suitability for PECAT® system.
- > Deployment and retrieval of PECAT® system.
- > Data retrieval and analysis.
- > Full report of findings.

PE provides advice on all pipeline cleaning, pipeline pigging and flow assurance activities.



PECAT® - Sensor spider and odometer assembly



PECAT® being positioned in pipeline

PL/PECAT/01

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