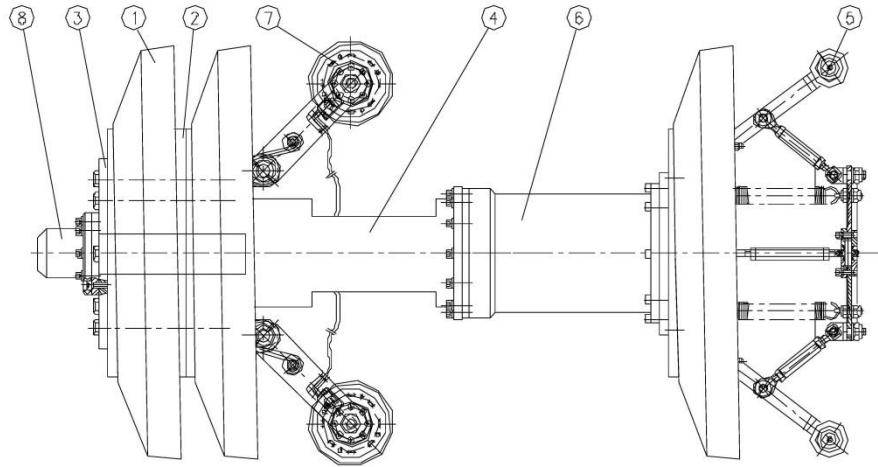# 20" PS ENGINEERING CALIPER TOOL

SPECIFICATION SHEET

1 – Cup , 2 – Cup Spacers , 3 – Flange , 4 – Pig Body , 5 – SC Spider, 6 – Recorder, 7 – Odometer, 8 – Pig Locator

DATA SETS

Sensing Fingers wiht Double Wheels	18
Gyros	1
Odometer Channels	2

OPERATIONAL

Products	All Liquids and Gases
Max. Pressure	120 bar (1740.45 psig)
Temp. Range	-10° to 80° C
Recommended Tool Speed*	0.1 to 3 m/s
Allowable Tool Speed	0.1 to 10 m/s
Minimum Back Pressure	3 bar (44 psig)

DIMENSIONS

Length**	approx. 1060 mm (41.73 in)
Weight	approx. 140 kg (308.65 lbs)

The below mentioned Featurens/Indications will be loceted (longitudinally) and identified the PS Engineering Caliper Tool.

- T-Pieces
- Valves
- Bends
- Girth Welds
- Dents
- Ovality
- Internal Diameter Changes

Tool Attributes

Battery Capacity	700 hrs
Active Range (Max. Distance)	600 km
Odometer Resolution	47 mm
Modules	1

PIPELINE GEOMETRY REQUIREMENTS

Minimum Local Bore	25% of pipe O.D.
Min. Bend Radius	1.5D for 90° Bend
Min. ID in Straight Pipe	381 mm

Accuracy of Measurement

Accuracy of Distance information	≤ 0.2mm from ref. Girth Weld or 0.1% of total distance
Accuracy of Internal Dia. Changes	+/- 0.2%
Accuracy of Defect Measurement	+/- 0.2%
Axial Sampling	47 mm

All given percentage values are related to the outer diameter (OD). The above mentioned accuracies depend on acceptable run conditions:
- Constant speed during inspection
- Clean pipe
- Pipebook given to PS Engineering evaluation department

When driving the tool with compressed air, the pipeline must have a back pressure of at least 5 bars / 0,5 MPA (depending on condition of the pipeline)

* At tool speeds above 3 m/s, the girth weld indications become inaccurate due to dynamic overreaction of the sensing fingers. For best results we recommend tool speeds between 0.1 and 1.5 m/s.

** For shorter lengths contact PS Engineering

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