

Pipe Section Scan

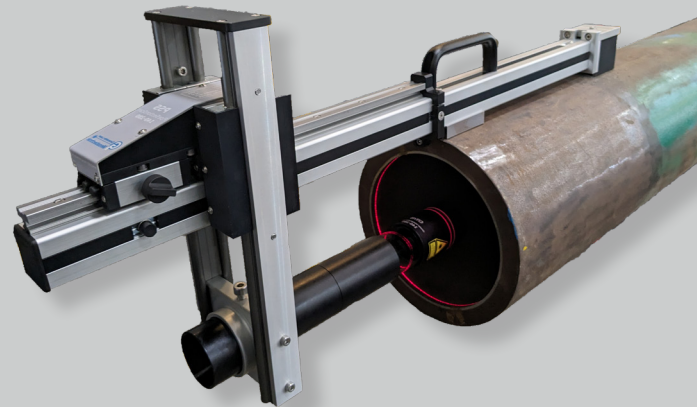
2D-evaluation of pipe-endings

The system measures the inner cross section contour of the pipe end. Pipe Section Scan includes the sensor and also the mechanical component to position the CiTriS quick and precise.

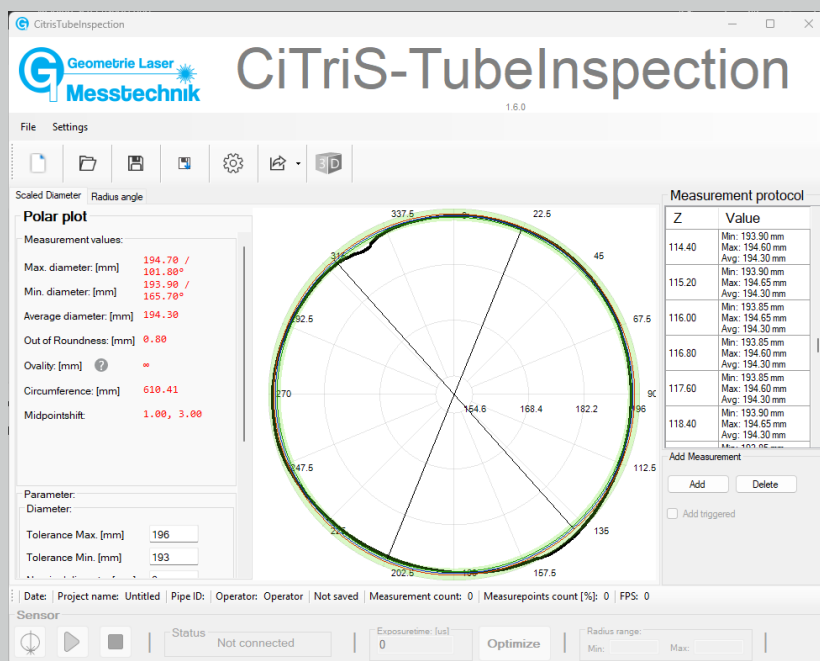
The included software calculates the full 2D-profil and all parameters, which are used to display tolerances and evaluate the calibration process of pipes.

Functions

- ✓ Optical measurement system for pipes
- ✓ Exactly internal profil
- ✓ Evaluation of calibration process
- ✓ Fast, easy to handle and precise
- ✓ Measure time < 1 sec.
- ✓ Non contact measurement
- ✓ Industrie 4.0



CiTriS tube measurement



Results

- 2D contour
- Radius of 3600 angle positions
- Diameter of 1800 angle positions
- Max/min/avg diameter
- Ovality
- Circumference
- Tolerance adjustment
- Ideal surface enlargement
- Center correction
- CSV-report

2D CiTriS Tube-Inspect, shows the 2D measured section

Pipe Section Scan

2D-evaluation of pipe-endings

Specification:

| | | | | | |
|---|--|---------|---------|---------|---------|
| Typ of sensor | CiTriS - Circular Triangulation Sensor | | | | |
| Laser class | II M, (visible) | | | | |
| CiTriS models (1 sensor included): | 60-140 | 110-120 | 180-340 | 300-620 | 550-960 |
| Measurement range \varnothing ID [mm] | 60-140 | 110-120 | 180-340 | 300-620 | 550-960 |
| Data interface / Power supply | USB 3.0 | | | | |
| Software | 2D CiTriS-Tube Inspect | | | | |
| Scanning Time | <1 sec | | | | |
| Operating temperature | 10–40 °C | | | | |
| System calibration | ISO9001 EN (calibrated) | | | | |
| EC conformity declaration | CE certified | | | | |

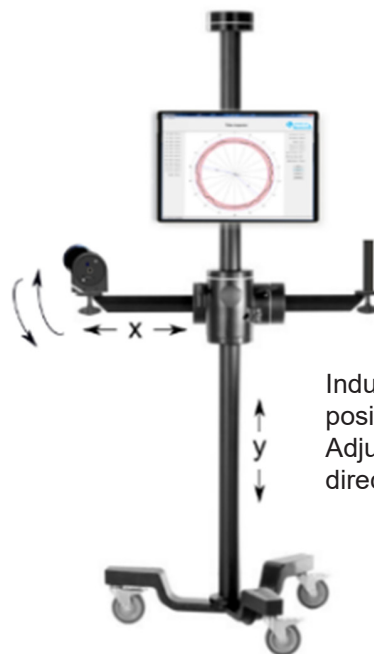
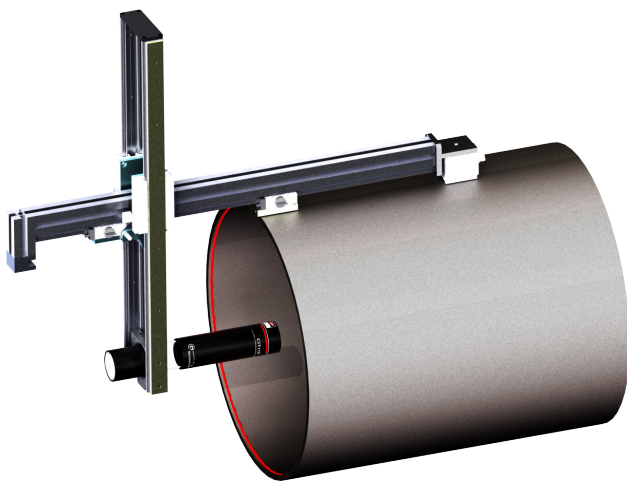
Mechanical mounting options:

CiTriS tripod:

- ✓ fast positioning on tube endings
- ✓ customized CiTriS mount
- ✓ 2-axis linear adjustment
- ✓ Tablet with holder

CiTriS stand:

- ✓ internal tube positioning
- ✓ customized CiTriS mount
- ✓ adjustment to different tube diameter
- ✓ mounted screen



Industrial stand for positioning of CiTriS. Adjustment on x- and y-direction pipe ending.