Pipe inspection systems
Typical setup
Specifications

Weld types
✓ Longitudinal welds
✓ Spiral welds
✓ Circumferential/planar welds

Dimensions
Pipe length : up to 20 m
Diameter : 10“ – 60“
Wall thickness : 5mm-75 mm
Material : (Stainless) steel
Typical setup
Typical setup
Standard Testcycle

Start of testcycle

✓ Pipe moves in
✓ Parallel pipe length measurement
✓ Doors close automatically

Test position reached

✓ Step-wise inspection of all welds
✓ Images stored for every position
✓ Optional: Faulty positions are marked on the tube

End of Testcycle

✓ Doors open
✓ Pipe moves out
Mechanical options

Moving Pipe carrier:
- Detector and tube have a fixed position
  + Lower costs
- Longer bunker (2* max tube length)

Fixed pipe position:
- Detector and tube have a variable and synchronized position
  + Higher costs due to complex mechanics
- Short bunker (1* max tube length)

→ Choice depending on space and budget considerations!
Positioning control and safety indicators

Pipe meta data for automatic image overlay
**XplusPipe Software**

- **X-ray control**
- **Collision detection**
- **System status**
Inspection Standards

- Meets international standards (EN/ISO 17636-2-2013, ASTM etc.)
- Class B is fullfilled (proof trough IQI)
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- Meets international standards (EN/ISO 17636-2-2013, ASTM etc.)
- Class B is fulfilled (proof through IQI)
X-ray images
The X-ray setup

The wall thickness range is influencing the choice of the detector and the X-ray setup:

| Max. Wall thickness | → | Energy (Max. kV) |
| Min. Wall thickness | → | Detector resolution (pixel size) |
| Min diameter of pipe | → | Fitting of the detector for single wall |
## References

<table>
<thead>
<tr>
<th>Company</th>
<th>Country</th>
<th>Material</th>
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<tbody>
<tr>
<td>Sosta</td>
<td>Germany</td>
<td>Stainless Steel</td>
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<tr>
<td>Butting</td>
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<tr>
<td>Corinth Pipe Works</td>
<td>Greece</td>
<td>Steel</td>
</tr>
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<td>Germany, South Korea, Malaysia, Saudi Arabia</td>
<td>Steel</td>
</tr>
<tr>
<td>PFW</td>
<td>Germany</td>
<td>Titanium</td>
</tr>
</tbody>
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Thanks for your attention!