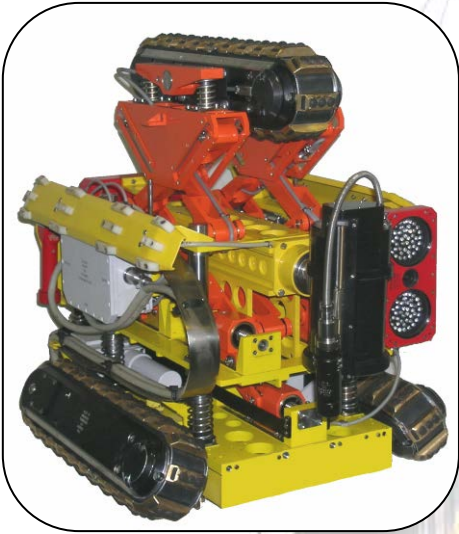




## Pipeline In-Line Inspection Through Unpiggable Sections

Since 2004, Diakont has been trusted by the global energy industry to verify pipeline integrity using the RODIS inspection tool. The crawler system transverses a wide range of pipe diameters, climbs vertical sections, and transverses curves, half-bends, T-bends, and stop valves. Multiple onboard NDT tools perform EMAT inspection of the entire pipe volume, and laser weld inspection.



Diakont's utilizes the RODIS system for In-Line Inspection of unpiggable HCA pipeline sections including compressor and booster station manifolds, using methods of Non-Destructive Testing (NDT) such as EMAT and laser scanning.

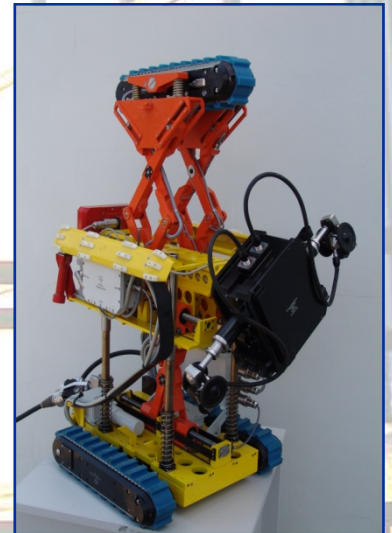
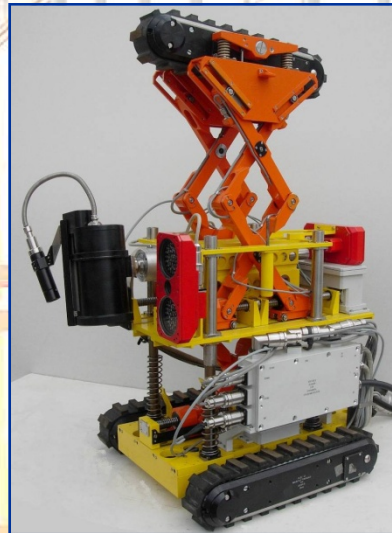
### The RODIS' NDT systems detect:

- Weld defects (faulty joints, concavities, blisters, etc.)
- Internal pipe wall defects (interstices, exfoliations, segregations, etc.)
- Metal loss on external pipe surface (continuous corrosion and pitting, dints, handling marks, etc.)
- SCC defects (stress corrosion cracking)
- Wall thickness erosion, including at pipe bends
- Internal contamination, often causing performance reductions
- Foreign objects (metal rods, stones, soil, collapsed items, etc.)

Additionally, Diakont uses the RODIS to generate surveys of buried pipeline actual geometry, and actual weld locations.

### Technical Specifications:

- The certified explosion-proof delivery robot is able to move through horizontal and vertical sections of pipe with diameters between 19"-59"
- Laser-holographic weld scanner
- Continuous EMAT of pipe walls
- Inspect 2/3-mile of pipe at a time (1640-foot range from pipe entry point)
- Robot moves through pipe bends, T-bends, and stop valves
- Maximum inspection speed:
  - Laser weld scanning: 6-8 min/weld
  - EMAT: 31 feet/hr at 100% inspection, greater for spot inspection
- Certified explosion-proof
- System has means of emergency retrieval



Robot is typically loaded or withdrawn from a pipeline through a dismantled check valve of 28" diameter (with dismantling valve plate), through a dismantled check valve of 40" diameter (without dismantling valve plate), through a hatch of at least 18" diameter, or through a tap.

