PIPE CONDITION ASSESSMENT
& REHABILITATION

MIDRAND 2019

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METHOD STATEMENT CONSISTENT

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SPIECAPAG
GROUP FIVE
Civil Engineering
WK
CONSTRUCTION

7


22.10.2010 12:03

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SOUTH AFRICA
NU FLOW
RELINE REPAIR RENEW

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SOUTH AFRICA
NU FLOW
RELINE REPAIR RENEW

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NON DESTRUCTIVE
SURVEY

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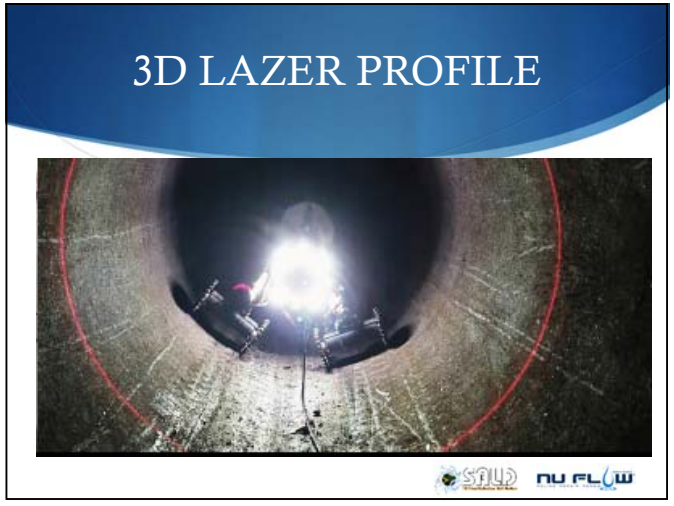
3D LAZER PROFILE

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Robotic wireless inspection

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VIRTUAL INSPECTION

- LIVE
- 3D FULL VIEW
- PANAMORPHIC
- PTZ

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VIRTUAL INSPECTION

- CONTROLLED OFF SITE
- YOU CAN INSPECT IN USA FROM CAPE TOWN

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VIRTUAL INSPECTION

- MAPPING
- RECORDING DATA

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VIRTUAL INSPECTION

- MAPPING
- RECORDING DATA

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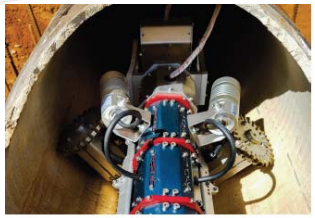
Robotic wireless inspection



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Robotic wireless inspection

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VACUUM EXCAVATION

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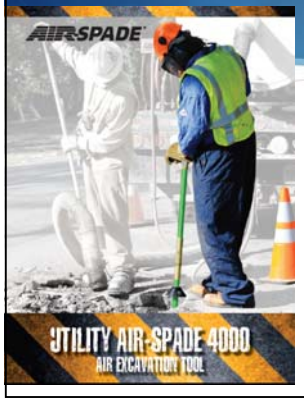
VACUUM EXCAVATION



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MAPPING PIPES

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JD7 Bullet

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JD7 Bullet

- Effective in All Materials
- 20km - Free Flowing Mode
- 500m Capability - Tethered Mode
- Pressurised Insertion and Seal Technology
- On-board Hydrophone for Leak Detection
- Sonde For Above Ground Location
- Simple Operation
- Data Analysis and Reporting Software

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JD7 Investigator

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JD7 Investigator

- Sonde For Above Ground Location
- Tri Sensor Head
- Pressurized insertion up to 16bar
- Ruggedized control station
- Real-time analysis software
- 75–300mm pipes

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JD7 Investigator

- Designed for distribution mains
- Non destructive inspection
- No service disruption
- Single pass acoustic, CCTV, and sonde mapping
- In-line system for increased accuracy

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JD7 Investigator

- Can travel 100m with or against flow
- Simultaneous leak and video inspection
- 25mm access
- Entry via:
  - Air valves
  - Hydrants
  - Hot-tapping

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JD7 Investigator ADVANTAGES

- Operator retains control at all times
- Tethered inspection
- Operator has “eyes and ears” inside the pipe
- Can stop to study features
- More cost-effective than other similar systems

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LDS 1000

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LDS 1000

Condition assessment of large diameter pipes

- Tri Sensor Head
- HD Camera Sensor
- Proven Unmatchable Hydrophone Sensitivity
- Electronice Cable Drum
- Simple to Install, Configure & Operate
- Minimum Flow of 0.3m/s Required
- Pipelines 12in. and Above
- Video & Acoustics Capturing
- Lightweight Heavy Duty Control
- 400mm and larger diameter

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LDS 1000

Condition assessment of large diameter pipes

- Designed for transmission mains
- No service disruption
- Cost effective
- Single pass acoustic, CCTV, and sonde mapping
- Accurate in-line system
- Used globally

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LDS 1000

Condition assessment of large diameter pipes

- Video inspection and acoustic leak sensor (38mm diameter)
- Insertion through 50mm tap
- Wide angle fixed focus optics
- 400mm and larger transmission mains pipelines

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Pipescan +

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Pipescan+

- Fire hydrant access
- NDT wall thickness
- CCTV Imaging
- Fully automatic
- Location mapping
- Live insertion
- water and waste water pipelines
- petrochemical pipelines

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Condition assessment

Investigator can identify …

- Closed valves
- Undocumented valves
- Other undocumented fittings
- Illegal connections
- Pipeline material
- Improperly installed liner
- Faulty repairs
- Undocumented diameter changes
- Pipe corrosion

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Condition assessment

Investigator can identify …

- Pipe blockages and flow restrictions
- Damaged joints
- Tuberculation levels
- Damaged service connections
- Leaks
- Damaged pipe walls
- Air pockets
- Screw plugs
- Hardwood dowel repairs
- Valve operability
- Debris accumulation

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SMOKE DETECTION

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- Odours in buildings
- Cross contamination
- Damaged service connections
- Leaks

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SMOKE DETECTION

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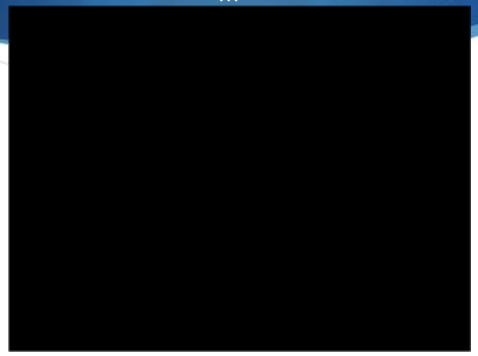

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SMOKE DETECTION

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