

ASP Advanced Service Provider



OUR SERVICE LINES



Internal Inspection of Pipelines:

- ✓ Rainwater pipes;
- ✓ Fire Fighting Systems;
- ✓ Process and Cooling Lines, etc.;
- ✓ Use of cleaning and instrumented pigs



Inspection and Cleaning of Tanks:

- ✓ Fire Fighting Tanks;
- ✓ Cooling Towers;
- ✓ Lagoons;
- ✓ Confined Space Inspection;

ROBOTIC VISUAL INSPECTION



- Inspection of pipes and galleries from 3" up to 100";
- Underwater operation;
- Camera with 360° rotation and Full HD resolution;
- Umbilical distance from 120m up to 185m;
- Laser measurement;

ROBOTIC VISUAL INSPECTION



Click to see



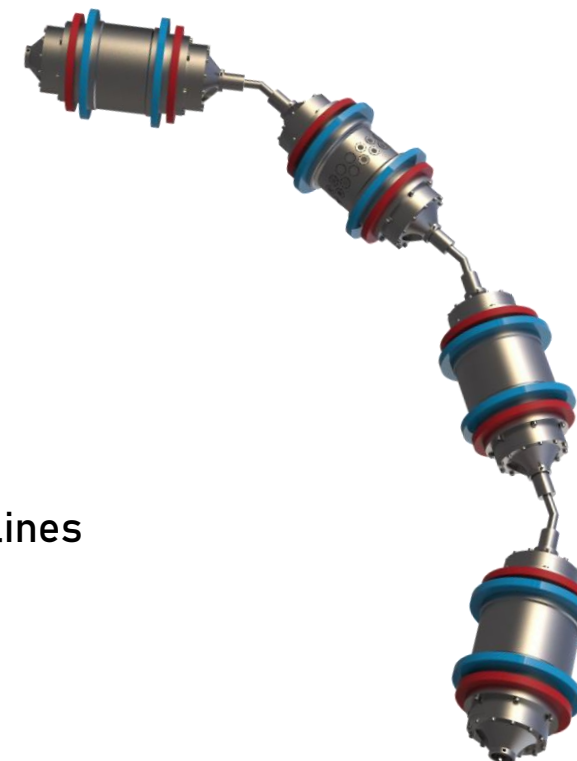
Cleaning of non piggable pipelines

- Supply of launchers/receivers and adaptation project for pig run;



Pipelines inspection

- UT and MFL technology;
- Bidirecional;
- Tools from 3" to 14";
- Without couplant;
- Inspection of non-piggable lines



PIGS TRACKING AND TEST LOOP



Pigs Tracking

- American pigs tracking system
- Waterproof emitter 175 bar
- 677 hours of operation
- Compact and simple to operate



Test Loop

- Qualification and training center
- Inspection and cleaning
- Ultrasonic flow meter
- Pigs of 6"

LEAK DETECTION



Watertight Validation!

- Tools from 4" up to 50";
- Minimum leak detection capacity of 6.8 l/h (0.3 mm hole);
- Maximum operating pressure of 100 bar (1470 psi);
- ATEX certificate;

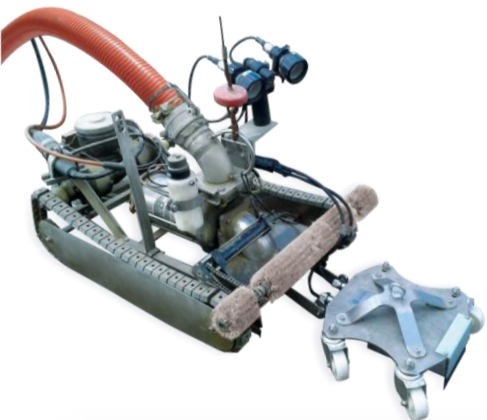
ROBOTIC VISUAL INSPECTION



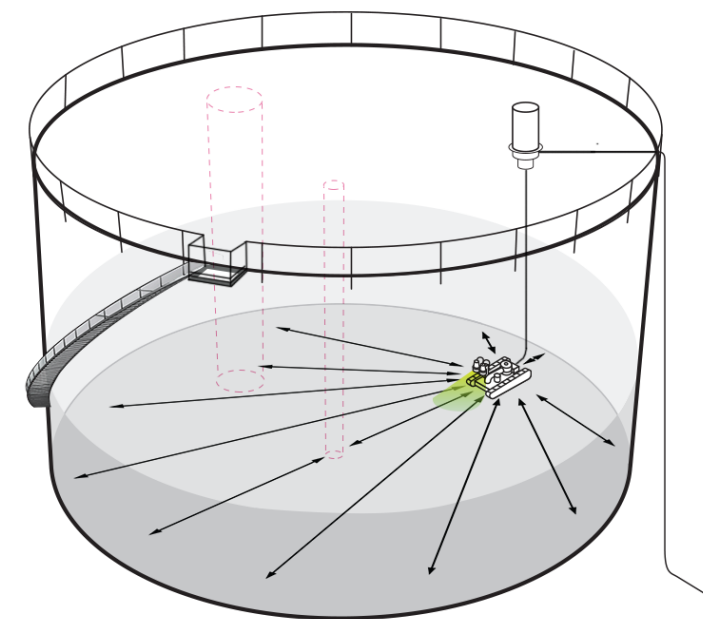
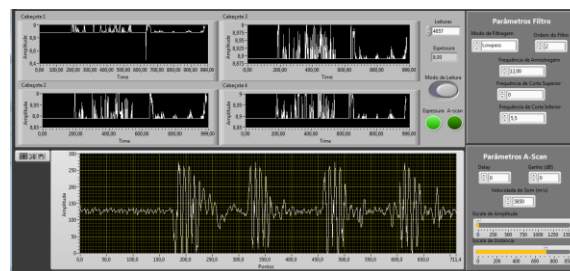
- Designed specifically for confined space;
- High resolution camera (1<mm at 9 m de distance);
- Manhole entry minimum 18";
- Ability to go up or down automatically;
- Roof, shell and bottom inspection according API 653 / NR 13;
- Software designed for flaw dimensioning;
- 4k videos;



BOTTOM PLATE INSPECTION UT



- Ultrasonic inspection of tank bottom;
- No work in confined space;
- No downtime;
- Tank remains in operation;
- Inspection according to API653.

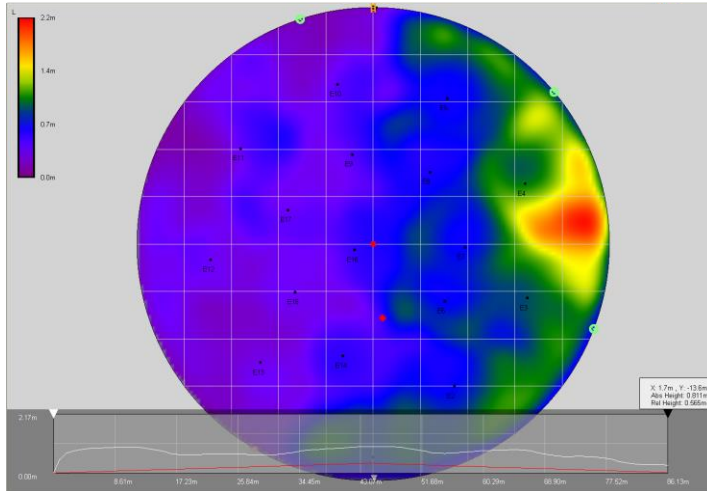


ROBOTIC VISUAL INSPECTION VÍDEO



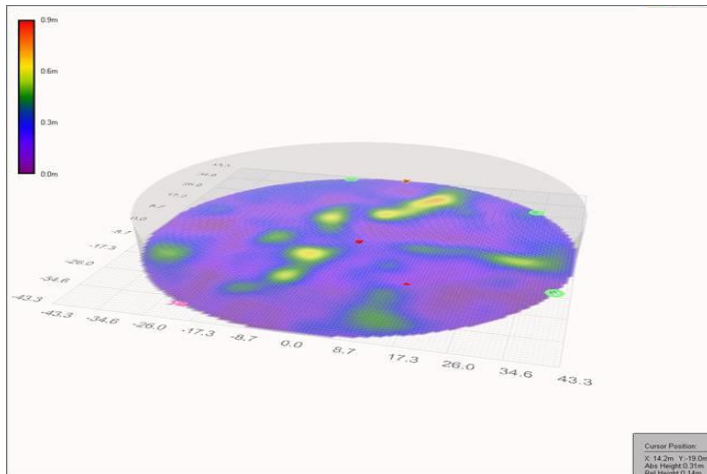
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TANK SERVICES SLUDGE MAPPING



2D

- Inspection within a maximum of 1 day;
- 2D and 3D topography;
- Volume calculation in m³;
- Accuracy +/- 95% of the volume obtained;
- Introduction of the tool by ceiling accessories (leg, valve)
- ATEX tool;



3D

AUTOMATED SLODGE REMOVER



- Continuous cleaning of sediments;
- Reservoir remains in operation;
- Complete cleaning of the floor without leaving residue;
- Improves water quality during the process;
- Programmable routine depending on the waste generated;



WATER TANK CLEANING AND INSPECTION



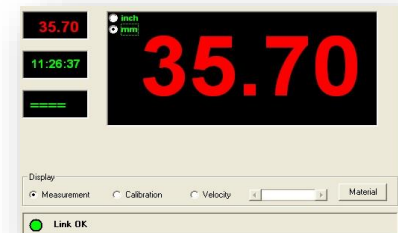
- Depth up to 150 m;
- Ultrasonic thickness measuring device;
- Gripper for up to 40 kg;
- High resolution camera;
- Sonar engaged for bathymetry;



Control Panel

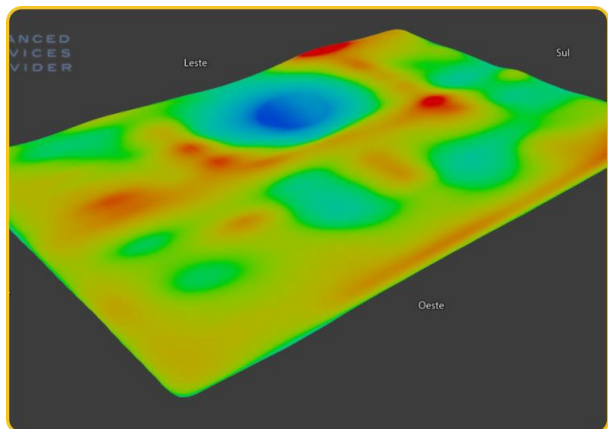


Inspection ROV



Wall Thickness

BATHYMETRY



- Water tanks, cooling towers, lagoons;
- Sediment in 2D;
- Accurate sediment amount in m^3 ;



WATER TANK CLEANING



- Simple and low cost solution;;
- Reservoir remains in operation;
- Ideal for applications that require periodic cleaning;

CLEANING OF WATER TANKS AND COOLING TOWER



- Applicable for drinking and firefighting tanks, cooling towers, concrete tanks;
- Navigation system with sonar;
- Camera with 360° rotation and full HD resolution;
- Meets the requirements of NFPA 25;
- Depth: up to 20 m;
- Optional water filtration;



TANK CLEANING AND INSPECTION PROJECT



VISUAL INSPECTION IN COOLING TOWER

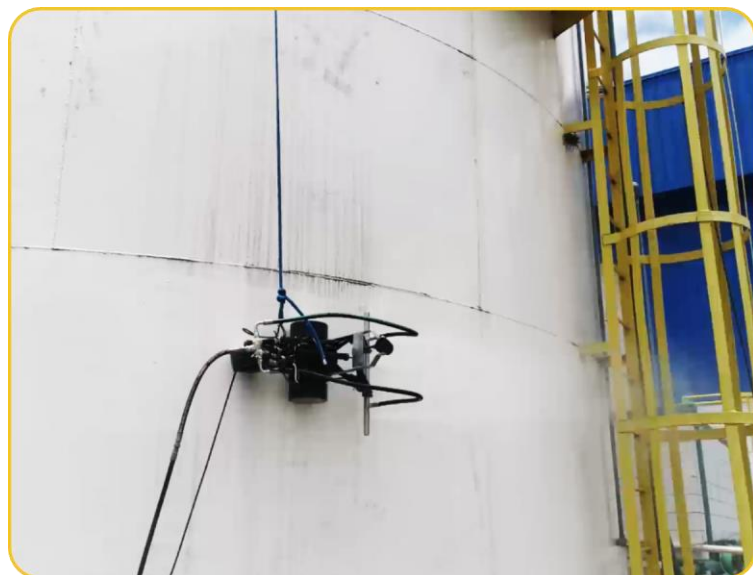


SEDIMENT FILTERING/SEPARATION AND WATER REUSE



Click to see

EXTERNAL TANK CLEANING



- Efficient shell cleaning;
- Ship hull cleaning;
- Eliminates scaffolding assembly;
- Excellent cost benefit;

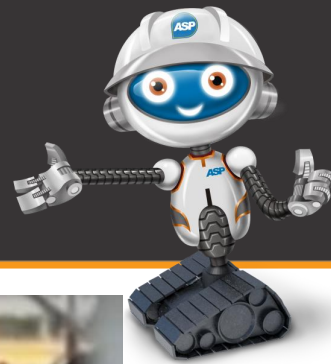
ROBOTS FOR MONITORING DANGEROUS AREAS



- Atex Zone 1
- Online monitoring
- Leak detection
- Heat source detection
- Payloads available
- Route programmed by the client
- Instrument and human detection (AI)



ROBOTS FOR MONITORING DANGEROUS AREAS



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MAIN CLIENTS





THANK YOU

ASP Advanced Service Provider

