



TECMA
PIPELINE SERVICES



ISO CERTIFICATES



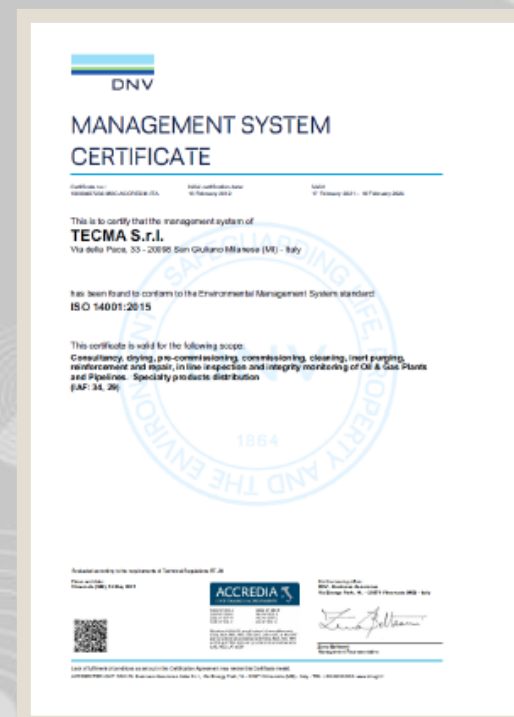
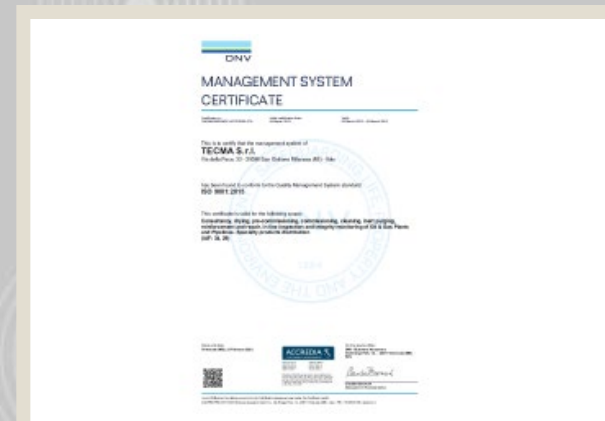
Quality



Environment



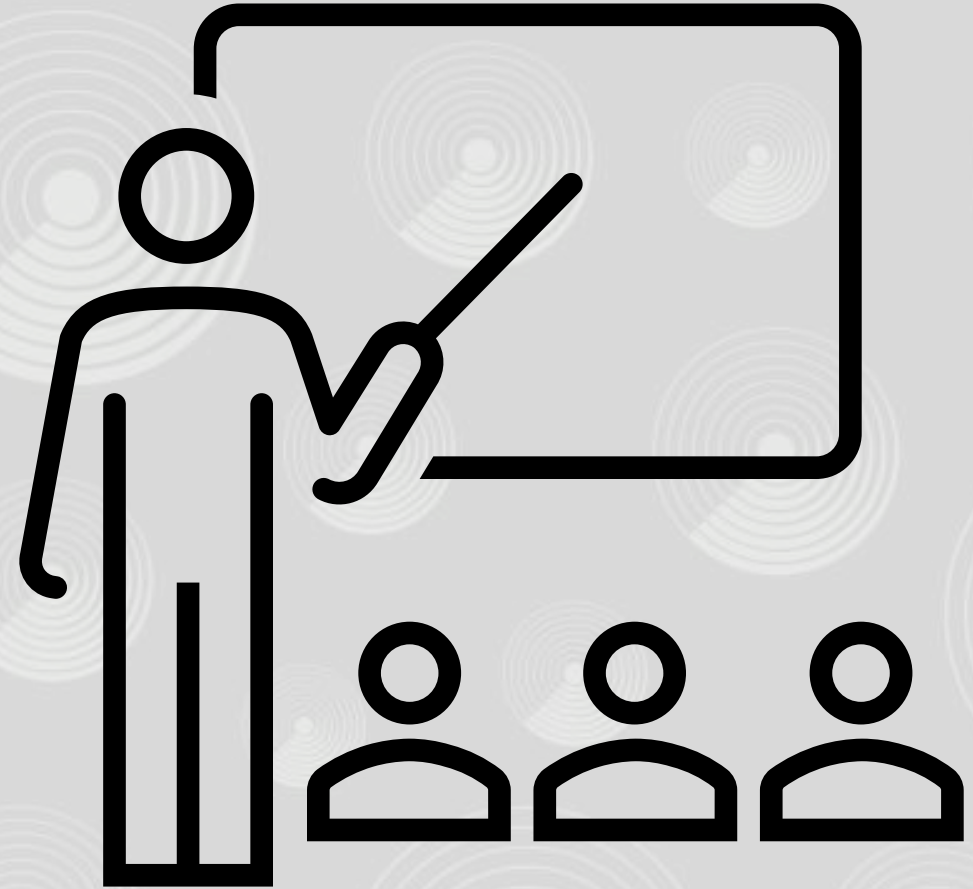
Safety



Training

To ensure high quality standards and offer constantly improved services, **TECMA** provides continuous training and updates on health and safety issues to its technicians in order to pursue a "zero accidents" culture.

We believe that the company's success depends on **TECMA's** ability to continuously improve the quality of its services through constant implementations of its integrated Quality, Safety and Environment management system.



Pillars of our success

SUSTAINABILITY

LIFE CYCLE PERSPECTIVE

INTEGRATED MANAGEMENT SYSTEM

SELECTION OF SUPPLIERS

COMMITMENT TO THE ENVIRONMENT

SUSTAINABILITY

- **Sustainability is an integral part of the company's business.** Since the early 1970s, TECMA has been marketing specialised products and qualified services to industry in general and, since the 1990s, to the Oil & Gas sector, enabling its customers to increase the durability and efficiency of their pipelines, with the aim of **improving infrastructure safety and environmental protection.**



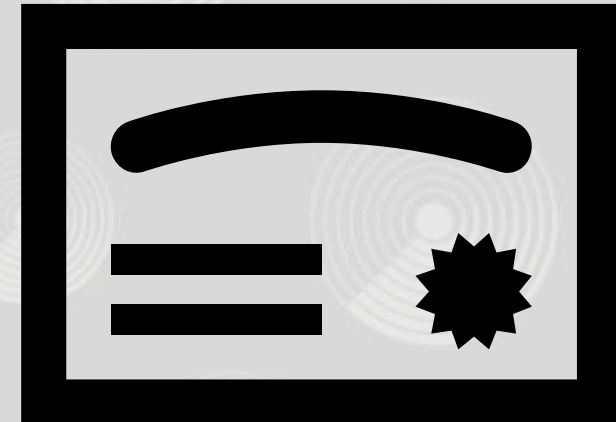
Life Cycle Chain

Throughout its value chain, TECMA takes a Life Cycle Perspective, which consists of identifying, assessing and managing its environmental features. To this purpose, we analyse our activities and their impact to the environment



Integrated Management System

- Over the years, TECMA has developed an Integrated Management System (IMS) that enables our company to excel in quality, environment, health and safety systems (QHSE), sharing achieved and ongoing progress with its Customers, in full compliance with current regulations and international standards ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018, which we are certified for.
- The main system document is the **Integrated Quality, Environment and Safety Policy**, which aims to transparently communicate the core values of TECMA's IMS, committing its employees as well as all the stakeholders.

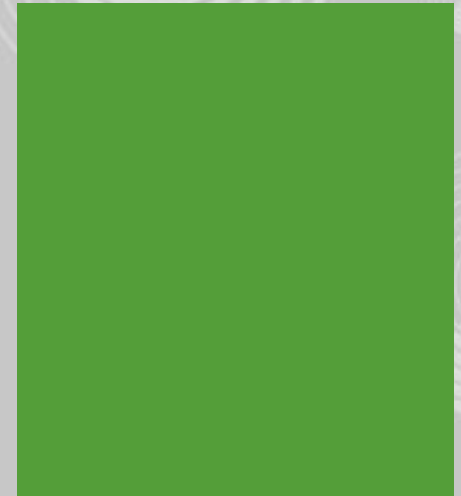


Commitment to the Environment

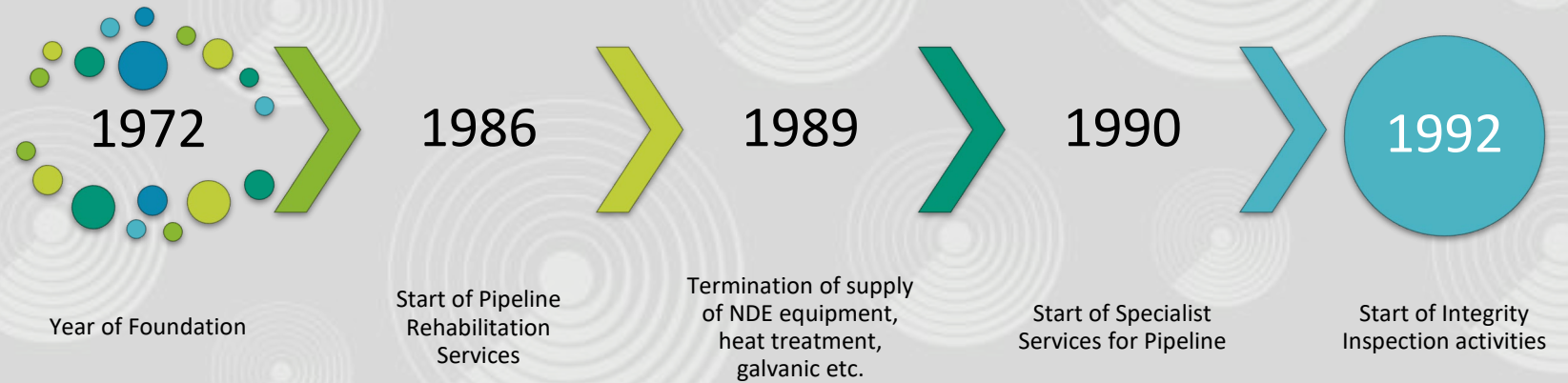
TECMA'S engagement in the environment can be seen in its operational headquarter, which has been completely refurbished with the aim of upgrading the building from an energy and environmental point of view. The installation of a heat pump interfaced with geothermal wells and photovoltaic panels has made possible to reduce plant **emissions to zero**. This intervention, along with the total building external insulation with sustainable materials, has made possible to certify the entire building to **Energy Class A**.

Our vehicle fleet is updated to **Euro 6** standards and integrated by **hybrid vehicles**.

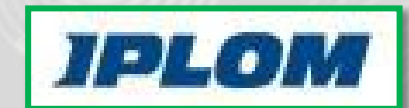
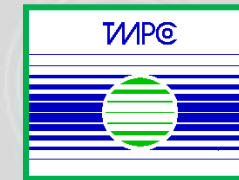
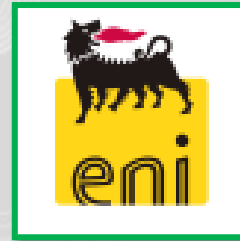
Finally, TECMA is committed in making the difference, using **ECOLABEL FSC-certified** paper, as well as embracing **paperless philosophy** by digitalizing most of the documents. Furthermore, over the last few years we have become **plastic free**, by replacing all plastic bottles and cups with glass and recycled paper.



Evolution and Experience



Main Customers Served



Pigging services abroad

Algeria (BRN Field)

Austria

Belgium/ Luxembourg

Croatia

Congo

France

Germany

Kuwait

Portugal

Switzerland

Tunisia (TransMed)



Services Portfolio



Special products for pipelines

- Polyurethane foam pigs
- Temporary and Real Time Pig Passage monitoring systems
- Urethane Monolithic Pigs
- Design and Implementation of Specialist Pigs
- Quick opening closures for Launch/Receive Traps
- Intrusive and Non-Intrusive Pig Signals
- Temporary Launch and Receive Traps
- E/M transmitters
- E/M receivers
- Acoustic Geophones
- Submarine Pig Passage Detection Systems



Courtesy of CDI Inc. Courtesy of Wavetrack Inc.

Courtesy of Online Electronics Ltd.

Special products for pipelines: Cleaning Services

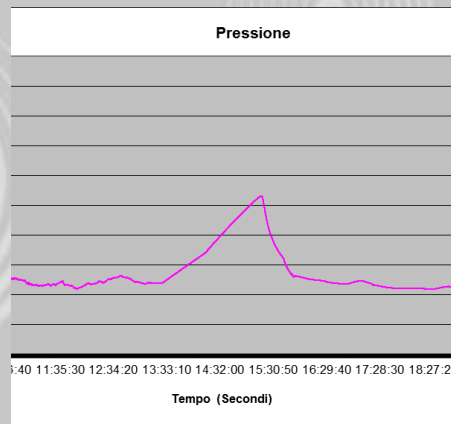
- Crude Oil Transfer Pipelines
- On-Off Shore Pipelines/Gas Pipelines
- Multiphase pipelines
- NON-PIGGABLE pipelines
- Hydromechanical cleaning tools for difficult to remove deposits



Special products for pipelines:

Real-time Pig Tracking

- Pig tracking
- Real-time continuous recording of pressure and flow rate during pigging

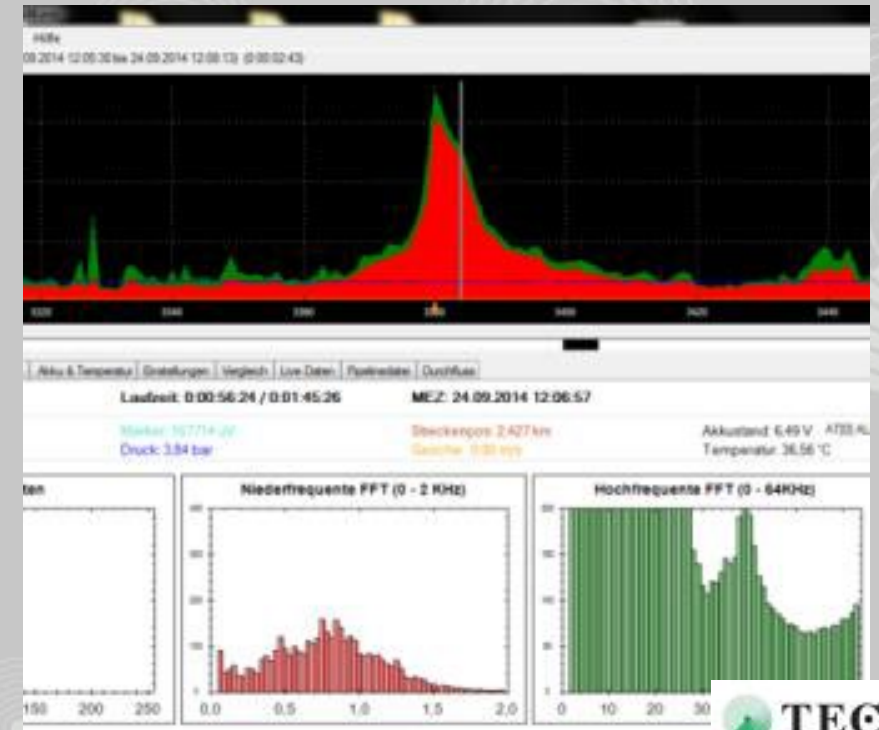


Special products for pipelines: Leak Detection Service

- Reliable Leak Detection
- Acoustic Measurement Principle
- Leak Detection in High Noise Environments



Courtesy of GOTTSEBERG

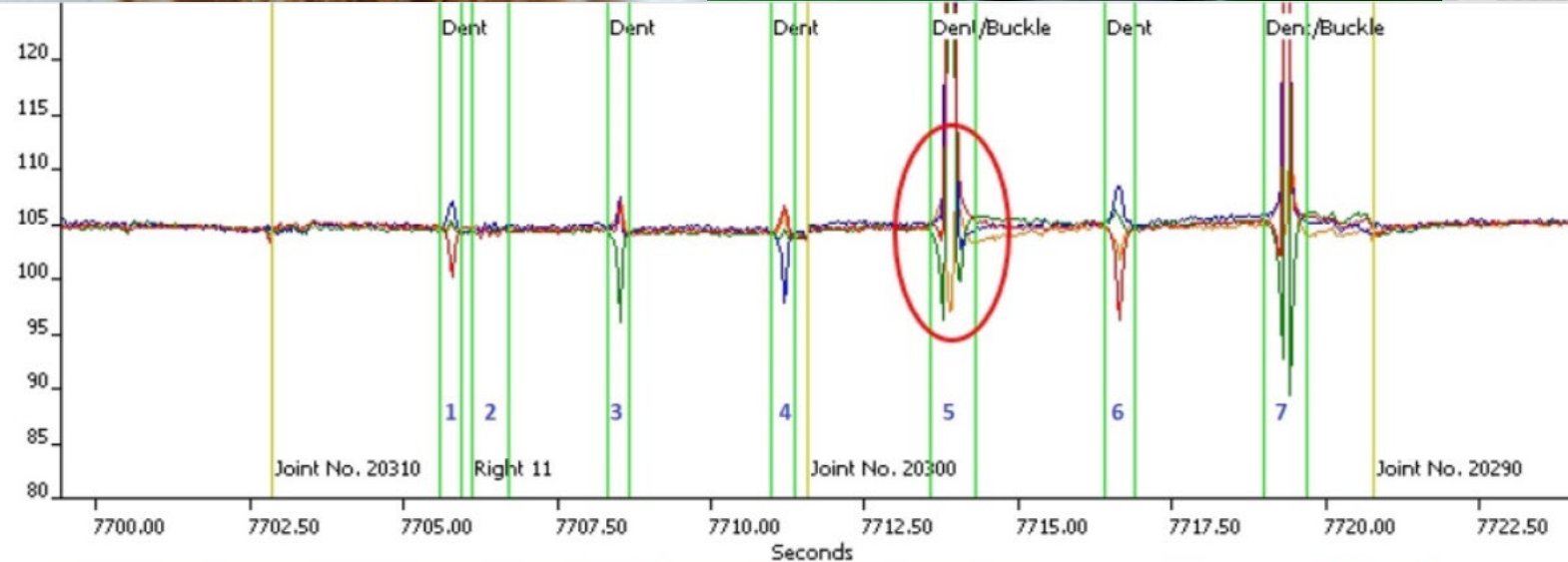


Courtesy of P.I.L.

Special products for pipelines:

Foam Caliper Pig, Scouting Pig

Innovative exploratory pig with special sensors embedded in polyurethane foam to calibrate pipelines and determine the presence of deposits and debris within the pipeline. Ideal for pipelines that have never been pigged and in any case before running more intrusive pigs that could compromise the safe pipeline operation.

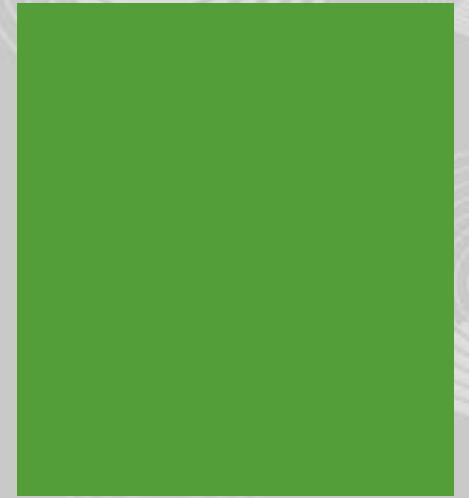


Illegal Tapping detection service

- Since 2001, TECMA, with the support of its partner Baker Hughes, have significantly invested in developing a specific detection capability for illegal tapping, implementing the analysis process with a series of "Pull Through Tests" using real tapping samples. Thus gaining a deep experience.
- Feedback from its customers confirms that 100% of the active and latent illegal tapping sites reported by TECMA-BH through an inspection data analysis process known as "Change Report" match perfectly.



Support to In-Field Defects Verification



Pipeline Cleaning Services



Pipeline cleaning services:

Customized hydromechanical tools

The hydromechanical cleaning of the pipelines is carried out in cooperation with Reinhart Hydrocleaning SA:

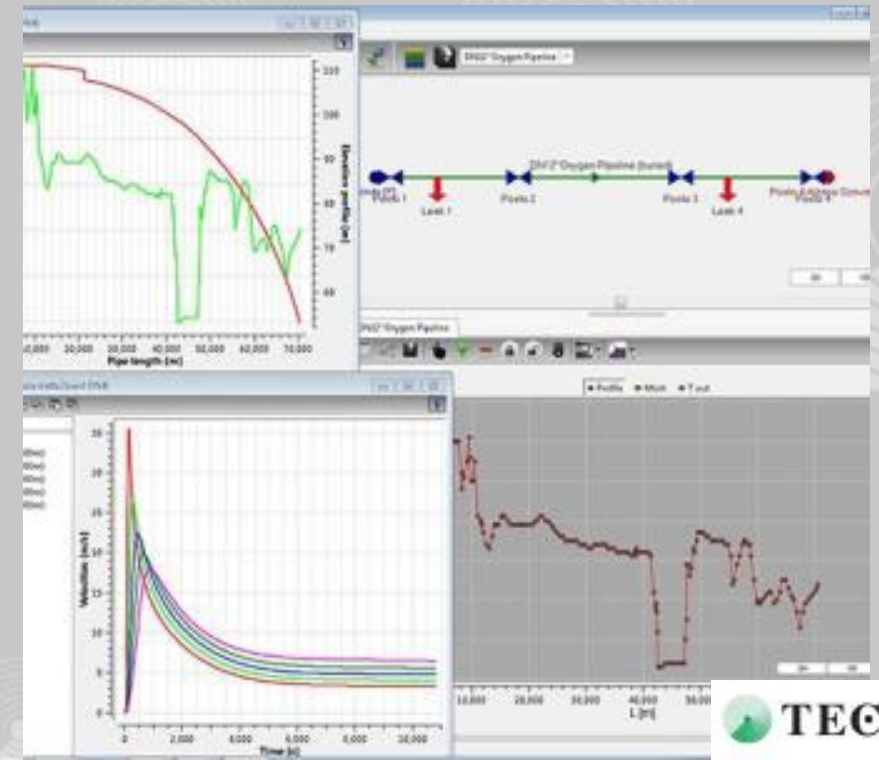
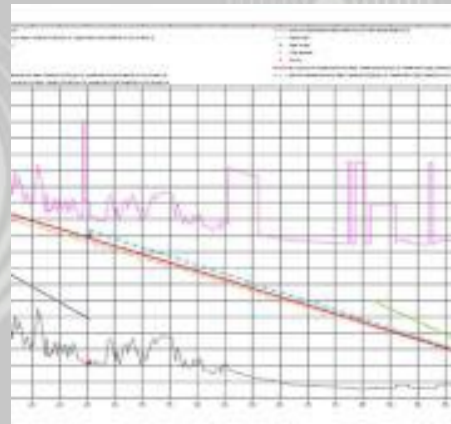
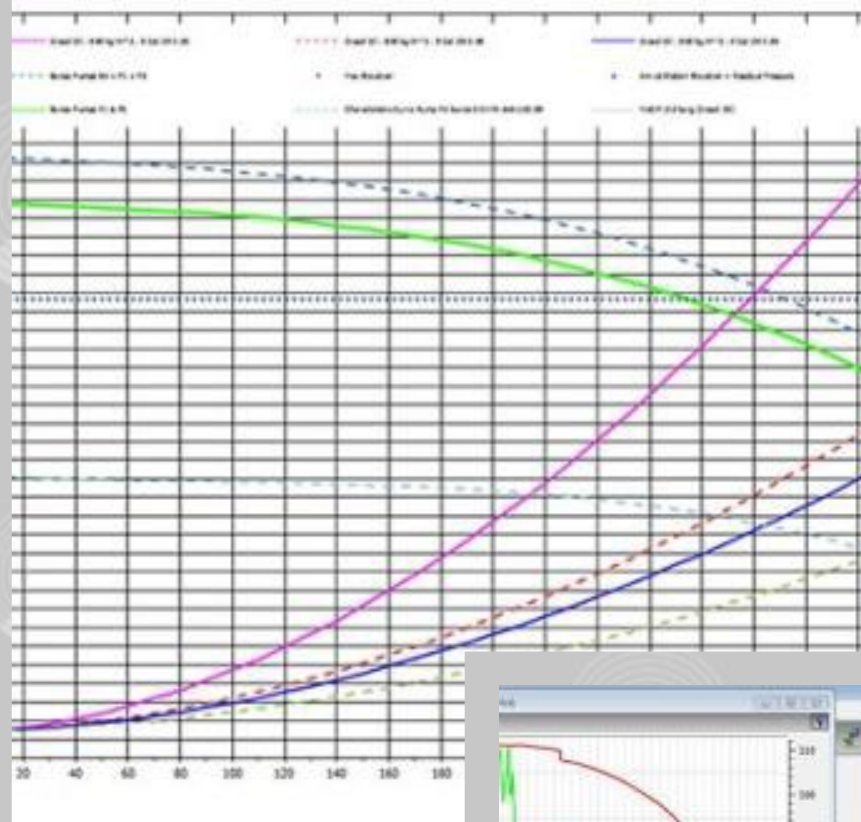
Without cables or connections, these special tools are able to remove deposits and incrustations with a limited number of runs, even in situations where traditional techniques cannot do the job.

Achieves maximum results effectively and quickly avoiding the use of solvents and limiting the use of semi-finished products.



Courtesy of Reinhart
Hydrocleaning SA

Consultancy and hydraulic engineering studies

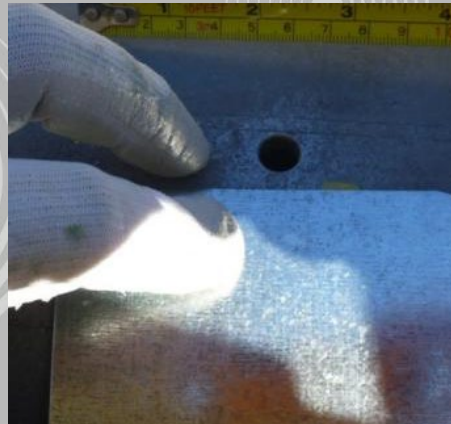


Pipeline Repair and Reinforcement Services

- Composite repair systems deliver safe, sustainable solutions for the construction, maintenance, and emergency repair of critical infrastructure.
- Pre-tensioned composites coils are ideal for repairing external metal loss up to 80% of the pipeline wall thickness.
- Carbon Fiber Repair System for repairing corrosion, cracks, leaks and attempted break-ins at bends, elbows, T-pieces, reductions and any complex geometry ISO TS 24817/ASME PCC2 validated system.



Courtesy of CSNRI Inc.



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Pipeline Repair and Reinforcement Services

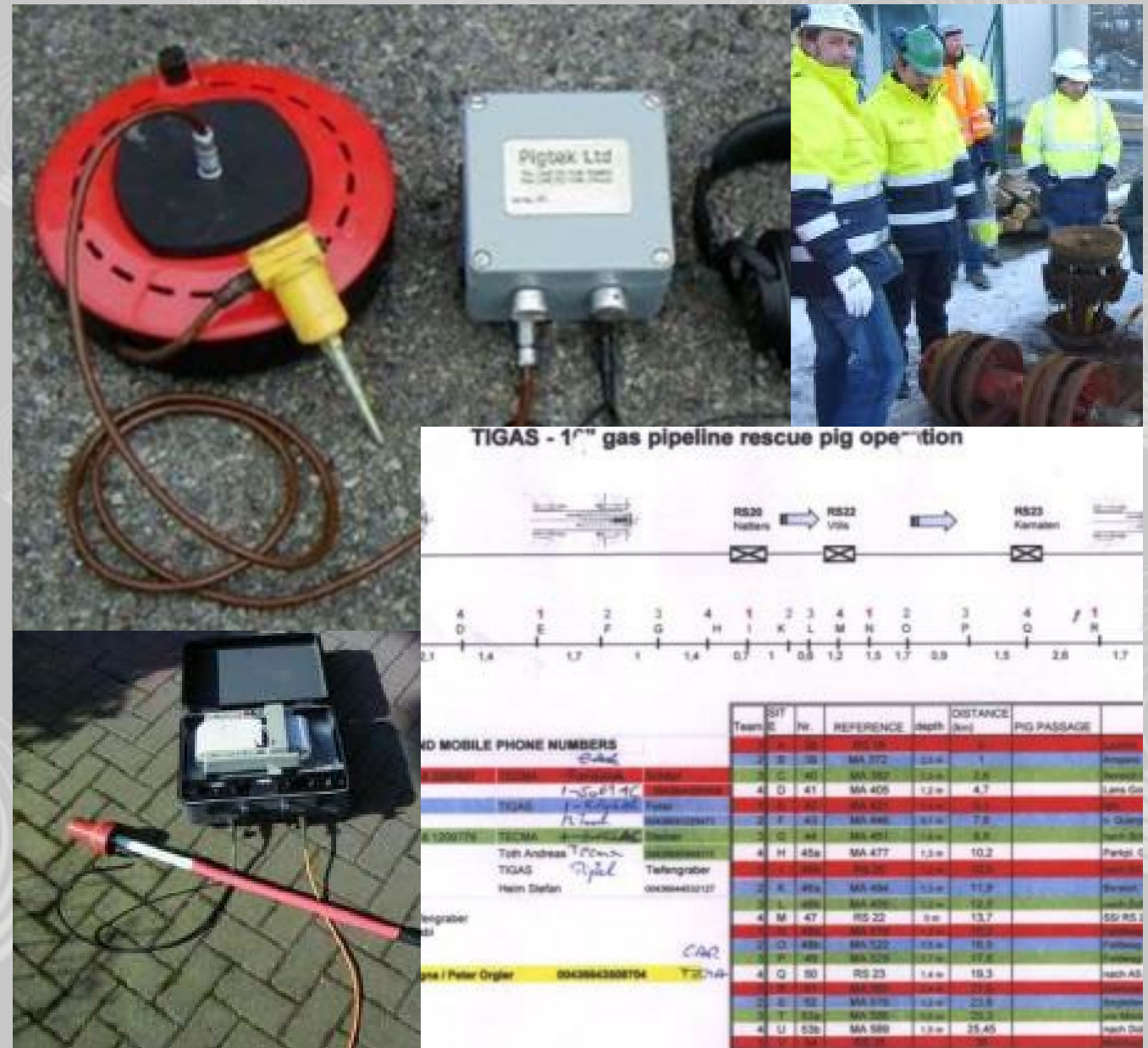
- Composite repair system ideal for repairing external metal leaks up to 80% of wall thickness.
- Special Repair System for repairing corrosion, leaks and attempted break-ins in straight bars, bends, elbows, T-pieces, reductions and any complex geometry ISOTS 24817/ASME PCC2 validated system



Courtesy of CSNRI Inc.

Lodged Pig detection services

Combining multiple technologies, we have developed a field-proven expertise to identify the position of a pig stuck in the line, mitigating the risks of reducing or halting the flow during normal pipeline operation or product transfer.



Pipeline inspection services

- Cleaning and Calibration
- Mechanical Activities, Temporary Traps Rental and Installation
- Issuing Procedures and Hydraulic Simulations
- Preparation of customized ILI pigs and spare parts
- Pipeline Inspection
- Availability of different Pig Propulsion Systems (Nitrogen, Water pumping, etc..)



Courtesy of BAKER HUGHES

Pipeline inspection services

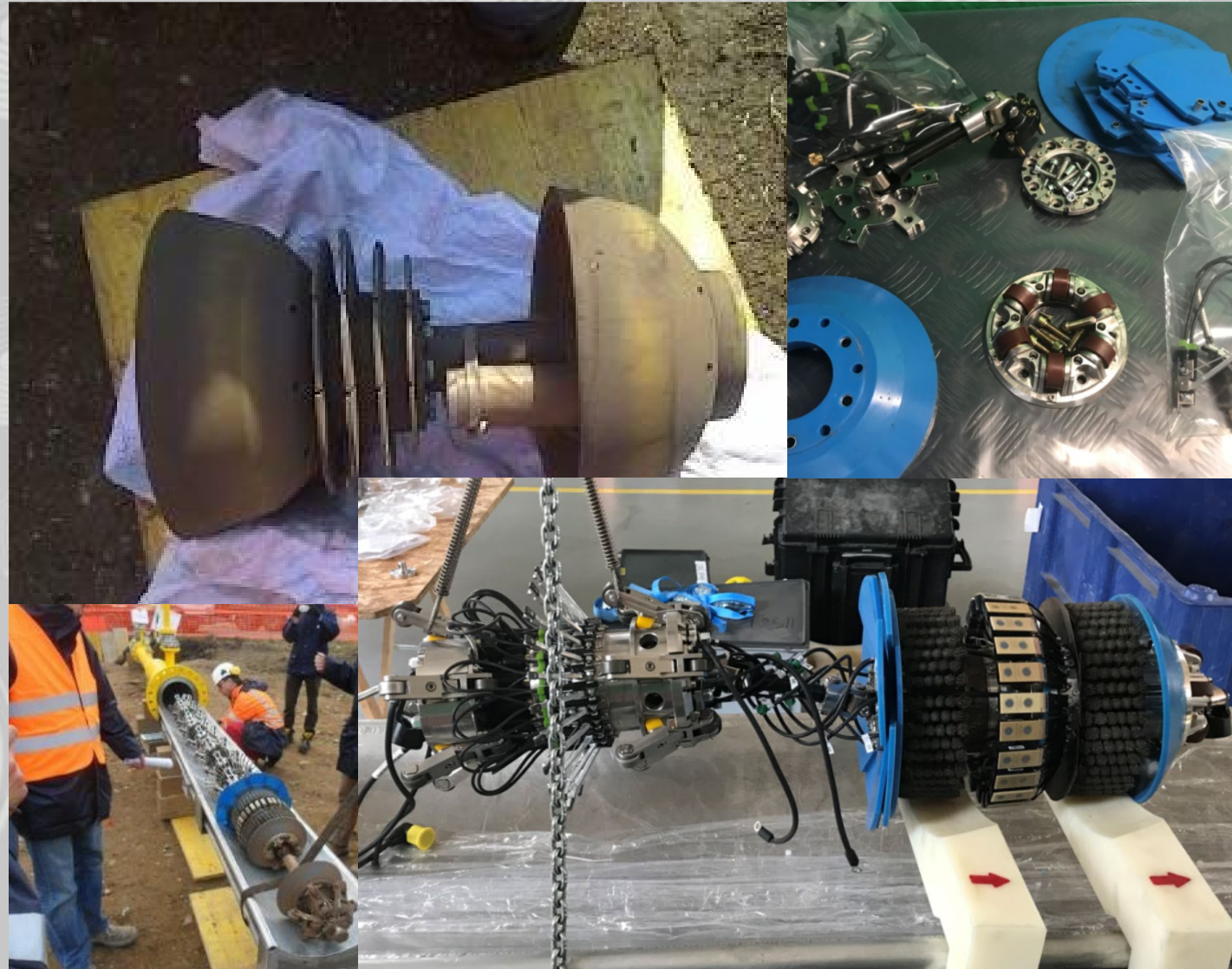
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Courtesy of NDT Global

Pipeline inspection services using nitrogen as propelling fluid

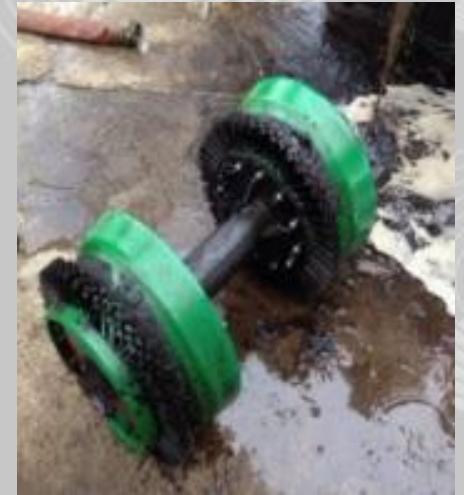
- Piggings feasibility assessment, mechanical modifications and temporary traps
- Fluid-dynamic detailed studies
- Equipment sizing
- Cleaning of pigs for oxygen service
- Selection of a suitable back-up nitrogen pumping system
- Provision of suitable pigs and sealing elements
- Performance of Cleaning, Calibration and Inspection phases
- Post-inspection cleaning
- Studies and application of targeted blow-down



Courtesy of BAKER HUGHES

Service change and Pipeline Decommissioning services

- Nitrogen displacement
- Service/Product Change
- Hydraulic studies
- Chemical Cleaning
- Inertisation with Nitrogen or Water
- Preparation of detailed Procedures



Hydraulic Testing Services

- Hydraulic Test Cabin equipped with specialized equipment
- Single Range Dead-Weight tester
- Portable Temperature Probe
- Digital Gauge Pressure Recorder
- Pressure and Temperature Tape Recorders
- Reinforced Testing Pigs
- Preparation of detailed Procedures

