



通奥检测

T-ALL INSPECTION

TIC Service Capability Profile of T-ALL Inspection Group

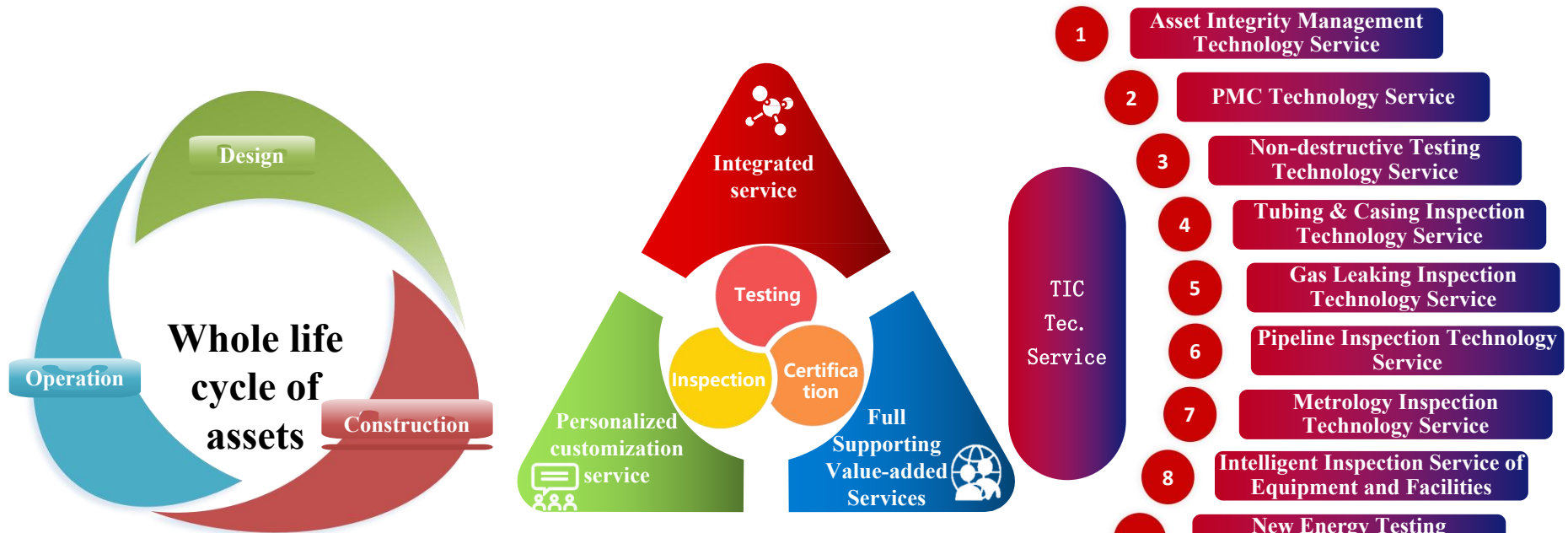
I. Integrated Inspection Technology Service Capability

II. Professional Inspection Technology Services

- 1. Asset Integrity Management Technology Service**
 - 2. PMC Technology Service**
 - 3. Non-destructive Testing Technology Service**
 - 4. Tubing&Casing Inspection Technology Service**
 - 5. Gas Leaking Inspection Technology Service**
 - 6. Pipeline Inspection Technology Service**
 - 7. Metrology Inspection Technology Service**
 - 8. New Energy Testing Technology Service**
 - 9. Equipment and Facilities Intelligent Inspection Technology Service**
 - 10. Carbon Monitoring and Consulting Service**
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Integrated Inspection Technology Service Capability

- T-ALL has the ability of integrated inspection technology service in the whole process of oil and gas development, and is committed to providing customers with life-cycle quality and safety detection solutions for oil and gas development assets.



*Oil and gas development
Comprehensive Inspection Mandatory*

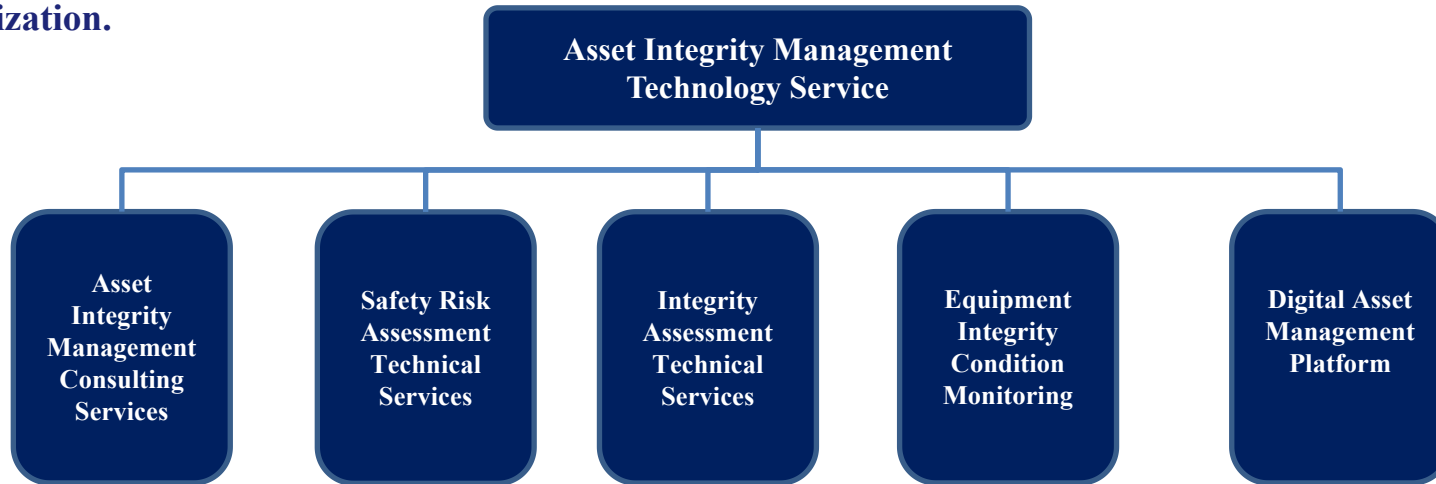
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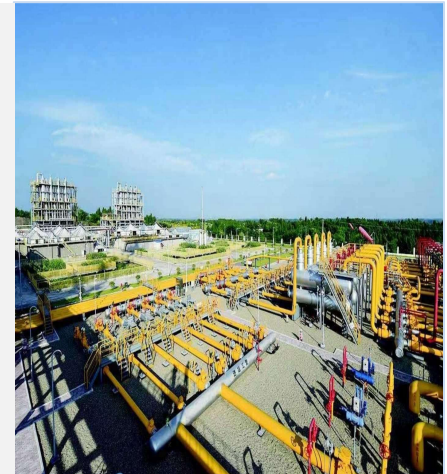
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- 9. Intelligent Inspection Service of Equipment and Facilities**
- 10. Carbon Monitoring and Consulting Service**

2.1 Asset Integrity Management Technology Service

- Based on the concept of asset integrity, with risk management at its core, covering the entire process across the asset's entire lifecycle, to achieve reliability, operability, safety, environmental protection, and cost-effectiveness in asset utilization.

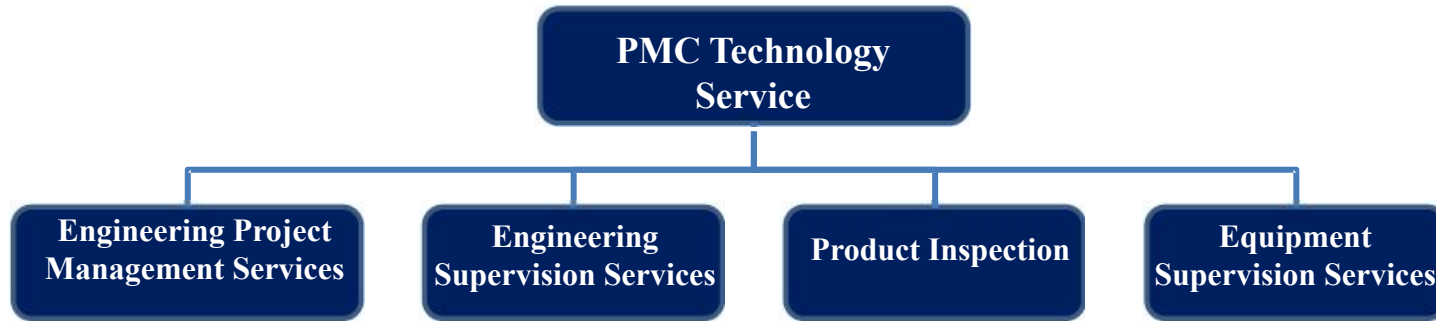


- T-ALL possess well-known experts and consultants at home and abroad, and has rich practical experience in asset integrity management such as management system construction planning, program design training and guidance implementation
- A comprehensive suite of professional assessment software tools enables the conduct of station process, equipment risk assessments, failure consequence impact evaluations, and various analytical methodologies such as HAZOP, RBI, RCM, SIL, QRA, and RAM.
- Capable of conducting fitness-for-service assessments of defective equipment, residual strength evaluations, remaining life predictions, and material compatibility analyses, as well as failure analysis.
- Offers online monitoring and testing services for equipment corrosion, vibration, temperature, and has developed an advanced data management database.
- Provides digital application solutions for asset management.

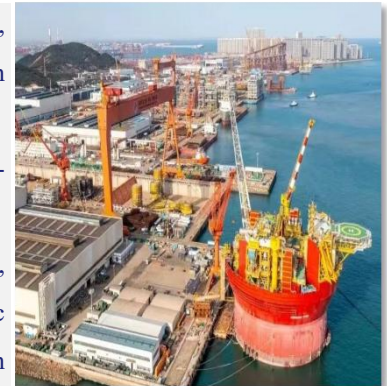


2.2 PMC Technology Service

- Focused on our clients' oil and gas assets (inclusive of engineering projects and equipment/product procurement) throughout the design and construction phases, we provide integrated services encompassing project management, supervision, oversight, and product inspection, addressing quality, progress, and safety across the entire process for engineering works, equipment, and products.

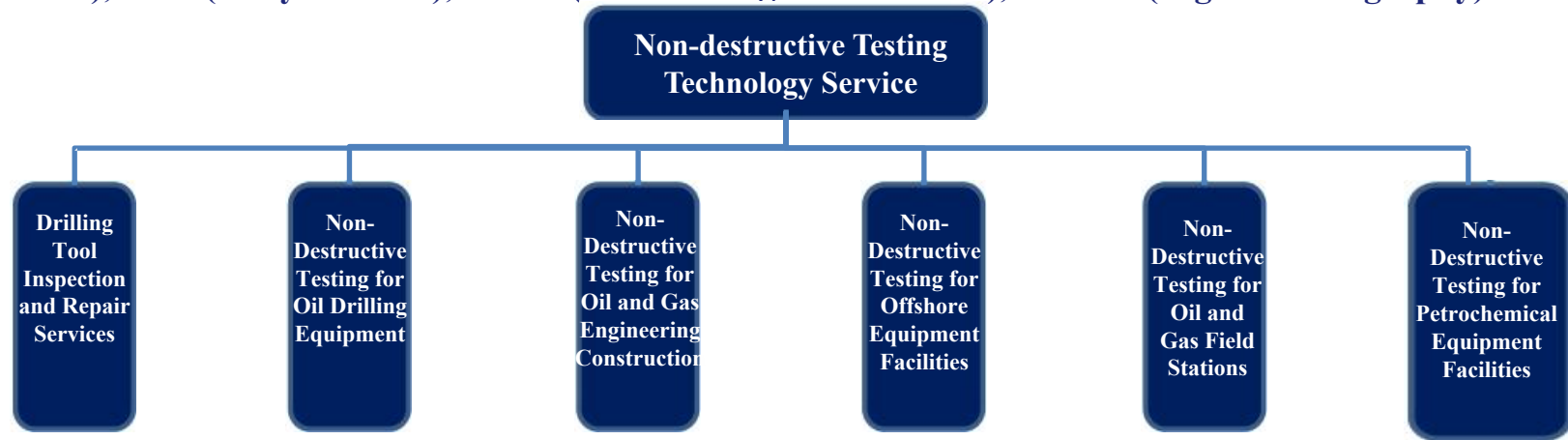


- PMC include supply chain management, quality management, safety management, progress management, cost management, document management, coordination management, etc. We establish project management and professional technical teams and can provide various service models such as PMC, IPMT, EPC, etc., according to customer requirements.
- T-ALL has a comprehensive and rich reserve of personnel, with over 200 internal and external technical experts, advanced high-precision measurement, testing equipment, and detection tools. With our global service bases, we can meet various industry needs.
- Our business coverage is extensive, and the group has long been involved in project management, inspection, supervision, certification, and consulting services for domestic and international projects. We have provided services multiple times in domestic markets such as CNPC and CNOOC, as well as international markets in the Middle East, West Africa, etc., accumulating rich achievements and experiences.



2.3 Non-destructive Testing Technology Service

- Providing comprehensive non-destructive testing technical services encompassing UT (Ultrasonic), RT (Radiographic), MT (Magnetic Particle), PT (Penetrant), PAUT (Phased Array Ultrasonic), AE (Acoustic Emission), ECT (Eddy Current), TOFD (Time-of-Flight Diffraction), and DR (Digital Radiography).

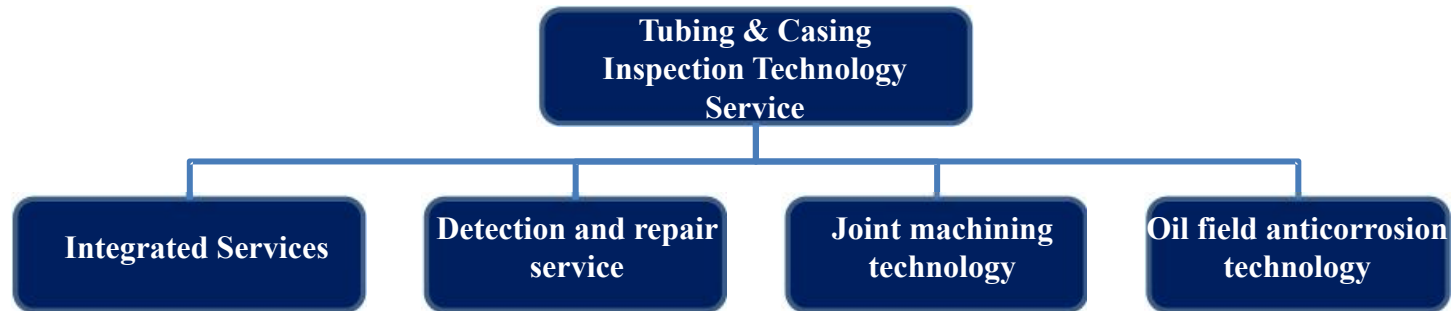


- Covering multiple industries of non-destructive testing technology capabilities, with CMA/CNAS/API/DNV/CASEI-B/equipment supervision qualification
- High-quality professional Non-destructive testing team, with 7 project departments, 29 professional testing teams, more than 300 employees, the certificate holding rate is not less than 75%, including more than 20% of senior talents
- 600+ sets Self-owned testing equipment : cutting-edge equipment including all methods, which can meet all testing needs of various industries
- According to customer needs, T-ALL can provide integrated services and customized solutions from management consulting, scheme design, product and equipment and facility inspection and testing, on-site engineering services, third-party testing, and comprehensive evaluation technology



2.4 Tubing & Casing Inspection Technology Service

- Centered around casing and tubing repair services, complemented by specialized thread machining and corrosion protection technologies, we offer integrated services throughout the entire lifecycle of oilfield tubular goods for our clients.

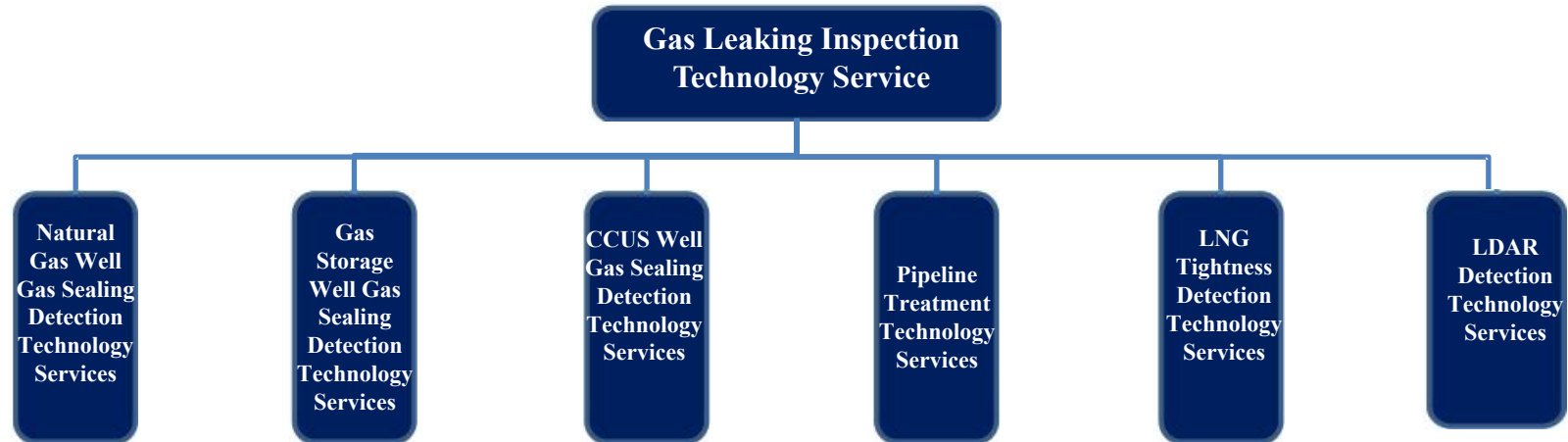


- The only service provider in China possessing integrated technical capabilities encompassing drilling tool, casing/tubing inspection, repair, evaluation, corrosion protection, accessory fabrication, and warehousing.
- It has a comprehensive thread processing qualification authorization and system certification from well-known steel mills at home and abroad, and has more than 20 years of technical service experience in oil casing overhaul. It has overhauled more than 2 million oil casings and processed more than 1 million short joints and tools.
- Corrosion protection qualification certification, providing customers with high-quality technical solutions for downhole pipe corrosion, wear, erosion, cavitation, etc.
- Customized development/design/processing/experiment to meet the specific needs of customers in oil field and machinery field.
- Form an integrated service to provide high-quality technical services for tubing, nipple finishing and oilfield anticorrosion product sequence.



2.5 Gas Leaking Inspection Technology Service

- Featuring the Gas Leaking Inspection of oil and tubing, we provide technical services of Gas Leaking Inspection in oil and gas development, storage and transportation, refining and other scenarios.

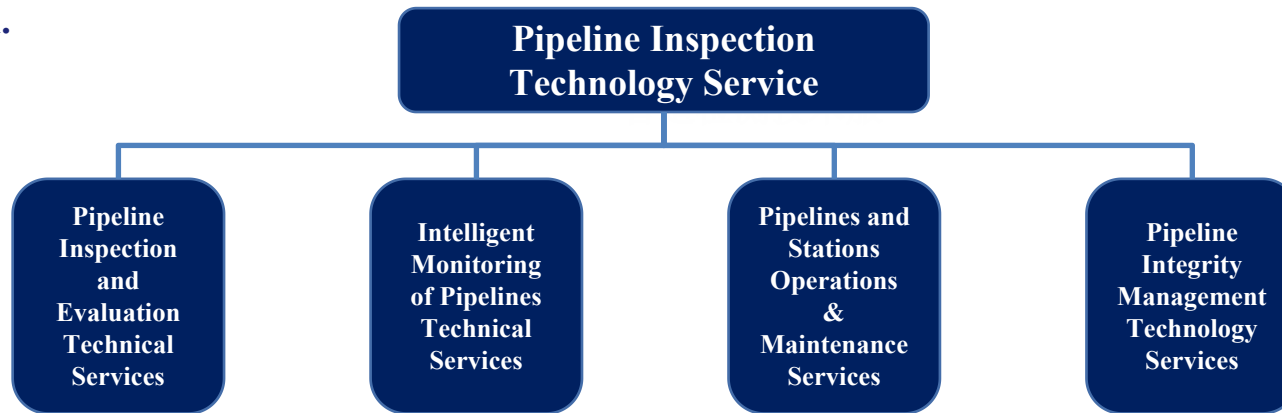


- There are more than 30 core patents of oil and casing gas seal detection technology, and the technical strength leading the formulation of two industry standards is far ahead. T-ALL possesses intelligent data acquisition, monitoring, and control systems.
- Strong technical service ability, 26 sets of ultra-high pressure gas seal testing equipment and service teams are spread all over domestic bases, and they respond quickly. Over 15 years of experience in on-site inspection operations, with over 3,000 wells inspected and over 30 gas storage projects and CCUS project exclusively
- Integrated pipeline treatment services: gas tight test pressure, helium and nitrogen gas tightness testing, nitrogen replacement, inerting, pipeline purging and cleaning, etc.
- Provide LNG tightness detection technology: the business scope covers LNG ships, receiving stations, tanks, etc., and provide technical services for tightness detection.
- Provide LDAR detection technology: LDAR full-process solution, including software and hardware required for detection, on-site detection, data analysis and evaluation, etc.



2.6 Pipeline Inspection Technology Service

□ Offering integrated technical services for the entire lifecycle of pipeline systems, encompassing inspection and testing, risk assessment, monitoring and early warning, operation and maintenance, integrity management, and digitalization.

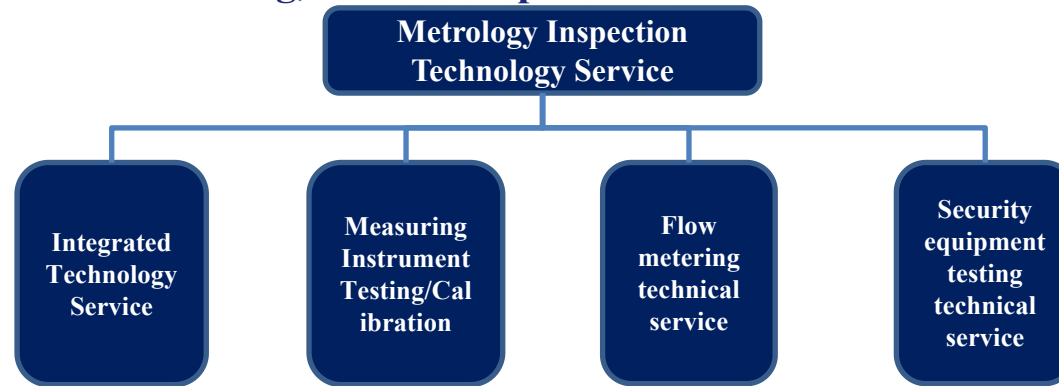


- Accumulated completion of pipeline inspection for 200,000 kilometers, and station inspection for 200 stations, with over 20 years of industry service experience
- Possessing Grade One Qualification for Anti-corrosion Construction in China and Grade Two Special Contracting Qualification for Waterproofing, Anti-corrosion, and Insulation Engineering.
- Approved by the State Administration for Market Regulation for Magnetic Flux Leakage (MFL) testing qualification and non-destructive testing qualification.
- Equipped with 96 sets of internal corrosion detection and leak detection equipment, 78 inspection engineers, and 6 specialized teams providing internal corrosion detection and leak detection assessment technical services.
- Strategic partnerships with international renowned companies such as NDT/Shenyang Industrial University / I2I / XYLEM /INTROL, enabling global deployment of the latest pipeline inspection technology resources.



2.7 Metrology Inspection Technology Service

- Providing integrated technical services including measurement instrument testing, calibration, verification, management consulting, and asset operation and maintenance.

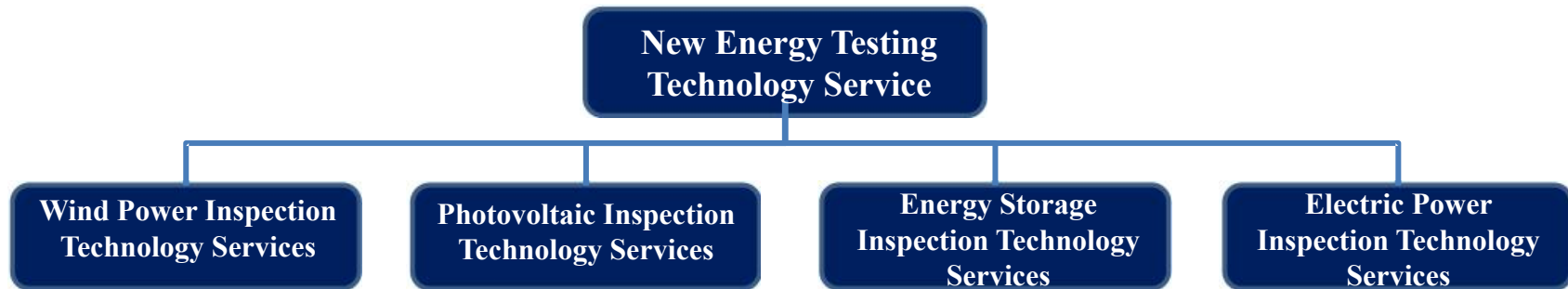


- We provide integrated services including management consulting, qualification certification consulting, metrology asset operation and maintenance, training, human resources, and intelligent detection information management systems, enabling comprehensive product lifecycle control.
- Our flexible and efficient service model offers both on-site and laboratory-based service solutions. We have comprehensive coverage of testing and calibration capabilities in the oil and gas industry, with 71 measurement standards established, 21 verification authorizations obtained, 11 CMA tests, and 312 CNAS calibrations.
- With a professional technical team and efficient supply chain services, we offer integrated package services for the design, procurement, supervision, commissioning, operation, and consulting of primary, secondary, and working-level flowmeter calibration devices.
- We cover a wide range with high precision to meet customer needs, and hold qualifications for testing safety valves, gas cylinders, electrical safety appliances, and common alarm devices.



2.8 New Energy Testing Technology Service

□ Providing integrated technical services for the entire lifecycle of equipment certification, supervision, inspection, testing, and operation and maintenance in wind power, photovoltaic, energy storage, and other fields.

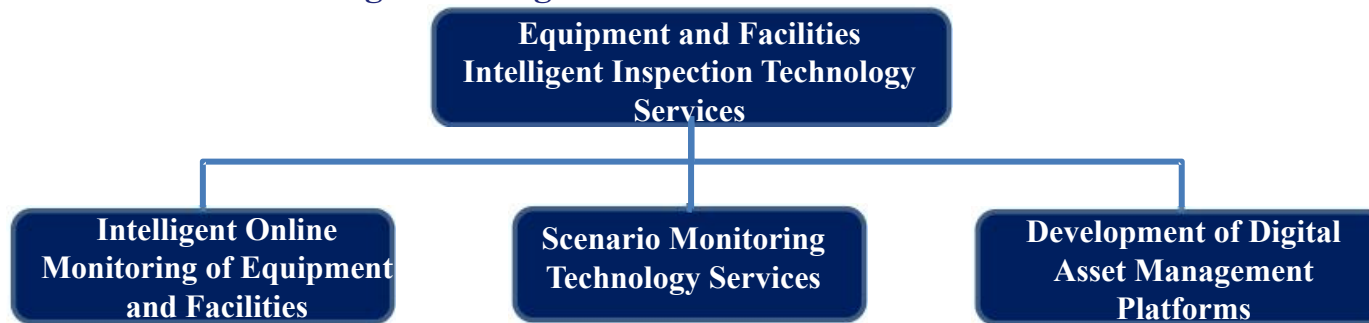


- Covering non-destructive testing, testing, supervision, and other qualifications in the power industry such as CMA/CNAS/PMC/CASEI-B.
- We have a high-quality professional team, consisting of four project departments including non-destructive testing, testing, supervision, and operation and maintenance, with over 12 specialized inspection and testing teams and more than 50 employees, with a certification rate of not less than 85%, including over 20% of senior talents.
- We have over 50 sets of self-owned inspection and testing equipment, capable of meeting various inspection/testing technical requirements
- We provide integrated technical services tailored to customer needs, including resource assessment, solution design, product and equipment supervision, component and whole-machine certification, on-site engineering supervision, testing, grid connection testing, and operational technical upgrades, from planning, construction, to operation stages.



2.9 Equipment and Facilities Intelligent Inspection Technology Services

- Possessing comprehensive online monitoring technical service capabilities for all scenarios of equipment and facilities, utilizing a full range of inspection and testing technical capabilities and an intelligent management platform that seamlessly integrates offline and online operations, we provide our clients with integrated solutions for asset digital management.

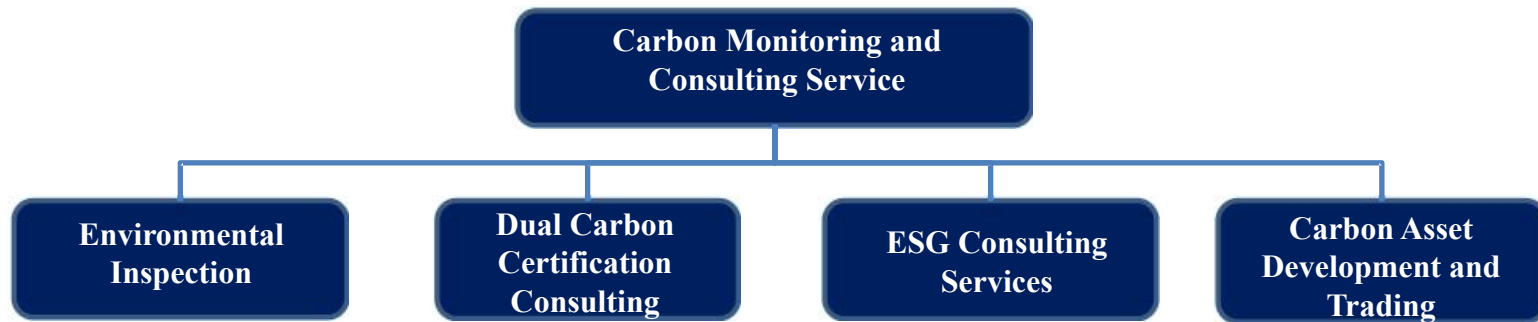


- Drawing upon over 20 years of on-site equipment and facilities inspection experience, we have a deep understanding of the operational challenges and pain points faced by our clients. We provide targeted intelligent monitoring and predictive maintenance solutions.
- Utilizing Industrial Internet platform technology, we enable intelligent management of production organization, health management of key units, comprehensive energy management of sites, and integrated HSE management, promoting the construction of unmanned stations for oil and gas production and pipelines.
- With our independently developed intelligent software platform, we offer digitized management combining detection and monitoring. We integrate offline and online technical service modes to achieve an integrated intelligent detection system.



2.10 Carbon Monitoring and Consulting Service

- Providing comprehensive dual carbon technical services, including carbon neutrality certification consulting, carbon asset development and trading, ESG consulting, environmental consulting, and ecological environment monitoring.



- Rich experience in managing dual carbon consultation projects, supported by a team of 20 senior technical experts from diverse fields, equipped with comprehensive capabilities for dual carbon technical consultation services.
- Precise carbon monitoring technical capabilities, offering businesses an integrated, end-to-end solution for peak carbon emissions and carbon neutrality, facilitating clean and efficient production, energy structure adjustment, and enhanced carbon management capabilities.
- Provision of comprehensive services encompassing greenhouse gas verification, zero-carbon parks, and low-carbon product certifications.





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Intelligent·Environmental·Safer·Better