FROST & SULLIVAN
BEST PRACTICES

2026 GLOBAL NDT FIELD INSPECTION SERVICES COMPANY OF THE YEAR

MISTRAS

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Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. MISTRAS Group excels in many of the criteria in the NDT field inspection services space.

RECOGNITION CRITERIA

Visionary Innovation & Performance	*Customer Impact*
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Megatrends	Customer Purchase Experience
Leadership Focus	Customer Ownership Experience
Best Practices Implementation	Customer Service Experience
Financial Performance	Brand Equity

The Transformation of the Global NDT Field Inspection Services Industry

The non-destructive testing (NDT) segment within the field inspection services industry identifies emerging growth opportunities and shifting competitive dynamics, driving structural transformation. Geopolitical instability in several regions continues to influence project timelines, cross-border operations, and regulatory compliance requirements, making service providers strengthen risk management strategies and operational flexibility.

At the same time, transformative megatrends expand the scope of NDT applications. Space exploration programs increasingly rely on advanced inspection technologies to ensure material integrity and mission safety, creating new high-precision service demands. Industry convergence further accelerates change, as cross-sector collaboration among aerospace, energy, manufacturing, and infrastructure stakeholders drives efforts to establish universal NDT standards. These initiatives aim to harmonize methodologies, improve interoperability, and streamline inspection practices across industries.

Technology integration plays a central role in redefining service delivery models. The adoption of Internet of Things-enabled sensors supports real-time asset monitoring and predictive maintenance strategies, allowing inspection providers to deliver continuous data-driven insights rather than periodic assessments. Blockchain technology contributes to value chain compression by strengthening traceability, enhancing data integrity, and securing inspection records across distributed networks.

Despite these opportunities, the market faces notable constraints. Digitalization increases exposure to cybersecurity risks, particularly as inspection data becomes more interconnected and cloud-based. Many organizations also encounter internal resistance to adopting advanced inspection technologies due to cost concerns, skills gaps, and legacy system dependencies. Meanwhile, multinational corporations continue to expand globally, intensifying competitive pressure. Tier II providers increasingly broaden their geographic footprint to capture new demand, which further raises market rivalry. Within this evolving environment, NDT vendors prioritize capability enhancement, digital integration, and geographic expansion to strengthen differentiation and capture emerging growth opportunities across the global field inspection services landscape.[1]

The United States (US) remains the largest and most dynamic market, driven by high inspection volumes across data centers, commercial space, aerospace, and defense. Strong capital investment in advanced manufacturing, digital infrastructure, and energy transition projects continues to sustain demand for inspection and asset integrity services. The scale and diversity of US end markets position it as a primary growth engine.

At the same time, emerging markets present significant expansion opportunities. In oil and gas (O&G), production shifts from higher-cost regions such as the US and Europe toward Latin America and the Middle East have stimulated new inspection demand. The Middle East, in particular, shows strong momentum as new assets, pipelines, and processing facilities come online. These developments create sustained requirements for construction-phase inspection, commissioning support, and long-term integrity management services. The organization maintains a direct presence across these regions, enabling it to capture growth in both mature and emerging markets.

Looking ahead over the 2026-2030 period, digital execution and artificial intelligence (AI) will define competitive positioning within the inspection services sector. The strategic focus centers on fully digital field operations that minimize manual data handling, reduce inefficiencies, and improve workflow coordination. By leveraging decades of accumulated asset data across millions of inspection records, advanced analytics and AI-driven models will enable more predictive and prescriptive decision-making. This approach supports optimized inspection intervals, improved resource allocation, and continuous performance enhancement. The long-term objective emphasizes end-to-end digital integration, data-driven optimization, and measurable year-over-year improvement in operational effectiveness across global markets.

MISTRAS Group: Integrated Global Leader in Asset Protection and Integrity Solutions

Founded in 1978 and headquartered in Princeton Junction, New Jersey, MISTRAS Group (MISTRAS) is a global provider of asset protection and integrity solutions that help industrial operators maximize the safety, reliability, and performance of critical infrastructure. The company delivers non-destructive testing, inspection, engineering, and consulting services across O&G, power generation, aerospace, defense, chemicals, and infrastructure markets. Beyond field inspection services, MISTRAS designs and manufactures advanced sensor technologies, robotic inspection systems, and data

[1] *Top 10 Strategic Imperatives for the Non-destructive Testing Market, 2025* (Frost & Sullivan, March 2025)

management software platforms that support integrity management programs. By integrating inspection execution with proprietary technologies and digital analytics, the company enables customers to monitor asset condition, maintain regulatory compliance, extend asset life, and reduce operational risk. Its global footprint and vertically integrated capabilities position MISTRAS as a strategic partner in asset integrity and reliability management.

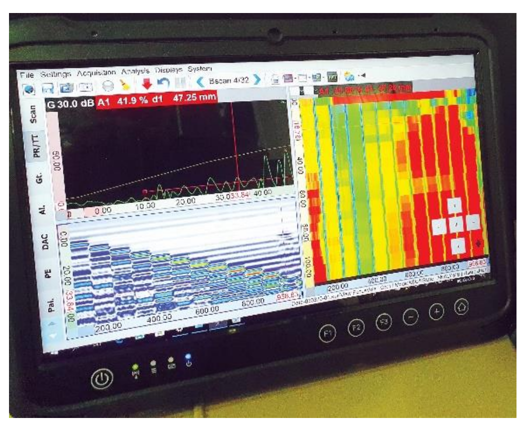
> *"MISTRAS differentiates itself through integration. It combines inspection services with internally developed engineered products and a dedicated software division that aggregates field data captured by proprietary equipment and certified technicians. This model enables data consolidation, advanced analytics, and actionable insights that support risk-informed asset optimization."*
>
> ***- Marcos Ainchil,***
> ***BPR Analyst***

Digital Transformation, Asset Intelligence, and Managed Service Innovation in Field Inspection

The field inspection market is evolving as customers recalibrate expectations based on commodity cycles, asset age, and competitive pressures. In energy markets, particularly O&G, pricing pressure continues to influence procurement decisions. Some operators prioritize cost containment and request basic inspection services at reduced rates. Others demand deeper asset intelligence, expanded coverage, and real-time data transparency. These divergent expectations create both commercial and technical complexity.

Asset aging further intensifies demand. Operators increasingly require visibility into hard-to-access or previously inaccessible areas, including reinforced concrete structures, elevated components, storage tanks, and complex industrial facilities. As infrastructure across multiple sectors continues to mature, inspection providers must deliver accurate diagnostics in environments that historically constrained traditional NDT techniques.

MISTRAS differentiates itself through integration. It combines inspection services with internally developed engineered products and a dedicated software division that aggregates field data captured by proprietary equipment and certified technicians. This model enables data consolidation, advanced analytics, and actionable insights that support risk-informed asset optimization. Few providers operate across services, engineered products, and software within a unified framework spanning the inspection lifecycle.



The industry's commercial model is also shifting. Historically, time-and-materials billing created misaligned incentives: customers focused on asset uptime and compliance, while providers optimized labor utilization. Managed services and performance-based contracts are gaining traction, introducing risk-sharing mechanisms and outcome-oriented frameworks that better align interests.

MISTRAS actively supports this transition through continuous monitoring systems, permanent sensors, mobile field applications, and analytics-driven asset management tools. These solutions enhance execution efficiency while enabling measurable performance improvements, an essential capability as customers move toward value-based engagement models.

Digital transformation, AI, and smart inspection technologies now define competitive differentiation. Asset owners expect inspection activities to generate structured, actionable intelligence rather than static reports.

> *"The company leverages its proprietary Plant Condition Management Software (PCMS), a widely adopted integrity data management platform within O&G. PCMS houses decades of historical inspection data covering thousands of assets. By embedding AI-driven analytics into this environment, MISTRAS enhances planning precision. Predictive and prescriptive models prioritize high-risk locations, reducing unnecessary sampling while preserving compliance and safety. Inspection strategies shift from routine, volume-based execution to risk-informed optimization."*
>
> ***- Prem Shanmugam,***
> ***VP & Global Practice Area Leader***

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Digital twin technology further strengthens planning and deployment. Advanced scanning creates high-fidelity digital models that integrate with integrity data inside PCMS. This linkage allows teams to cluster inspection activities logically, reduce redundant mobilization, and optimize deployment schedules across large facilities. These capabilities directly support managed service contracts, where efficiency and measurable outcomes define value.

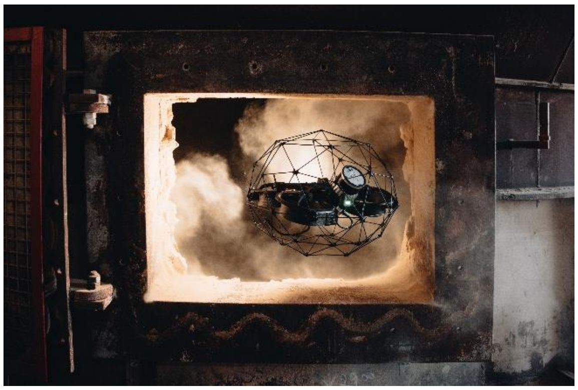
Innovation remains collaborative. Customers participate in pilot programs and structured feedback cycles to refine AI applications, digital twin integration, and inspection tools. This co-development model accelerates adoption while grounding innovation in operational realities.

The same philosophy applies to robotics. MISTRAS's digital radiography crawler platform, now in its sixth generation, reflects iterative improvements driven by field feedback. Each generation addresses practical challenges identified in live operating environments, expanding functionality and improving inspection completeness and compliance outcomes. This structured innovation process strengthens technical differentiation while reinforcing long-term partnerships.

Frontline engagement underpins these efforts. Field technicians interact daily with customer assets and develop deep insight into degradation mechanisms and site-specific risks. Their observations inform process refinement, equipment enhancements, and service improvements. By systematically incorporating frontline expertise into decision-making, MISTRAS reinforces service quality and accelerates innovation.

Rapid deployment of emerging NDT technologies remains a strategic priority as customers seek higher productivity, expanded coverage, and improved safety.

Robotic crawler systems performing digital radiography are increasingly deployed in complex industrial environments. Adoption continues to expand across the Middle East, Southeast Asia, and Latin America, where operators prioritize accelerated timelines and efficiency gains. Compared to conventional techniques, robotic crawlers increase scanning speed, enhance data accuracy, and expand coverage while reducing exposure risk.



Unmanned aerial vehicles and drone-based inspection platforms address elevated and difficult-to-access assets, reducing reliance on scaffolding and other traditional access methods. Advanced techniques such as acoustic emission testing further enable real-time asset evaluation. Although adoption sometimes requires customer education, the long-term productivity and safety advantages support broader implementation.

Workforce demographics present structural challenges across the NDT sector. A significant portion of certified technicians are approaching retirement age, creating potential skill gaps as experienced personnel exit the workforce. While automation offsets some labor constraints, inspection services will continue to depend on highly trained professionals.

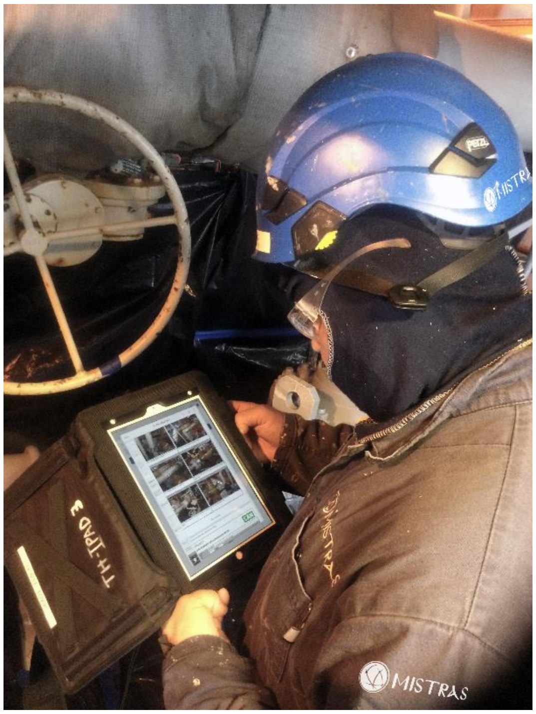
MISTRAS addresses this through structured workforce development. Investments in formal training programs, certification pathways, and apprenticeship models support career progression from entry-level roles to advanced credentials such as American Petroleum Institute and Certified Welding Inspector certifications. Recruitment efforts extend to technical schools and adjacent industries to broaden the talent pipeline. By combining accelerated technology adoption with disciplined workforce investment, the company strengthens operational resilience and positions itself to navigate long-term capacity constraints.

Traditional O&G markets, particularly in North America, have experienced sustained pressure. Reduced capital expenditures following the COVID period, deferred maintenance programs, and extended inspection intervals have limited demand growth. Assets that previously required annual inspection may now follow multi-year cycles. Refinery closures in higher-cost regions and geographic capacity shifts have further reshaped demand patterns, intensifying competition.

A substantial backlog of US capital projects provides additional growth visibility. Liquefied natural gas facilities, semiconductor fabrication plants, and large-scale industrial construction projects require extensive inspection during fabrication and commissioning. Data center construction is accelerating in parallel with AI-driven computing demand. Each facility requires inspection during construction and ongoing maintenance once operational. Expanding data center capacity also drives parallel investment in power generation infrastructure, creating downstream inspection demand.

Aging infrastructure remains a durable growth driver. Bridges, buildings, maritime structures, wind turbines, and other critical assets require corrosion management and ongoing inspection. MISTRAS deploys continuous monitoring sensors on bridges and provides inspection services for wind turbine components. These diversified exposures mitigate volatility in traditional energy markets while aligning with infrastructure renewal and advanced manufacturing expansion.

Data-Backed Value Delivery and Digitally Enabled Commercial Execution



Financial performance reflects disciplined execution. Since 2022, the company has delivered consistent year-over-year improvement in adjusted Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA). Guidance for 2025 indicates approximately 50% growth in adjusted EBITDA over the two-year period from 2023 to 2025.[2] This trajectory underscores sustained focus on margin expansion, cost control, and operational efficiency across market cycles.

Customer perception of value centers on measurable performance. Rather than relying on qualitative claims, MISTRAS emphasizes transparent reporting supported by digital field execution systems. Technicians use mobile devices to capture readings, automate data transfer into customer platforms, and track productive versus non-productive time.

During monthly and quarterly business reviews, customers receive productivity metrics demonstrating efficiency gains, labor utilization trends, and reductions in non-productive time. This transparency enables objective validation of price-performance value and strengthens long-term commercial relationships.

Digital execution tools also differentiate the company during sales and onboarding. Integrated field data collection systems support automated reporting, real-time visibility, and streamlined documentation. Many competitors continue to rely on manual or fragmented processes that limit transparency and control. By embedding digital workflows into service delivery, MISTRAS enhances reporting accuracy and supports more informed asset management decisions.

To reduce the total cost of ownership, the company advances an integrated solutions framework aligned with managed services. Rather than limiting engagement to discrete NDT tasks, it assumes broader responsibility for compliance management, inspection planning, and program execution. Bundled service delivery incorporates advanced NDT methods, risk-based inspection strategies, rope access solutions that reduce scaffolding requirements, and proprietary technologies that optimize scope.

[2] Frost & Sullivan's Best Practices Research Discussion with MISTRAS Group (February 2026)

This consolidated approach minimizes redundancy, reduces downtime, and delivers measurable cost savings while aligning incentives under performance-based models.

The purchasing experience reflects project complexity. For single-site or short-duration engagements, streamlined bid and mobilization processes ensure rapid execution. For multi-site enterprise contracts, cross-functional corporate teams coordinate scalable solutions addressing geographic coverage, technical capability, and long-term partnership objectives. This tailored approach enhances transparency and responsiveness across engagement types.

Embedded Field Partnerships and Structured, Continuous Customer Feedback

Customer experience management relies on structured, multi-layered feedback mechanisms. Many client relationships span multiple years and involve daily on-site collaboration. The company conducts periodic business reviews on a monthly or quarterly basis to assess performance, identify improvement areas, and align with evolving priorities. Field supervisors and project managers also maintain continuous dialogue with customer representatives, capturing real-time feedback during ongoing operations. At the enterprise level, the organization deploys formal surveys and performance scorecards that evaluate execution, safety, quality, and overall service delivery. Digital communication channels further embed feedback loops by enabling recipients to provide immediate input through standard email interactions. These mechanisms create an integrated system for monitoring satisfaction and driving continuous improvement.

Safety-Led Brand Authority with a Modernized, Technology-Forward Identity

Brand credibility begins in the field. Technicians and supervisors serve as primary brand ambassadors, representing the company’s safety culture, technical competence, and compliance discipline. Daily on-site execution reinforces customer trust and operational reliability.

At the same time, MISTRAS is modernizing its market identity to reflect its expanding technology capabilities. A comprehensive website redesign introduces a more contemporary presentation aligned with its integrated solutions model and digital transformation initiatives. The refreshed platform clearly articulates value across each phase of the asset lifecycle, replacing fragmented service descriptions with a cohesive narrative linking inspection, analytics, and optimization.

Thought leadership initiatives and executive engagement in industry publications further communicate expertise in digital transformation, advanced inspection technologies, and evolving energy and infrastructure requirements. By combining frontline operational excellence with structured brand modernization and data-driven execution, MISTRAS reinforces its position as a safety-led, technology-enabled leader in global asset protection and integrity services.

Conclusion

MISTRAS Group redefines field inspection through digital integration, advanced analytics, and a managed services model that aligns directly with customer outcomes. The company combines proprietary technologies, artificial intelligence-enabled data intelligence, and frontline technical expertise to deliver measurable performance improvements across global markets. Its disciplined operational execution drives sustained Earnings Before Interest, Taxes, Depreciation, and Amortization growth while maintaining strong safety and quality standards. Through strategic diversification into high-growth sectors and emerging geographies, MISTRAS demonstrates resilience and forward-looking leadership. By uniting innovation, financial strength, and customer-centric execution, the company sets a benchmark for excellence in asset integrity and inspection services.

With its strong overall performance, MISTRAS Group earns Frost & Sullivan’s 2026 Global Company of the Year Recognition in the NDT field inspection services industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Recognition is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Recognition Analysis

For the Company of the Year Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed to create growth opportunities across the entire value chain

Visionary Scenarios Through Megatrends: Long-range scenarios are incorporated into the innovation strategy by leveraging megatrends and cutting-edge technologies, thereby accelerating the transformational growth journey

Leadership Focus: The company focuses on building a leadership position in core markets to create stiff barriers to entry for new competitors and enhance its future growth potential

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate consistent, repeatable, and scalable success

Financial Performance: Strong overall business performance is achieved by striking the optimal balance between investing in revenue growth and maximizing operating margin

Customer Impact

Price/Performance Value: Products or services offer the best ROI and superior value compared to similar market offerings

Customer Purchase Experience: Purchase experience with minimal friction and high transparency assures customers that they are buying the optimal solution to address both their needs and constraints

Customer Ownership Excellence: Products and solutions evolve continuously in sync with the customers' own growth journeys, engendering pride of ownership and enhanced customer experience

Customer Service Experience: Customer service is readily accessible and stress-free, and delivered with high quality, high availability, and fast response time

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty, which is regularly measured and confirmed through a high Net Promoter Score®

Best Practices Recognition Analytics Methodology

Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

		VALUE IMPACT	
STEP		WHAT	WHY
1	**Opportunity Universe**	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	**Transformational Model**	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	**Ecosystem**	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	**Growth Generator**	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	**Growth Opportunities**	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	**Frost Radar**	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	**Best Practices**	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	**Companies to Action**	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

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Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Generator™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fueled by the Innovation Generator™.

Learn more.

Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- **Growth Strategies:** Proven Best Practices
- **Innovation Culture:** Optimized Customer Experience
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** Industry Leadership

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Megatrend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)