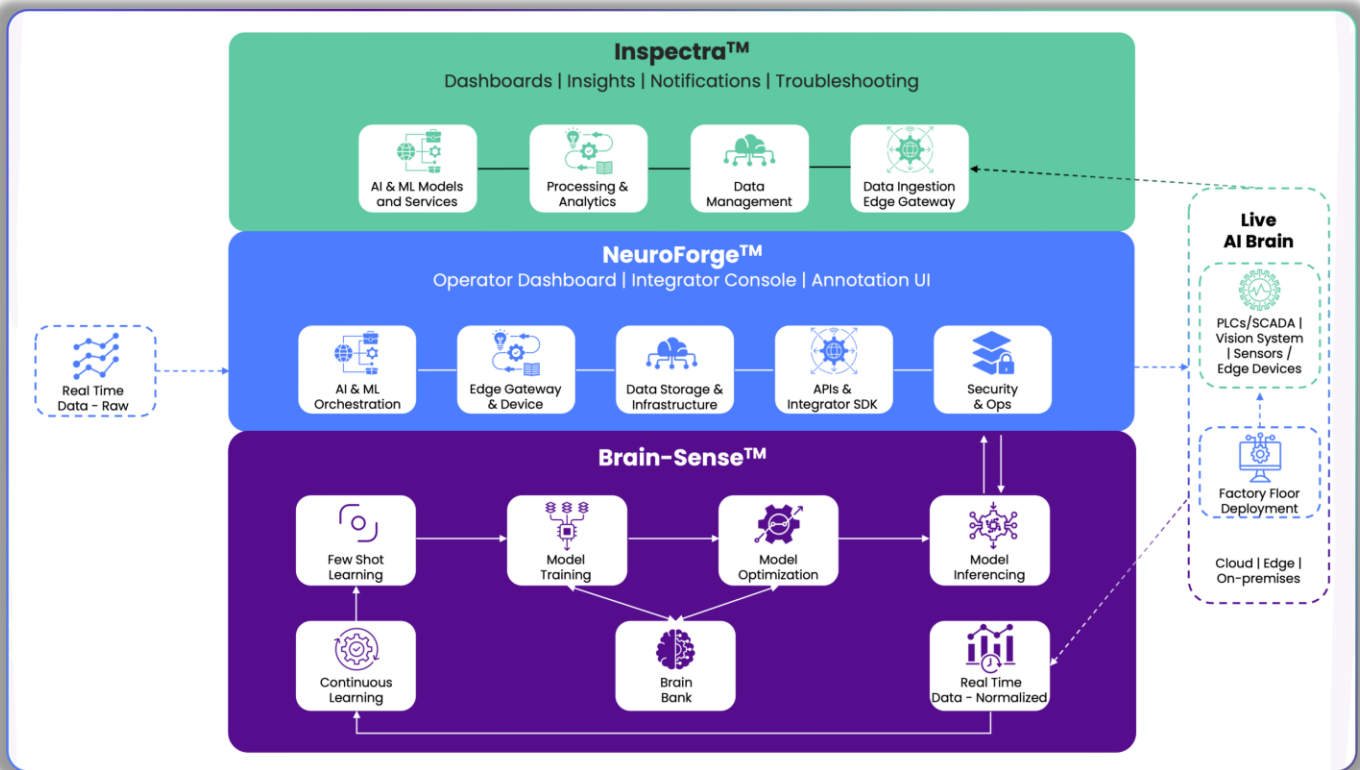


MINDTRACE.AI SMART MANUFACTURING PLATFORM

Defect Detection AI Technology. Implementation-Ready. Actionable Analytics.

AI technology is a critical part of smart manufacturing automation, but it is not a standalone solution. This is especially true in manufacturing settings where the technology needs to be integrated into production line equipment, trained to recognize customer-specific defects and provide actionable analytics that drive improvements. Mindtrace understands these requirements and provides a complete smart manufacturing solution that delivers unrivaled accuracy, fast up-times, and lasting value.



With Mindtrace

90%

Fewer Images

80%

Cost Reduction

98%

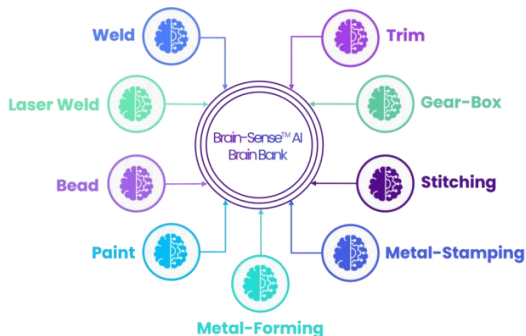
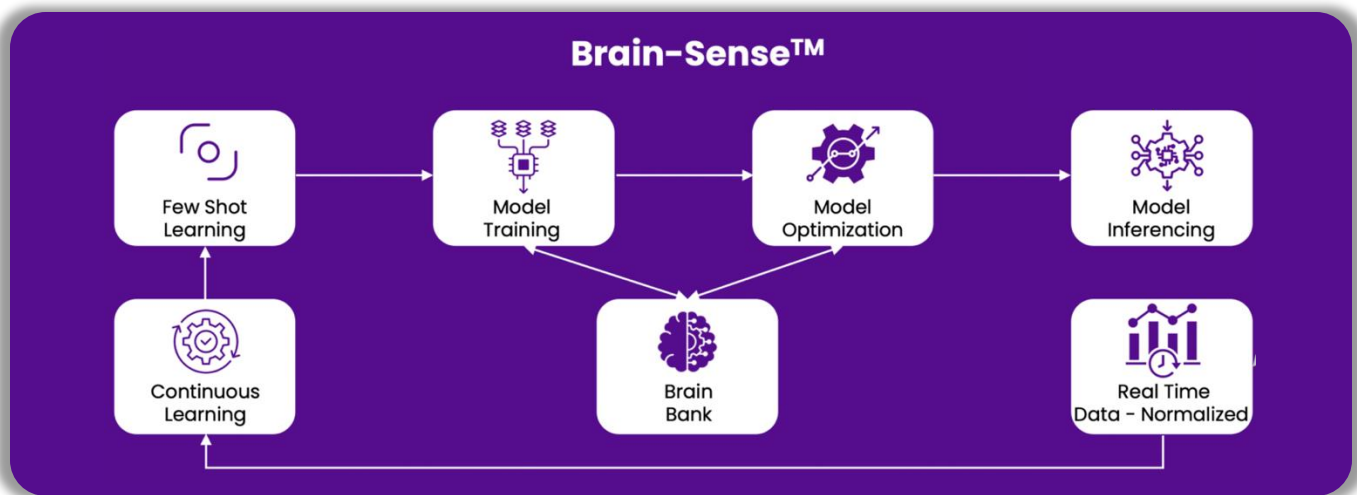
Gage R&R Score

Brain-Sense™ Technology Platform

Computer Vision for Defect Detection

Brain-Sense™ provides manufacturers with **fully automated, highly accurate, defect detection** with significant advantages:

- Detects defects faster and more accurately, reducing escapes and improving yield
- Operates **24/7/365** without fatigue
- Delivers **cost savings** compared to manual inspections



The core of Brain-Sense™ is a Brain Bank of AI data models that are pretrained to recognize a wide range of manufacturing defects. As a result, these “brains” can be rapidly customized for each customer’s unique needs with minimal additional.



Fast & Efficient Training

- Few-Shot Detection – Achieves high accuracy with as few as 20 images, minimizing data collection and training time.
- Transfer Learning – Adapts pre-trained AI “brains” to new tasks quickly, accelerating deployment.



Smarter Over Time

- Continuous Learning – Models adapt to new parts, processes, and defects without retraining from scratch.
- Self-Supervised Learning – Improves performance using unlabelled data, reducing reliance on expensive annotations.



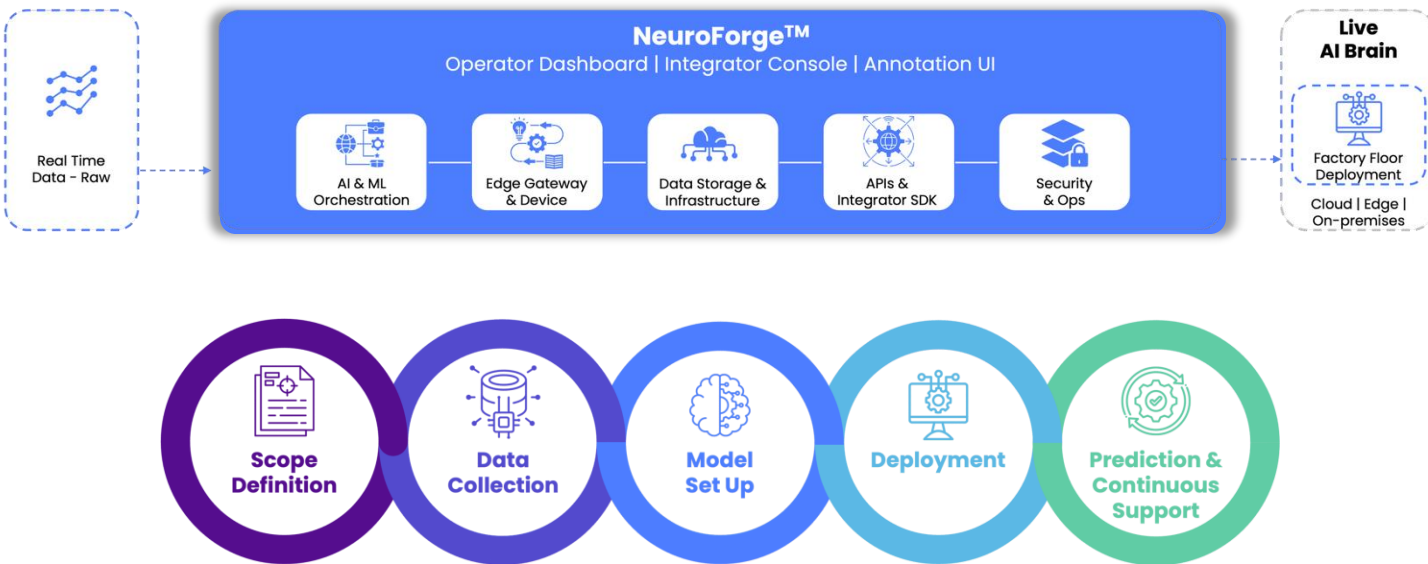
Deeper Quality Insights

- Unsupervised Learning – Detects hidden patterns and insights beyond predefined rules.
- Deep Attention Learning – Focuses on the most relevant features of each part, improving accuracy and defect recognition.

Mindtrace NeuroForge™

Integration-Ready, Custom Application

NeuroForge™ provides a **set of tools and gateways** that embed Brain-Sense™ AI defect detection into manufacturers' existing production cells, workflows, data pipelines and production-specific requirements.



NeuroForge™ transforms smart manufacturing technology into **operational reality** — bridging the gap between AI research and the factory floor. NeuroForge™ enables **secure, scalable, and efficient deployment**, reducing risk and accelerating ROI.

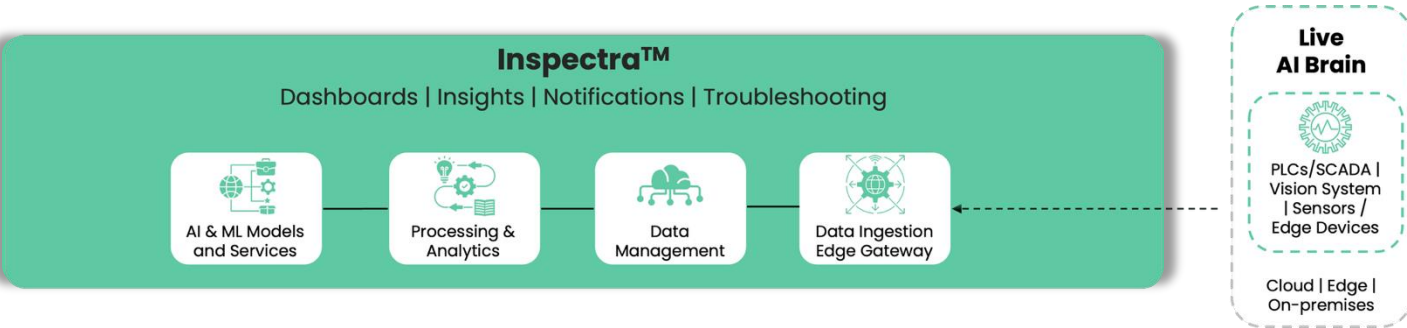


Mindtrace Inspectra™

Trends & Actionable Insights

Inspectra™ is a powerful analytics portal that synchronizes with the “AI Brains” deployed by NeuroForge™, to **collect, catalog, and analyze** defect data on the factory floor. Inspectra™ delivers:

- Predictive analytics
- Root cause analysis
- Compliance reporting
- Monitoring & insights



CEO

Inspectra™ gives the CEO a clear, enterprise-wide view of quality performance without requiring technical deep dives. Dashboards highlight overall defect rates, cost savings from reduced rework, supplier quality trends, and ROI from AI-driven inspection, enabling quick, strategic decisions that protect brand reputation and shareholder value.



Global Operations Head

For regional or global operations leaders, Inspectra™ consolidates data across multiple plants into a single, standardized view. Dashboards provide factory-to-factory comparisons, throughput vs. defect correlations, and predictive maintenance alerts, simplifying oversight of complex global networks.



Plant Manager

Inspectra™ equips plant managers with actionable intelligence to maximize uptime and yield. Their dashboard displays line-level defect trends, equipment utilization, downtime causes, and workforce efficiency metrics, enabling them to keep production on track and improve output quality.



Rework Manager

Inspectra™ simplifies the job of rework managers by surfacing which defects occur most frequently and where they originate. Their dashboard shows defect categories, parts most impacted, operator shift correlations, and rework cycle time, helping reduce unnecessary effort and lower scrap costs.



QA Manager

Quality Assurance (QA) managers use Inspectra™ to maintain compliance and consistency across operations. Dashboards feature detailed defect classification, SPC (statistical process control) metrics, first-pass yield, and compliance/audit-ready reports, ensuring quality standards are met and easily demonstrated.



Floor Manager

Inspectra™ provides floor managers with real-time, line-side visibility into production health. Their dashboard emphasizes alerts for new or recurring defects, operator performance indicators, and live production KPIs, enabling faster troubleshooting and smoother coordination on the shop floor.

Inspectra™ turns parts inspection data into actionable intelligence that empowers OEMs and suppliers with transparent, auditable insights that improve quality, compliance, and customer trust.