

AI Brain for Smart Factory

ASTRI's AI Brain for Smart Factory's metacognitive reasoning engine unifies multimodal industrial information, isolated knowledge bases, and inconsistent decision frameworks, creating a centralised intelligence layer adapting to each factory's unique context. The system enables cross-functional insights, transforming fragmented information into actionable intelligence supporting design and maintenance. Combining cutting-edge AI orchestration with domain-specific learning, M-CORE accelerates innovation cycles whilst reducing operational and training costs.

Industry Challenges

- **Data Heterogeneity:** Manufacturing environments generate diverse, multimodal data that resists standardisation
- **Proprietary Silos:** Factory-specific data remains isolated, preventing knowledge transfer
- **Inconsistent Standards:** Decision-making criteria vary significantly across facilities

Major Benefits

- **Workforce Optimisation:** Streamlines labor costs whilst dramatically improving training efficiency and knowledge transfer
- **Quality Enhancement:** Elevates technical output quality and manufacturing yield through intelligent recommendations
- **Development Acceleration:** Significantly compresses research and development timelines
- **Productivity Amplification:** Substantially increases per-engineer output and overall operational effectiveness

Application Areas

- Product design recommendation
- Workflow orchestration
- Machine repair recommendation
- Employee training

Collaborator(s)

Manufacturers of consumer electronics, optics and precision manufacturing



It collects scattered data efficiently and turn them into precise actions through AI, making manufacturing smarter and more efficient

