

Production and quality assurance

Shaping mobility through world-class manufacturing

For three decades, HMIL has built one of the country's most advanced and dependable automotive manufacturing ecosystems. With intelligent automation, agile platforms and uncompromising quality systems, our factories in Chennai and Pune form the backbone of our growth – delivering precision, scalability and future-ready capability to power India's evolving mobility landscape.



Scaled capability and continuous evolution

HMIL's manufacturing journey is defined by purposeful expansion, disciplined execution and relentless technological advancement. Our Chennai plant, spread across 536 acres, has evolved through four strategic phases – establishing a strong foothold, scaling operations, driving new market segments and building agile, sustainable resilience. With 8,24,000 units of installed capacity and 13.5 million vehicles produced till March 2026, the facility remains a benchmark for operational efficiency and quality excellence.

The addition of our Pune plant marks a new era. With 300 acres of advanced infrastructure, four vehicle shops, one engine shop and a calibrated ramp-up plan began in October 2025, this plant will reinforce our ambition to reach over 1.1 million units in annual capacity, the highest among HMC's global facilities.

Agility and flexibility

Our manufacturing architecture is designed to respond to evolving product demand with exceptional flexibility. Our plants produce 15 models including N Line, with capabilities spanning hatchbacks, sedans, SUVs, Taxi and EVs on shared lines.

60+

Powertrain combinations across petrol, diesel, CNG and EV

450+

Multi-model variants (in a month)



One passenger vehicle produced every 30 seconds (approx.)

13.5 Mn+

Units produced till March 31, 2026

This multi-model, multi-variant adaptability ensures faster market responsiveness and efficient capacity utilization.

The strength of our manufacturing discipline is reflected in consistently high First Time Through (FTT) yields and in-line pass ratios. Supported by stage-wise inspection protocols, digital quality controls and predictive analytics, these metrics demonstrate our ability to achieve high-volume production while maintaining world-class quality standards.

Progressing towards a software-defined plant

Our plants are undergoing a transformative shift toward intelligent, software-defined manufacturing. This evolution is anchored on three pillars:



Advanced, flexible automation

Robotic precision and modular systems enable seamless workflow transitions across models and platforms.



Human-friendly smart technology

Man-machine collaboration enhances safety, ergonomics and operational efficiency.



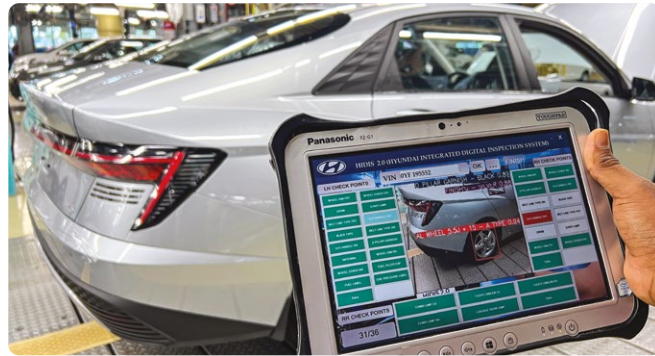
AI and big data integration

Digital twins, predictive analytics and intelligent monitoring systems improve visibility, predictability and decision-making across the manufacturing lifecycle.

Production and quality assurance

Advanced technologies driving precision

HMIL's manufacturing ecosystem combines advanced automation with digital quality intelligence to ensure precision, consistency and traceability across operations. Real-time monitoring, AI-enabled inspections and integrated quality platforms strengthen process control and support continuous improvement across the production lifecycle.



AI inspection systems
Ensure defect-free output and improve inspection accuracy



AI-based tester line
Accelerates end-of-line validation and quality checks



Digital command centre
Enables real-time operational monitoring



Auto body dimension scanners
Ensure structural accuracy and dimensional consistency



Zero-emission engine performance testing
Validates environmentally responsible performance



Engine dynamometer laboratories
Test durability, efficiency and engine performance



HIVIS and GQAS platforms
Enable real-time quality monitoring and process traceability



HIDIS and RTSQIS systems
Support AI-driven defect detection and predictive quality management

These innovations strengthen consistency, reduce variability and maintain Hyundai's global manufacturing benchmarks.



A quality-centric manufacturing philosophy

Quality excellence forms the cornerstone of HMIL's manufacturing competitiveness and remains a key driver of customer trust. Guided by a zero-defect mindset, our integrated quality ecosystem spans manufacturing operations, powertrain engineering, supplier quality management and field quality assurance, ensuring reliability throughout the entire vehicle lifecycle.

Our commitment to safety and quality is reinforced through Q-Nxt and Q-Safe practices, supported by 304 critical quality checkpoints designed to achieve zero safety defects. Advanced digital systems enable end-to-end traceability and real-time visibility, facilitating rapid issue identification and resolution while maintaining consistent quality standards across the supplier and manufacturing ecosystem.



India condition durability testing: Replicating real-world terrain stress



Supplier Quality Evaluation
frameworks for sustained supply chain excellence



HMC global quality systems
for inline and field-level quality control



NABL-accredited emission laboratory ensuring regulatory compliance



Dynamic quality validation across diverse road conditions



Q-Nxt and Q-Safe frameworks to drive quality excellence through 304 critical checkpoints



GPTIS systems to enable VIN-level traceability

Through the integration of digital technologies, rigorous validation protocols and disciplined manufacturing practices, HMIL is benchmarking itself against the highest global standards. Strong performance in Hyundai's global plant quality assessments and dealer pre-delivery inspection evaluations reflect the effectiveness of this approach.

This comprehensive quality ecosystem ensures that every vehicle manufactured in India delivers reliability, safety and performance that customers can trust.

Sustainable and responsible

Across our plants, sustainability is embedded into our manufacturing philosophy. From advanced water recycling systems and energy-efficient paint shops to extensive green cover and environmentally responsible production practices, our facilities are designed to minimize environmental impact while maximizing operational efficiency.

As India's mobility landscape evolves, HMIL's manufacturing ecosystem is evolving alongside it. Our transition toward electrification, intelligent manufacturing and software-defined operations ensures that our facilities remain future-ready, supporting both domestic growth and global ambitions while advancing our vision of Progress for Humanity.

