



ENGINEERING PRECISION · GLOBAL STANDARDS · OEM-READY MANUFACTURING



EXECUTIVE OVERVIEW

Founded in 2009, the Modicon Group is a diversified engineering and manufacturing organisation built on a strong foundation of engineering excellence, disciplined processes, and technical problem-solving.

What began as a specialised fabrication and engineering operation has evolved into a multi-vertical group delivering design, prototyping, industrial fabrication, and OEM-grade automotive manufacturing solutions.

Today, We Modicon supports customers across the entire product lifecycle, from concept and design, through prototyping and validation, to serial production and large-scale manufacturing, within a single, fully integrated engineering ecosystem.

EVOLUTOIN

2009 – Foundation: Modicon Engineering

Modicon was founded by **Dakshitha Chandradasa** as **Modicon Engineering**, with a clear objective:

“ *To deliver high-quality engineered storage solutions while pushing the boundaries of manufacturing capability in Sri Lanka.* ”

Starting from a modest **1,000 sq. ft. facility** with a single engineer and technician, We rapidly earned a reputation for **precision, reliability, and technical problem-solving.**

2015 – Design & Prototyping Expansion: 3D Tech

Recognising the growing demand for design-led manufacturing, the Group expanded in 2015 with the launch of **3D Tech.**

Established to:

- Enable in-house product design and validation
- Support rapid prototyping and reverse engineering
- Bridge the gap between concept and manufacturability

What began as an internal capability soon evolved into a **full-service design and prototyping arm**, supporting entrepreneurs, start-ups, SMEs, and industrial clients.

2019 – OEM Automotive Manufacturing: Modicon Automotive

In 2019, we made a strategic entry into **automotive component manufacturing** with the formation of **Modicon Automotive**, aligning operations to global OEM standards.

This milestone positioned us as **one of Sri Lanka's OEM automotive component manufacturers for the locally assembled vehicle market**, capable of meeting stringent international automotive requirements.





MARKET POSITION & COMPETITIVE ADVANTAGE



MODICON'S DIFFERENTIATION IS DRIVEN BY:

- One of Sri Lanka's leading OEM automotive component manufacturers
- End-to-end engineering and production under one roof
- Competitive regional cost positioning
- Manufacturing discipline aligned with global standards
- Fast design-to-production turnaround
- Robust quality management and process control
- Highly skilled engineering workforce

Our production model combines international compliance with regional competitiveness, delivering cost-effective and technically assured manufacturing solutions.



LEADERSHIP & GOVERNANCE



A manufacturing engineer with over 17 years of expertise in:

- Metal forming and fabrication
- Mandrel bending for precision tube geometries
- Welding technologies (TIG, MIG, Pulse, Seam)
- Metallurgical and structural analysis
- Production automation and process development
- Tooling, jigs, and fixture engineering

His leadership ensures production accuracy, consistency, and repeatability aligned with global standards.

Dakshitha Chandradasa

Managing Director
BEng (Hons), MIET

An engineering and industrial operations specialist with over 15 years of experience in:

- Manufacturing systems design
- IATF-aligned quality frameworks
- Supply chain management
- Multi-process workflow engineering
- Technology adoption and workforce development

He leads operational discipline, quality assurance, and long-term competitiveness.



Jayamal Gunarathne

Director
BS Mech, BEng (Hons), UK

Leadership Philosophy

“To build a **globally competitive manufacturing ecosystem in Sri Lanka**, guided by engineering integrity, disciplined process control, and an unwavering commitment to excellence.”



BUSINESS VERTICALS



MODICON ENGINEERING

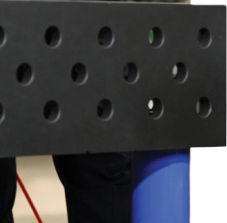
INDUSTRIAL FABRICATION & STORAGE SYSTEMS

Core Capabilities

- Light, medium, and heavy-duty racking systems
- Pallet and cantilever racking
- Movable and modular storage solutions
- Industrial shelving
- Custom steel fabrication

Industries Served

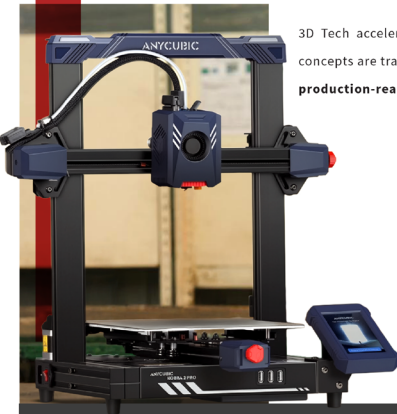
- Automotive and logistics
- Warehousing and distribution
- Manufacturing facilities
- Retail and industrial infrastructure



3D TECH

Design Engineering & Rapid Prototyping

- 3D scanning and reverse engineering
- CAD design and modelling
- Rapid prototyping
- Vacuum casting
- Design validation and iteration



3D Tech accelerates development cycles and ensures concepts are translated into **manufacturable, production-ready solutions.**

MODICON AUTOMOTIVE

OEM Automotive Manufacturing

Modicon Automotive is a fully integrated automotive component manufacturer supplying precision-engineered systems to global vehicle platforms.

Product Portfolio

- Exhaust systems
- Fuel tanks
- Bent-tube assemblies
- Structural automotive components
- 4x4 accessories and protection systems



With **>99% acceptance rates** and **first-attempt PPAP success**, we are a technically mature and reliable OEM partner.



**OEM CREDENTIALS
& TRUST MARKERS**

OEM CREDENTIALS & TRUST MARKERS

Global Automobile OEM Partnerships



Other Partnerships





OEM CASE STUDY MAHINDRA & MAHINDRA

BACKGROUND

We entered Mahindra's supply chain through a long-standing engineering relationship with Ideal Motors and through the successful completion of several research and development projects. Following a rigorous supplier evaluation process, including capability audits, documentation reviews, sampling, and engineering assessments, Mahindra & Mahindra onboarded us as a direct OEM supplier.

PRODUCT SCOPE

- Complete exhaust system assemblies
- Welded fuel tank systems

These components are used in active production platforms, including commercial and utility vehicle models.



ENGINEERING & QUALITY REQUIREMENTS

Mahindra requires components that meet global standards for:

- Dimensional tolerances verified through **CMM inspections**
- **100% leak testing** (air for exhausts, water for fuel tanks)
- Weld integrity validated through tensile and penetration tests
- Corrosion resistance validated with salt spray tests
- Safety compliance for pressurised and fuel-related systems
- Full material traceability from raw material to final assembly
- Complete IATF-style documentation (PFMEA, CP, SOP, Traceability)

We successfully met all criteria during onboarding.

PPAP SUCCESS

We achieved **PPAP approval on the first submission**, a rare accomplishment for a new OEM supplier.

The PPAP dossier included:

- Process Flow Diagrams
- Control Plans
- PFMEA
- Raw Material Traceability
- CMM Dimensional Reports
- Weld Penetration Tests
- Sample Approvals

This milestone strengthened our standing as a technically reliable and process-disciplined supplier.

PRODUCTION PERFORMANCE



- >99% ongoing acceptance rate
- Zero major non-conformities in delivered batches
- Strong dimensional repeatability
- Validated coating and weld durability
- Stable delivery timelines
- Successful adoption of value engineering recommendations

STRATEGIC VALUE DELIVERED

- Tax incentives driven by local value addition
- Greater supply-chain agility through localized production
- Substantial reduction in import dependency
- Lower logistics costs and shorter lead times
- Faster response to engineering and design changes
- High reliability and consistency in large-scale production

Ongoing discussions include future models and component expansions, demonstrating strong mutual confidence.





MANUFACTURING VALUE PROPOSITION

WHAT MAKES MODICON AN ATTRACTIVE PARTNER

- **Engineering-First Culture**

Every product goes through structured design, validation, and controlled manufacturing.

- **End-to-End Capability**

From concept to production, including jig design, CNC fabrication, welding, testing, and finishing.

- **Cost-Effective Regional Manufacturing**

Global standards with competitive cost structures.

- **Fast NPI (New Product Introduction)**

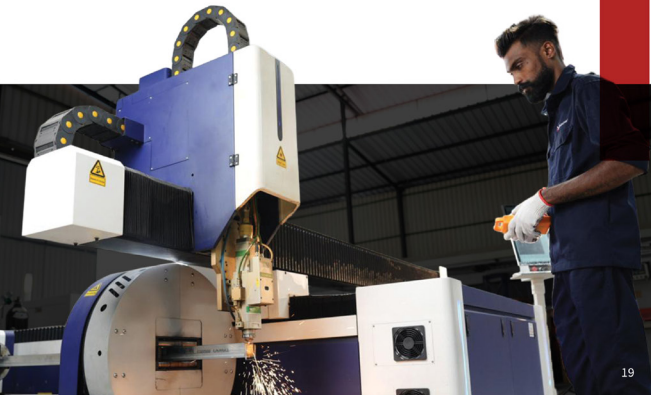
Rapid prototyping, flexible tooling, and fast design adaptation.

- **High-Volume Stability**

Strong process discipline ensures repeatability and consistent quality.

- **Scalable Workforce**

A trained, certified technical team ready for global OEM requirements.





ENGINEERING & TECHNICAL CAPABILITIES

END-TO-END WORKFLOW



Design



Prototyping



Tooling



Shipping



Coating - Testing - QC



CNC Fabrication

PRODUCT SPECIALISATIONS

- Exhaust assemblies
- Fuel tanks
- Structural metal components
- Underbody protection systems
- Off-road accessories
- Bent-tube assemblies
- Racking, storage, shelving, and furniture systems



**QUALITY, VALIDATION &
COMPLIANCE**

QUALITY ASSURANCE SYSTEMS

- IATF-aligned documentation
- PFMEA, Control Plans, SOPs
- 100% incoming inspection
- Multi-stage in-process verification
- Final quantitative & visual inspection



VALIDATION & TESTING



- Air leak testing (exhaust systems)
- Water leak testing (fuel tanks)
- CMM dimensional verification
- Weld penetration tests
- Tensile tests
- Ultrasonic NDT
- Salt spray corrosion tests
- Coating thickness and adhesion tests



**FACILITIES, EQUIPMENT
& TECHNOLOGY**

CNC PIPE BENDING

- Mandrel bending: 8–76 mm

CUTTING & FORMING

- Laser cutter
- CNC press brake, roller, router
- Hydraulic press
- Plasma cutter

WELDING TECHNOLOGIES

- Laser welding
- Dual Pulse MIG
- TIG, MIG, Seam, Spot welding

SURFACE TREATMENT

- Powder coating oven and booth





**SUSTAINABILITY
& PEOPLE**

ENVIRONMENT

- Scrap recycling
- Powder recovery
- Reduced polythene usage
- Energy-efficient ventilation



SAFETY

- Custom welder ventilation systems
- PPE compliance
- Fire suppression and electrical safety

PEOPLE

- Multi-skilled technical workforce
- Continuous training and upskilling
- Culture of innovation and accountability



MISSION

To bring global manufacturing excellence to Sri Lanka through engineering innovation, world-class quality systems, and precision manufacturing.

VISION

To become a regional manufacturing leader and a benchmark for engineering excellence.

OUR PROMISE

Quality. Precision. Reliability.



CLOSING STATEMENT

WHY CHOOSE MODICON?

- Proven OEM performance
- Global-standard quality
- Strong engineering foundation
- Reliable delivery performance
- Scalable and flexible production
- Competitive regional cost advantage
- Comprehensive testing and validation
- Trusted by global automotive brands



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Engineering the Future of Manufacturing.