



From Pioneering Engines to **Precision Propulsion**



When it all began, the Jalavadia brothers laid the foundation of Sensitive Industries, manufacturing diesel engines for India's agricultural backbone.

Spin Craft is born, establishing itself as a leader in high-precision component manufacturing for global automotive giants.

The future arrives. The 3rd generation, among them Mr. Rushil A. Jalavadia, joins after specializing in engine and drivetrain design in Germany.

A new chapter. Launch of Spin Craft Powertrain, leveraging decades of experience and German knowledge network to build cutting-edge, indigenous propulsion solutions.

1968

2000

2018

2025



1990

2005

2023

A legacy of innovation. Mr. Amrit G. Jalavadia wins a National Award from the Government of India for his innovative lightweight 8 HP engine design.

Sensitive Industries foundry division is established catering to the need for critical castings.

Spincraft foundry division established as a leading LFC foundry for engine & gearbox components.

www.spincraft.co



Our Solution:

Indigenous Design, Global Performance

Spin Craft Powertrain is purpose-built to design, develop, and manufacture state-of-the-art powertrain and propulsion solutions, owning the intellectual property in India.

Vision

To be India's premier developer of proprietary propulsion technology, from concept to production.

Mission

To deliver world-class, durable, and efficient engines that empower India's strategic, industrial, and agricultural sectors.

Strategy

Leverage our German network, vertically integrated manufacturing, and proprietary control systems to build products that outperform the competition on performance and reliability.

From Molten Metal to Intelligent Machine: Our End-to-End Control

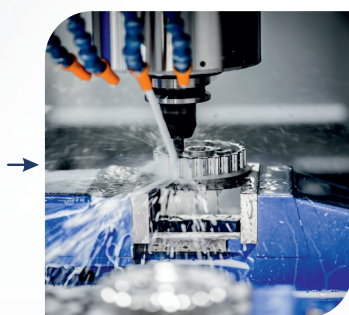
We control the entire value chain, ensuring unparalleled quality, supply chain security, and rapid innovation.



Foundries

(Sensitive Industries & Spin Craft Foundry)

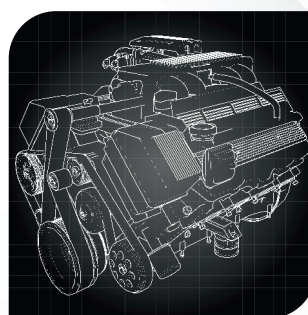
In-house green sand and lost-foam casting for critical engine and gearbox components.



Precision Machining

(Spin Craft Precision)

State-of-the-art CNC, VMC, HMC, Grinding, Honing & Lapping facility for machining components to micron-level accuracy.



Design & Development

(Spin Craft Powertrain)

Advanced simulation (CFD, FEA) and in-house design capability for engines, gearbox and proprietary control systems.



Assembly & Testing

(Spin Craft Powertrain)

Dedicated Inspection and testing facilities for all engine & gearbox assembly, calibration, and validation, ensuring end-to-end quality.



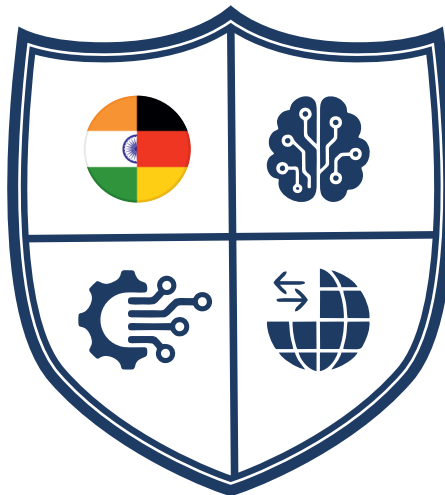
A Deep Technology Connection

German Network, Indian Execution

Our design process is led and mentored by Indian-origin PhDs and industry veterans with 20+ years of experience at top German OEMs, bringing world-class processes to a cost-effective Indian base.

Advanced Digital Engineering

We utilize an integrated toolchain for 3D CFD simulation, Finite Element Analysis (FEA), and Multi-Body Dynamics, optimizing every component for durability and performance before any metal is cut.



Proprietary Control Systems

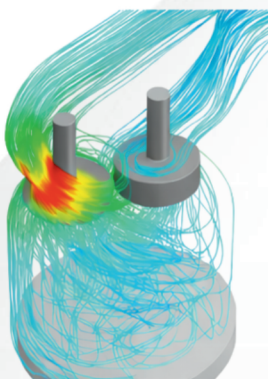
We are developing our own Engine Control Unit (ECU) - both hardware and software. This critical IP gives us ultimate control over performance, efficiency, and future upgrades, unlike competitors reliant on off-the-shelf solutions.

Established Market Access

Our existing relationships with industry leaders like HAL, Hero Motors, and Schaeffler provide immediate pathways and credibility for customer acquisition and co-development partnerships.

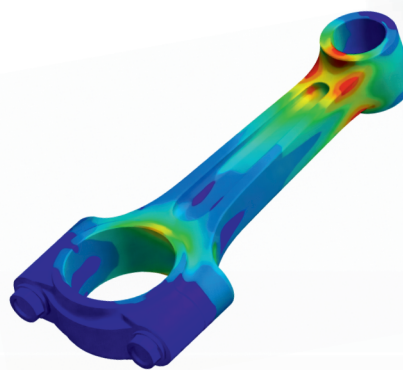
Digitally Engineered, Physically Perfected

Our advanced simulation-led design process mitigates risk and accelerates development by perfecting our designs in the digital world first.



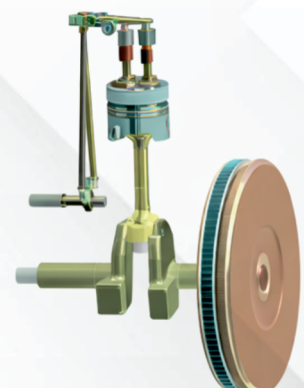
Flow & Thermal Analysis (CFD)

Optimizing cooling circuits, in-cylinder airflow, and fuel injection for maximum efficiency and Performance.



Structural Analysis (FEA)

Subjecting critical components like crankshafts and connecting rods to extreme virtual loads to ensure structural integrity and lightweighting.



Multi-Body Dynamics

Simulating the entire engine assembly in motion to perfect balancing, evaluate clearances, and minimize noise and vibration.

**Result: Faster time-to-market, lower development costs,
and higher first-time-right product reliability**



Product Portfolio & Target Applications



Farm & Power-Gen

- » Low speed diesel engines
- » Compact tractors
- » Special purpose machinery
- » Stationary Power-Gen
- » 10 to 150 hp engines
- » 1-to-4-cylinder engines
- » Modern light weight designs
- » Designed for high torque & efficiency
- » Multi-fuel capability



Off-Road

- » Heavy Duty diesel & multi-fuel engines
- » Special purpose vehicles
- » 100 hp to 2000 hp
- » 4-to-12-cylinder engines
- » Electronic Fuel Injection
- » Multi-fuel capability
- » In-House ECU



Marine

- » High speed diesel engines
- » Inboard / Outboard engines incl. drive units
- » 100 hp to 2000 hp
- » 4-to-12-cylinder engines
- » Electronic Fuel Injection
- » Multi-fuel capability
- » In-House ECU



UAV

- » Compact Gasoline engines
- » Light weight design
- » 4 hp to 80 hp
- » 1-to-4-cylinder engines
- » DI & PFI engines
- » In-House ECU

