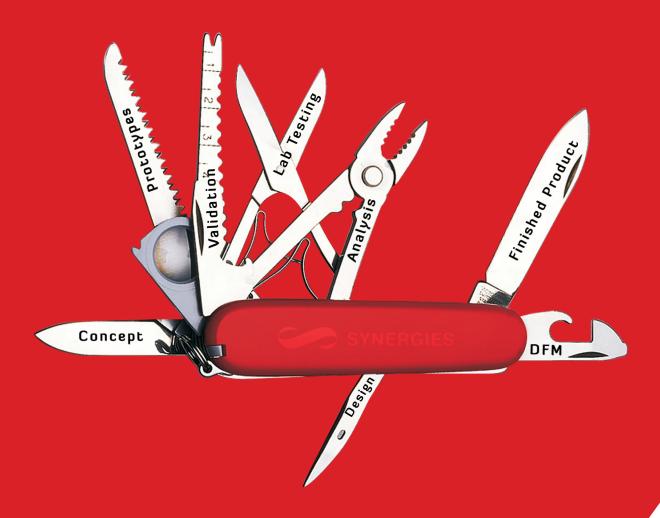
# Fully Equipped



At SYNERGIES, we cover the entire spectrum of Engineering Services, and with our in-house facilities for casting, machining, finishing and testing - all state-of-the-art, we not only provide the product design, engineering or analysis of a component, but can go beyond - if so required.



**SYNERGIES** Engineering Services...

not just compliance, but COMPETITIVENESS!!

### **Transforming Ideas into Products**

Deploying AIAG TS16949 compliant product realization objectives, we help translate your ideas into effective products, from a 'concept' brief through optimized Product & Tooling design. Our real time Program Management tools and cross-functional feedback ensures 'TOTAL' alignment of deliverables to expectations

Our services include all the processes from a 'Design brief' to a 'Finished product'.

#### Product design, engineering & validation

- Styling & concept evolution, Reverse engineering with 3D CMM, Design for Assembly (DFA), Design for Manufacturing (DFM), GD&T compliant Drafting & detail engineering, and legacy data conversion & physical prototypes (RPT/ CNC foam models) and pilot part production.
- Virtual Product validation comprising CAE (FEA-structural & modal), Mold flow, Casting simulation, optimization.
- Physical product validation comprising Metallurgical, Mechanical, Chemical and Functional performance testing.

#### Tool design & engineering

Tool path, NC code generation, Jigs & fixture design and manufacturing.

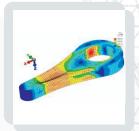
#### Knowledge based engineering

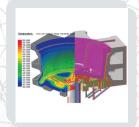
Product data management (PDM), Engineering BoM, Project management including techno-commercial evaluation and pre-project activities, Risk analysis driven Program management.











Design Engineering

PROGRAM MANAGEMENT



Together with our associates' labs and our own in-house equipment (several of which are already validated and certified by ARAI, JWL, VIA, GM-TIP), we offer accurate, certified and reliable test reports acceptable to the OEM's.

Modern program management techniques like Advanced Product Quality Planning (APQP), Failure Modes and Effects Analysis (FMEA) and Production Part Approval Process (PPAP) etc. coupled with our domain expertise in engineering services can help give you that competitive edge in the form of superior & optimized designs, light weighting, better manufacturability & ease of assembly.

#### **SYNERGIES CASTINGS**

SYNERGIES is a world-class manufacturer of non-ferrous components, and is India's first and largest manufacturer of world-class Aluminium Alloy wheels. As a global OEM supplier, SYNERGIES supplies aluminium alloy wheels to global leading marquees like GM, Ford and Chrysler in USA and Europe. Back home, we are the preferred choice with more than 70% market share. Our customers include - GM, Ford, Toyota, TATA Motors, Mahindra & Mahindra, etc. SYNERGIES is a TS 16949, EMS 14001, Ford Q1, VIA-JWL certified full service provider.

> Our Customers demand the most sophisticated analysis, testing and validation of our processes and products, in turn honing our skills in engineering, design and development. Almost 10 years and more than 100 development programs later, we are pleased to bring the full advantage of our competencies, skills and expertise to YOU!!

> > Talk to US for that winning EDGE!!



Send your inquiries to:

TR Krishna Mohan, Sr. Manager - Engineering



## **SYNERGIES** CASTINGS LIMITED