



1st Edition

Conference on Future of Automotive Design

9 October 2015: Hotel Le Royal Meridien, Chennai, India

Retrospect

Conference Brief:

Products and services, irrespective of sectors will evolve over a period pertaining to various forces like changing consumer preferences, needs, challenges, resource imbalance etc. and automobiles are no exception in this evolution. Automobile which is an important arm serving the mobility needs of people and goods, is very important in an Indian context as road transport is the largest mobility provider. It is always emphasized that products for the Indian market always involve unique design patterns and approaches pertaining to the diversity in culture. Global corporations will need to work with Indian designers to understand the local market. The same is true for the automotive, as in today's context vehicles are seen as a socio-economic statement. In such a scenario design assumes huge importance.

Major trends that influence the industry include shifts in consumer demand, regulatory requirements, increased availability of data and information and increased electronics and software content amongst other critical parameters. Pressured by consumer preference for more segmented vehicles, OEMs are adding to the number of models they are already offering. Further, customers expect manufacturers to deliver products at affordable prices with a wide array of attributes.

The rapid and dynamic product innovation cycles, together with the change from manufacturer oriented to customer oriented market, determine the need for higher productivity, flexibility and most of all the reduction of time to market. On the other hand, the demand for shorter product life-cycles constraints the time available to develop new products or to reconfigure and refit the old ones to the new market requirements. These issues primarily drive the need to understand the design processes and strategies in a global context.

The rapid pace of advancement in design technologies and information-transfer technologies has changed the nature of competition in the automobile industry worldwide. The above facts put together, marks the need for enabling tools and technology backed by a robust innovation strategy and culture. Studies advocate that an effective combination of design technologies & systems, robust design solving approaches along with good technical and managerial skills will strengthen the product development and design vertical in the automotive industry.

In an automotive rich market like India, it is necessary to assess where we stand in terms of design as the market structure and product positioning is always unique for a country like India with diverse culture and hence a unique design approach is always necessary. Therefore, in an attempt to highlight the megatrends in design for the automotive sector, the Tamil Nadu Technology Development & Promotion Center of CII organizes the 'Conference on Future of Automotive Design'. This creative area in the automotive industry is a function of lot of factors like design technologies, design practices, engineering excellence, skill etc. The conference propose to discuss the current and future trends in automotive design that will greatly influence the automotive market.

The conference sessions are as follows:

Session I - Automotive Product Design - Concept to Launch

Product Development Process; Design Strategies; Virtual & Integrated Product Development; Design of efficient components, products, sub-systems / systems; Cost Reduction strategies; Changing Markets & Rate of design obsolescence; Innovative designs;

Session II – Critical aspects of design

Design for Manufacturability, Assembly, Reliability; Sustainability, Reparability, Safety etc.; Interface between aesthetics and engineering; Advanced Materials Design; Product Life Cycle Challenges; System engineering interaction etc

Session III – Systems & Solutions for Effective Design

Design Challenges Vs Advanced Software Tools & Systems; Prototyping – Tools / Strategies; Innovative design solutions; Advanced Automotive Electronics;

Session IV - Product Optimization - Problem Solving Methodologies & Approaches

Design problem solving approaches; Design optimization methods (Six Sigma / Red X Shainin); Root Cause analysis; Cost of Design Failures; Design Enhancement for performance;

Speakers at the Conference:

- **1. Mr V Narasimhan,** Chairman Manufacturing Sub Committee, CII Southern Region & Executive Director Foundry Division, Brakes India Ltd
- 2. Mr Subu D Subramanian, Managing Director & CEO, Hinduja Tech Ltd
- 3. Mr Pradeep Nair, Managing Director, Autodesk India & SAARC
- 4. Mr Dilip Chhabria, Chairman & Managing Director, DC Design Pvt Ltd
- **5. Mr Rajinder S Sachdeva,** Executive Vice President & Head Technology, VE Commercial Vehicles Ltd
- 6. Mr Rajiv Bajaj, General Manager, India, Stratasys AP Ltd
- 7. Mr Srinivasulu Dampur, Vice President R&D, National Engineering Industries Ltd
- 8. Mr Rajasekaran M, Project Manager, Detroit Engineered Products
- 9. Mr Faiz Ahmad, Senior Vice President & Global Business Head Engineering, Hinduja Tech
- 10. Dr Christian Koitzsch, Head of Engineering Services (Automotive Electronics), Bosch India
- 11. Mr Ashok Khondge, Principal Engineer, ANSYS Customer Excellence, ANSYS Inc
- 12. Mr Pavan Gaur, Chief Executive Officer, Schneider Prototyping India (P) Ltd
- **13. Mr Gautam Datta,** Senior Director Marketing, Siemens PLM India
- 14. Mr Venkat Yenduri, Assistant Vice President, Satyam Venture Engg Services Pvt Ltd
- 15. Mr Sundara R Nagalingam, Head Virtualization Business, NVIDIA Graphics Pvt Ltd
- 16. Dr V Balasubramanian, Vice President (Engineering & Development), Simpson & Co Ltd
- 17. Dr Shankar M V, Director Technology Planning, Cummins India
- 18. Mr Jagadish Srinivasan, Head of Engineering, Caterpillar Engineering Centre, India
- **19. Dr S Darius Gnanaraj,** Dean (Mechanical Sciences) & Internal Quality Assurance Cell Coordinator, Hindustan University
- **20. Mr Yogesh Umbarkar,** General Manager Advanced Powertrain Simulations Business, Ricardo India Pvt Ltd

Event Snapshots

Inaugural Session:



(L-R) Mr Pradeep Nair, Managing Director, Autodesk - India & SAARC; Mr Subu D Subramanian, Managing Director & CEO, Hinduja Tech Ltd; Mr Dilip Chhabria, Chairman & Managing Director, DC Design Pvt Ltd; Mr V Narasimhan, Chairman - Manufacturing Sub Committee, CII SR & Executive Director — Foundry Division, Brakes India Ltd; CII Secretariat.

More than 300 Participants attended the initiative from various parts of the country:









Product Expo Panel Discussion Technical Session





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9 October 2015: Hotel Le Royal Meridien, Chennai

Programme Schedule

0800 Hrs – 0930 Hrs Registration

0930 Hrs - 10	030 Hrs	Inaugural Session
0930 Hrs	Welcome Address	Mr V Narasimhan Chairman Manufacturing Sub Committee CII Southern Region & Executive Director – Foundry Division Brakes India Ltd
0940 Hrs	Special Address (Via Video)	Ms Rajshree Pathy Chairperson, CII (SR) & Chairman & Managing Director Rajshree Sugars & Chemicals Ltd
0945 Hrs	Special Address	Mr Subu D Subramanian Managing Director& CEO Hinduja Tech Ltd
1000 Hrs	Special Address	Mr Pradeep Nair Managing Director Autodesk - India & SAARC
1015 Hrs	Keynote Address	Mr Dilip Chhabria Chairman & Managing Director DC Design Pvt Ltd
1035 Hrs	Concluding Remarks	Mr V Narasimhan

1040 Hrs - 1045 Hrs Session Change-over

1045 Hrs – 1200 Hrs Plenary Session I: Automotive Product Design Concept to Launch

1045 Hrs Opening Remarks & Address by

Session Chairman

Mr Rajinder S Sachdeva

Executive Vice President &

Head - Technology

VE Commercial Vehicles Ltd

1100 Hrs Address Mr Rajiv Bajaj

General Manager, India

Stratasys AP Ltd

1115 Hrs Address Mr Srinivasulu Dampur

Vice President - R&D

National Engineering Industries Ltd

1130 Hrs Address Mr Rajasekaran M

Project Manager

Detroit Engineered Products

1145 Hrs Discussion

1200 Hrs - 1315 Hrs Plenary Session-II: Critical Aspects of Design

1200 Hrs Opening Remarks & Address by

Session Chairman

Mr Faiz Ahmad

Senior Vice President & Global Business

Head – Engineering Hinduja Tech Ltd

1215 Hrs Address **Dr Christian Koitzsch**

Head of Engineering Services (Automotive Electronics)

Bosch India

1230 Hrs Address Mr Ashok Khondge

Principal Engineer, ANSYS Customer Excellence

ANSYS Inc

1245 Hrs Address Mr Pavan Gaur

Chief Executive Officer

Schneider Prototyping India (P) Ltd

1300 Hrs Discussion

1315 Hrs Session changeover

1315 Hrs – 1415 Hrs Networking Lunch

1415 Hrs - 1515 Hrs Plenary Session III: Systems & Solutions for Effective Design

1415 Hrs Opening Remarks & Address

by Session Chairman

Mr Gautam Datta

Senior Director Marketing

Siemens PLM India

1430 Hrs Address Mr. Venkat Yenduri

Assistant Vice President

Satyam Venture Engg Services Pvt Ltd

1445 Hrs Address Mr Sundara R Nagalingam

Head – Virtualization Business

NVIDIA Graphics Pvt Ltd

1500 Hrs Discussion

1515 Hrs – 1545 Hrs Tea / Coffee Break

1545 Hrs - 1700 Hrs Plenary Session – IV: Product Optimization – Problem Solving

Methodologies & Approaches

1545 Hrs Opening Remarks & Address by

Session Chairman

Dr V Balasubramanian

Vice President (Engineering & Development)

Simpson & Company Limited

1600 Hrs Address Dr Shankar M V

Director - Technology Planning

Cummins India

1615 Hrs Address Mr Jagadish Srinivasan

Head of Engineering

Caterpillar Engineering Centre

1630 Hrs Address **Dr S Darius Gnanarai**

Dean (Mechanical Sciences) &

Internal Quality Assurance Cell Coordinator

Hindustan University

1645 Hrs Address Mr Yogesh Umbarkar

General Manager - Advanced Powertrain

Simulations Business Ricardo India Pvt Ltd

1700 Hrs Discussion

1715 Hrs End of Sessions