



## SAEISS SKIP PROGRAM REPORT

Торіс	:	Latest advancements in welding Technology for Automotive
Date	:	6 <sup>th</sup> & 7 <sup>th</sup> July 2017
Speaker	:	Dr. D. Muruganandam and Mr. Sasi Anand Pathasarthy
Inaugurated By	:	Mr. M. Khader Basha Division chair Chennai Division, SAEISS
Presided By	:	Mr. B. SenthilKumar, Champion
Total Strength	:	52 Students
Total colleges	:	7 colleges
Venue	:	Jeppiaar Institute of Technology, Kunnam, Sriperumbudur, Kancheepuram
		District, Chennai – 631604.

## Suggested Topics for Future SKIP Program:

- About Robotics
- Kinematic Mechanism, Steering
- Gear Transmission System & its Materials
- Engines & Suspension systems
- Thermal Engineering, Refrigeration
- About safety in industries
- Emerging Trends in Mechanical Engineerings
- ECU Tuning can be conducted
- Topic on Non Destructive Testing
- Aerodynamics in Automobiles

## **Special Suggestion Points:**

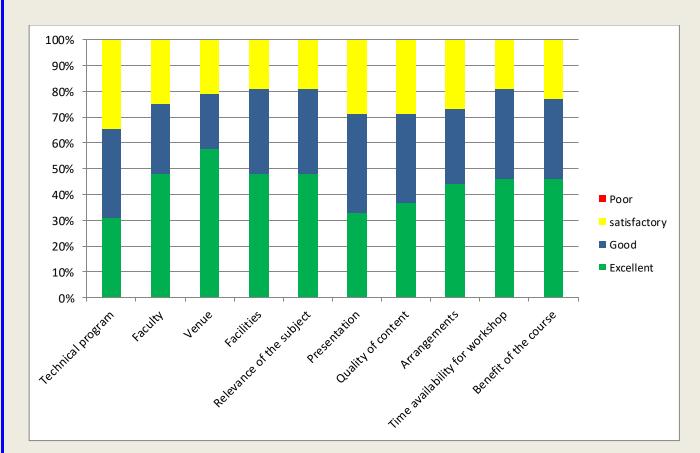
- Please conduct the program in city limit
- Explanation is good and way of presentation is More informative
- Need more practical sessions
- Session is very Useful to us
- Hands on Training should be needed
- Classes Can be more interactive and efficient
- Expect more practical workshop
- Course Duration must be Extended





## **Objective:**

- To impart Knowledge on Latest Welding Technologies and also to show case the World class welding power sources and its capabilities
- To share the welding expertise gained in Institutions
- To Network with various Students and discuss, seek techno-economical solutions regarding their queries



## Criteria and Comments about the program:





# **Report**

SKIP program on topic of *"Latest Advancements in Welding Technology for Automotive"* was organised by *SAEINDIA Southern Section* on 6<sup>th</sup> and 7<sup>th</sup> July 2017 at Jeppiaar Institute of Technology, Kunnam, Chennai.

Speakers: Dr. D. Muruganandam, Professor & Head of the Department at Jeppiaar Institute of Technology, Kunnam, Chennai.

Mr. Sasi Anand Parthasarathy, Fronius India Pvt Ltd.

Latest advancements in welding Technology for Automotive SKIP Program Introduction and Inauguration was done by Mr. M. Khader Basha, Division chair Chennai Division, SAEISS.



Dr. D. Muruganandam starts the program initially with God Shiva image and explains the basics of welding like definition of welding, types of welding, and explain about Arc welding, Gas welding, TIG welding, MIG welding, Pressure welding, Resistance welding, Friction welding, spot welding and projection welding.







And also he explained about Iron Carbide equilibrium Diagram and briefly explained about Ferrite cementite, austenite....etc

Mr. Sasi Anand Parthasarathy explaining about welding power source and he explain types of electrodes and said we have to select the electrodes depends on the welding material and he shows some images about welding material, frames and explain about them. Gave briefing about importance of welding, Basics of metals.



Mr. Sasi Anand Parthasarathy giving detailed explanation about following electrodes Rutile electrodes, Basic electrodes, CrNi electrodes, Cellulose electrodes, Aluminium electrodes, Cast iron electrodes, Arc air gouging and explanation about Metal Inert Gas Welding [MIG], Metal Active Gas Welding [MAG /CO2]



Dr. D. Muruganandam explains about Defects in Welding: Lack of fusion, Lack of penetration or excess, penetration, Porosity, Inclusions, Cracking, Undercut, Lamellar tearing watch Mechanism.







At the end of the session principal of Jeppiaar Institute of Technology has Presented the Momento to Dr.D.Muruganandam & Mr. Sasi Anand Parthasarathy





At the end of the session Principal of Jeppiaar Institute of Technology presented certificate to participants.







## Finally the Students gave the feedback about the program at the end of the Session





SKIP Champions Dr. S. Karthikayan, MC Member/SAEISS Mr. B. SenthilKumar, Champion Prepared By, M. Vijayasimman