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A Report on Industrial Visit at "Engineering Technique", GIDC Makarpura, Vadodara

EXECUTIVE SUMMARY

Mechanical Engineering Department of S.N.P.I.T. & R.C., Umrakh arranged an industrial visit to Engineering Technique, Vadodara, Gujarat on 28th January 2019 with 108 students of 3rd year Mechanical Engineering. The purpose of the visit was to enhance industrial exposure of the students, get practical knowledge of additive manufacturing procedure of various products made by rapid prototyping and related other advanced machineries. The team of four faculty coordinators Mr. Arif Varsi, Mr. Misal Gandhi & Mr. Hiten Mistry and with them one lab assistant Mr. Ajay Patel took part in prestigious industrial visit.







ABOUT INDUSTRY

Engineering Technique is 35+ years old Manufacturing company and since last 18 years well known for 3D-CAD Software SOLIDWORKS implementation also. Since last 5+ years in to 3D Printing Technology with Unique Futuristic setup of DAM Factory (Collection of best different 3D Printers & 3D Pen which serves in to MCAD, Jewellery, Medical and many more other industries).

Engineering Technique's Digital Additive Manufacturing Lab (DAM Lab) powered by 3D CAD software SOLIDWORKS and 3D Printer helps Educational Institutes in implementing Future of Manufacturing i.e. Digitalization Of Manufacturing.

World of Making is changing due to Digitalisation of everything! Digitalisation is major process of Technology shift from Analog to Digital technology. Since last 5+ decades major changes are happening because of Digitalization. So we can say Change is Digitalization.

Changes influenced by Digitalization are as follows...

- Data, Information or Business Processing
- Tele-communication
- Transmission of Television
- Photography
- Printing & Publishing
- Educational Content including Text Books, Digital Board etc

VISIT INSIGHT

Engg. Technique are the leading 3D printing services provider in India supplying thousands of 3D printed components to industries that include aerospace, architecture, medical, automotive, commercial products, jewellery, packaging, lifestyle, engineering, product design, healthcare, and education. They have commercial grade FDM 3D printing machines and Envision TEC 3D printers which provide well-bonded engineering grade plastics for end-use parts. 3D print technologies are FDM, SLA, SLS, DLP, 3SP, and Polyjet are offered.

ENGG. TECHNIQUE TEAM CREDENTIALS

- The highly qualified CAD services team provided design and documentation solutions to a large precision component manufacturer in Canada.
- Engineering Technique's design team assisted government organization in modeling and 3D renderings of their new product concept.
- Engineering Technique's design services team assisted Canada based engineering company in making 3D models of assembly and weldments from existing 2D structural drawing.



- The mechanical engineers completed a 3D Modeling, Rendering and Prototyping project for a large oil company in record time while ensuring the highest quality.
- The highly qualified design engineers assisted a Canada based engineering company in making 3D models of spools of piping system from provided isometric piping drawings.
- Engineering Technique successfully completed 3D modeling and 2D drafting projects for different types and size of valves.







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PRODUCTS OFFERED BY ENGG. TECHNIQUE

Engineering Technique has partnered with EnvisionTEC as a distributor, to offer customers EnvisionTEC's 3D Bioplotter, DLP, and 3SP lines of professional, desktop and industrial 3D printers.







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APPLICATION OF 3D PRINTERS



As scheduled, the visit team reached Engineering Technique, GIDC Makarpura, Vadodara at 10:00 am. Warm welcome was received from company representatives and they gave us the brief idea about their work culture, vision & Mission then Technology description by HR member and team was imparted to us.

The visit was started with the short presentation of the company profile in a conference hall showing the achievements, resources and futuristic developments in the field of manufacturing as well as other sectors.

The technical team members provided to us gave a detailed description of the machines and showed the demonstration about the working of the machine with a live example. Very precisely, they have shown the conversion of 2D model created on the SolidWorks to the machine for cutting on the ABS material.



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APPRECIATION

The students got the opportunity to learn about different products and process which undergoes the subject of Computer Aided Design (CAD). In addition, Machine learning was given by their officials at every corner of their site. We S.N.P.I.T. & R.C. Mechanical Engineering department team are really thankful to the Engg. Technique, Vadodara and their team.

Report Prepared by, Prof. Arif Varsi (Mechanical Eng. Dept.)