



Wissen Baum Engineering Solutions

BEL Batch 4 Training Report

Date: 06 May 2023

Wissen Baum Engineering Solutions

Germany | USA | India

Training No: WB_PD_002



Executive Summary

This report was prepared to provide information on the “Advance Training on Plastic Product Design” program conducted on 06th May 2023. Recommendations include the continuity of the program and the creation of training activities

Objectives

The training plan’s objectives were:

- To brush up the “**Advance Training Plastic Product Design**” knowledge to the Batch 4 team (Freshers)

Background:

- Design Engineers working as onsite support to BEL (Batch 4: Freshers) facing challenges in Advance of plastic product design.
- On the request of the client and as a continual improvement process the training of Basics of Plastic Product Design is planned

Training Date:

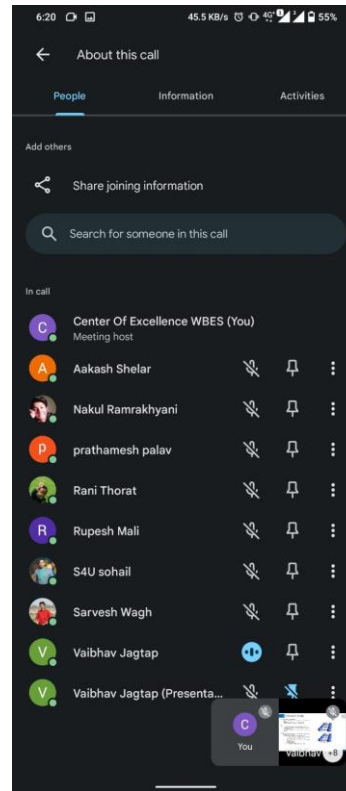
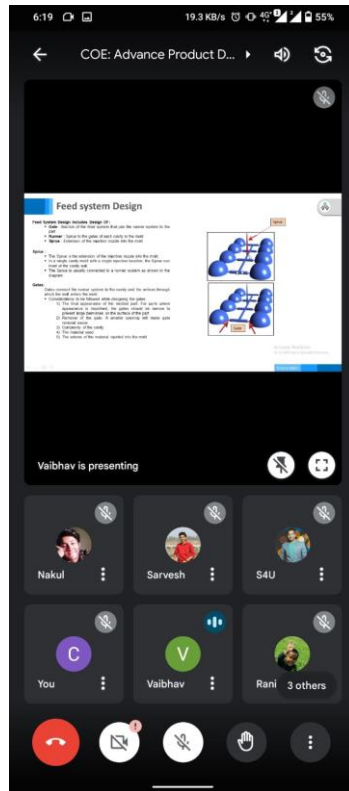
- 06th May 2023

Trainer:

- Swapnil Jadhav
- Vaibhav Jagtap

Attendees:

- Sarvesh W
- Rani T
- Rupesh M
- Prathamesh P
- Akash S
- Sohailuddin
- Nakul
- Wasim



Mode / Methodology

- Online Mode

Training Content:

- Advance information about plastic product validation
- Overview of the High-Pressure Injection Molding Process, Molds, and Defects
- Terminologies:
 - Injection Molding
 - Mould/ Die/ Tooling Types (Family, Multicavity, Single Cavity)
 - Cavity layout types
 - Parting lines
 - Gate types and positioning of best gate location
 - Runner system layout
 - Tooling Direction of part with parting line and core cavity side
- Design Guidelines for plastic products considering manufacturing defects
- What is Pressure and VP switchover
- What is clamping force? How to calculate theoretically.
- Manufacturing Defects:



- Filling pattern with feed system.
- Flow hesitations
- Short shot filling causes
- Sink Mark effect- Causes and Remedies.
- Weld line formation
- Warpage and causes of Warpage

Way Forward:

- Training on Injection molding layouts, Gates and Manufacturing defects understanding.