



K S RANGASAMY COLLEGE OF TECHNOLOGY
Tiruchengode – 637215
(An Autonomous Institution, Affiliated to Anna University, Chennai)
DEPARTMENT OF MECHANICAL ENGINEERING



Flipped Class			
Programme & Branch	B.E. & Mechanical Engineering	Year/Sec/Sem	II / B / III
Course Code & Name	50 ME 301 - Manufacturing Processes	Date	21.09.2022

The video link for the topic of Casting Defects <https://www.youtube.com/watch?v=FKcMuQDhdJ4>. All the Students are Informed to View the Video and get ready for the activity to be held on 23.09.2022 (1st hour) in our classroom.

Course Instructor



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Flipped Class			
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Course Code & Name	50 ME 301 - Manufacturing Processes	Date	23..09.2022

Answer the Questions:

1. List out the types of Casting Defects.
2. How the slag inclusion is caused in casting?.
3. How to prevent the slag inclusion in casting processes?.
4. What are the causes for incomplete fusion?
5. Discuss Porosity in casting defects.

The above questions have been asked to the students and they shared their answers. All the students answered questions no. 1, no.3 and no.4 correctly. But few students answered questions No. 2 and 5 correctly. So, I discussed the non-answered topic in the classroom.

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Flipped Class – Questions and Answers

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Course Code & Name	50 ME 301 - Manufacturing Processes	Date	23.09.2022

Answer the Questions:

1. List out the types of Casting Defects

- Pinholes.
- Subsurface blowhole.
- Open holes.
- Open shrinkage.
- Closed shrinkage.
- Cuts and washes.
- Fusion.

2. How the slag inclusion is caused in casting

Slag inclusion is caused when molten metal containing slag particles is poured into the mold cavities and solidifies.

3. How to prevent the slag inclusion in casting processes

Preventing slag inclusion is a simple fix. Remove slag particles from the molten metal before pouring it into the mold cavity.

4. What are the causes for incomplete fusion?

Common causes of incomplete fusion include incorrect angle and/or positioning of the welding gun, incorrect weaving technique when filling a joint, travel speed too slow or too fast, inaccurate settings such as amperage too low, or contamination and/or insufficient cleaning of the base metal.

5. Discuss Porosity in casting defects.

The above questions have been asked to the students and they shared their answers. All the students answered questions no. 1, no.3 and no.4 correctly. But few students answered questions No. 2 and 5 correctly. So, I discussed the non-answered topic in the classroom.

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