

Unit 7 - Week 6

Course outline

How does an NPTEL online course work?

week 1

week 2

Week 3

Week 4

Week 5

Week 6

● Quality of Cast Product

○ Role of Concast Process, Caster Design and Steel Grade

● Primary Cooling in Caster Mould

○ Heat Transfer in Mould

○ Cast Structure and Dendrite Size

○ Quiz : Assignment 6

○ Week 6 Feedback :Steel Quality: Role of Secondary Refining and Continuous Casting

Week 7

week 8

Week 9

Week 10

Week 11

Week 12

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Assignment 6

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-03-11, 23:59 IST.

Either One or Two Solutions are Correct for Each Question .

When One Solution is Correct , choice of only the Correct One will give ONE mark. Choice of more than One will result in ZERO mark .

When Two Solutions are Correct , choice of only the TWO CORRECT will give ONE mark . Choice of more than Two will result in ZERO mark . One Correct Solution will give 0.5 mark

1) The following is a possible quality defect in continuously cast steel :

1 point

- Oscillation mark
 Pin hole
 Depression
 Scale

No, the answer is incorrect.
Score: 0

Accepted Answers:

Pin hole

Depression

2) The following major factor can influence the quality of cast steel :

1 point

- Cast dimension
 Superheat
 Liquidus
 Steel grade

No, the answer is incorrect.
Score: 0

Accepted Answers:

Superheat

Steel grade

3) Thickness of solid shell is related to time (t) of solidification in this way :

1 point

- t^2
 t
 $t^{0.5}$
 no relation

No, the answer is incorrect.
Score: 0

Accepted Answers:

$t^{0.5}$

4) The following is responsible for formation of pin holes in cast steel :

1 point

- High soluble N
 High P
 Oxides
 High soluble O

No, the answer is incorrect.
Score: 0

Accepted Answers:

High soluble N

High soluble O

5) Mould flux used for slab and bloom casting controls the following in mould :

1 point

- Oscillation
 Lubrication
 Casting speed
 Heat transfer

No, the answer is incorrect.
Score: 0

Accepted Answers:

Lubrication

Heat transfer

6) The following are undesirable with respect to oscillation marks on cast product :

1 point

- Shallow marks
 Irregular marks
 Deep marks
 Regular marks

No, the answer is incorrect.
Score: 0

Accepted Answers:

Irregular marks

Deep marks

7) Solidification structure of cast steel depends on the following :

1 point

- Superheat
 Liquidus
 Solidus
 Solidification rate

No, the answer is incorrect.
Score: 0

Accepted Answers:

Superheat

Solidification rate

8) Low ratio of columnar vis-a-vis equaxed zone in cast steel depends on :

1 point

- Low liquidus
 Low superheat
 Low solidus
 EMS

No, the answer is incorrect.
Score: 0

Accepted Answers:

Low superheat

EMS

9) Dendrite size (measured by its arm spacing) of a casting is dependent on :

1 point

- Average heat transfer
 Local heat transfer
 None of this

No, the answer is incorrect.
Score: 0

Accepted Answers:

Local heat transfer

10) Dendrite size (measured by its arm spacing) at the surface of a casting is :

1 point

- Coarser than interior
 Finer than interior
 Same throughout casting

No, the answer is incorrect.
Score: 0

Accepted Answers:

Finer than interior