

Unit 8 - Week 7

Course outline

How to access the portal

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Week 7

Defects in rolled and forged products

Introduction and classification of extrusion processes

Analysis of extrusion processes

Extrusion of tubes and pipes, extrusion defect

Introduction to rod and wire drawing

Quiz : Assignment 7

Solution of Assignment 7

Week 8

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Assignment 7

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

Due on 2019-09-18, 23:59 IST.

- 1) In rolled and forged product, limiting thickness of plate is inversely proportional to **1 point**
- Elastic modulus of rolls
 - Coefficient of friction
 - Roll radius
 - Flow stress of workpiece

No, the answer is incorrect.
Score: 0

Accepted Answers:
Elastic modulus of rolls

- 2) A moving mandrel is used in **1 point**
- Wire drawing
 - Tube drawing
 - Metal cutting
 - Forging

No, the answer is incorrect.
Score: 0

Accepted Answers:
Tube drawing

- 3) Collapsible tubes are made by **1 point**
- Drawing
 - Spinning
 - Rolling
 - Impact extrusion

No, the answer is incorrect.
Score: 0

Accepted Answers:
Impact extrusion

- 4) For wire drawing operation, the work material should essentially be **1 point**
- Ductile
 - Tough
 - Hard
 - Malleable

No, the answer is incorrect.
Score: 0

Accepted Answers:
Ductile

- 5) A brass billet is to be extruded from its initial diameter of 100 mm to a final diameter of 50 mm. The operation is carried out at a working temperature of 700 °C and the extrusion constant is 250 MPa. The force required for extrusion is **1 point**
- 5.44 MN
 - 2.72 MN
 - 1.36 MN
 - 0.36 MN

No, the answer is incorrect.
Score: 0

Accepted Answers:
2.72 MN

- 6) Which of the following statement is /are correct for the Rod and Wire drawing? **1 point**
- (i) Draw benches are used for drawing of rods and tubes (which can not be coiled)
(ii) On the draw benches, rods are first made pointed using swager and then inserted through the die and moved using a chain drive or hydraulic mechanism.
- Only i
 - Only ii
 - Both i and ii
 - None of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both i and ii

- 7) Which of the following statement is/are correct for drawing operation? **1 point**
- (i) Drawing operations involve pulling metal through a die using tensile force from exit side of die.
(ii) Elastic flow will occur because of compression force that arise from reaction of metal with die.
- Only i
 - Only ii
 - Both i and ii
 - None of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
Only i

- 8) Which of the following statement is/are correct for extrusion process? **1 point**
- (i) In extrusion, block of metals is reduced in cross-section by forcing it to flow through a die orifice under high pressure
(ii) It is used to produce cylindrical bars/hollow tubes
- Only i
 - Only ii
 - Both i and ii
 - None of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both i and ii

- 9) Which of the following statement is /are correct for tube drawing? **1 point**
- (i) Hot formed (extruded or rolled) hollow cylinder or tubes are often cold finished by drawing to obtain closer dimensional tolerances, better surface finish and increased mechanical properties
(ii) Tubes are drawn using methods such as sinking, plug drawing and mandrel drawing.
- Only i
 - Only ii
 - Both i and ii
 - None of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
Both i and ii

- 10) Internal ruptures caused by improper cooling of large forging is called as **1 point**
- Flakes
 - Cracking at flash
 - Surface cracking
 - Fold

No, the answer is incorrect.
Score: 0

Accepted Answers:
Flakes