

Unit 3 - Week 1

Course outline

How does an NPTEL online course work?

Week 0

Week 1

- Lecture 1: Introduction
- Lecture 2: Geometry of single point turning tools - 1
- Lecture 3 : Geometry of Turning Tools - 2
- Lecture 4: Geometry of Single Point Turning Tools -3
- Lecture 5: Geometry of Cutting Tools and Numerical Problems
- Week 1 : Lecture Material
- Quiz : Assignment 1
- Week 1 Feedback Form

Week 2

Week 3

Week 4

DOWNLOAD VIDEOS

Assignment Detailed Solution

Live Interactive Session

Assignment 1

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

Due on 2020-03-04, 23:59 IST.

- 1) In a single point turning tool, the back rake angle is zero and the orthogonal rake is zero as well. This means that the auxiliary inclination angle
- Has to be zero
 - Has to be greater than 5°
 - Can be negative
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 2) In a single point turning tool, the principal cutting edge angle is 75° and the auxiliary cutting edge angle is 15° . If the inclination angle is 0° and the orthogonal rake angle is 5° , the value of the auxiliary orthogonal rake angle will be
- 5°
 - 0°
 - 2.34°
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
b.
- 3) A boring tool is
- A twist drill with three flutes
 - A single point tool for starting a hole in solid material
 - A tool for enlarging the diameter of pre-existing holes
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
c.
- 4) A single point turning tool has a negative back rake. This means that the side rake
- Has to be negative
 - Has to be positive
 - Has to be zero
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
d.
- 5) If principal side clearance, principal back clearance, side rake and back rake are given
- Principal cutting edge angle can definitely be determined
 - Auxiliary cutting edge angle can definitely be determined
 - Auxiliary orthogonal rake definitely can be determined
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 6) Positive orthogonal rake is provided
- To increase the beam strength of the tool
 - To facilitate chip formation
 - To produce segmented chips
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
b.
- 7) If a slab milling cutter is having helical cutting teeth instead of straight cutting teeth
- The cost of the cutter would be less for helical teeth
 - The vibration arising out of cutting would be less for helical teeth
 - The cutter with helical teeth can only be used in downmilling
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
b.
- 8) In a 2 flute twist drill, the chisel edge
- Is the edge which removes most of the material
 - Is the cutting edge with highest value of cutting speed
 - Is an indenting edge
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
c.
- 9) In a single point turning tool, the master line for rake and the master line for principal flank are parallel. This means that the inclination angle is definitely
- 0°
 - Positive
 - Negative
- a.
 b.
 c.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 10) If, for a single point turning tool, the rake angles in all directions have the same value
- The master line for rake will coincide with the master line for principal flank on the base plane
 - The master line for rake and the master line for principal flank will be parallel lines on base plane
 - The rake surface will not intersect with the base plane
 - None of these
- a.
 b.
 c.
 d.
- No, the answer is incorrect.
Score: 0
Accepted Answers:
c.