



# METAL FORMING PROCESSES

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Time left 0:27:36

Question 12  
Not yet answered  
Marked out of 1.00  
Flag question

In general, coining indicates a small amount of plastic deformation of the workpiece

Select one:  
 True  
 False

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Time left 0:20:22

Question 15  
Not yet answered  
Marked out of 1.00  
Flag question

The precise details of any manufacturing processes must be shared among engineers and managerial staff

Select one:

True

False

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Time left 0:24:08

Question 13  
Not yet answered  
Marked out of 1.00  
Flag question

Except for the perfectly elastic materials, all other metallic materials exhibit a strain-hardening effect when tested at temperatures as low as the room temperature

Select one:  
 True  
 False

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Time left 0:25:33

Question 13  
Not yet answered  
Marked out of 1.00  
Flag question

Except for the perfectly elastic materials, all other metallic materials exhibit a strain-hardening effect when tested at temperatures as low as the room temperature

Select one:

True

False

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Time left 0:59:15

Question 1  
Not yet answered  
Marked out of 1.00  
Flag question

In bending of sheets, a lengthening might occur but the width almost always remains constant

Select one:

True

False

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# METAL FORMING PROCESSES

Time left 0:55:56

Question 3  
Not yet answered  
Marked out of 1.00  
Flag question

The strength values are independent on the direction in:

- a. hot-rolled products
- b. all rolled products
- c. warm-rolled products
- d. cold-rolled products

[Clear my choice](#)

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Time left 0:21:51

Question 14  
Not yet answered  
Marked out of 1.00  
Flag question

In forging, the higher the length of the workpiece the lower the friction expected

Select one:

True

False

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Time left 0:56:46

Question 3  
Not yet answered  
Marked out of 1.00  
Flag question

Most open-die and flashless forged products are simple in shape

Select one:

True

False

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# METAL FORMING PROCESSES

Time left 0:41:36

Question 5  
Not yet answered  
Marked out of 1.00  
Flag question

The working temperature that helps in reducing the strength during deformation but preserves the strain-hardening phenomenon is

- a. warm-working temperature
- b. hot-working temperature
- c. cold-working temperature
- d. recrystallization temperature

[Clear my choice](#)

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Time left 0:58:39

Question 1  
Not yet answered  
Marked out of 1.00  
Flag question

The configuration of a three-high rolling mill is nonreversing

Select one:

True

False

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Time left 0:57:04

Question 2  
Not yet answered  
Marked out of 1.00  
Flag question

The region of the drawing die where the final amount of wire reduction is taken is called the bearing surface

Select one:

True

False

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# METAL FORMING PROCESSES

Time left 0:18:06

Question 16  
Not yet answered  
Marked out of 1.00  
Flag question

- A water bottle is made of
- a. nylon
  - b. elastomer
  - c. thermoplastic polymer
  - d. thermosetting polymer

[Clear my choice](#)

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# METAL FORMING PROCESSES

Time left 0:17:44

Question 17  
Not yet answered  
Marked out of 1.00  
Flag question

Manufacturing engineers prefer to work with materials having a microstructure with large grain size

Select one:

True

False

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Time left 0:56:21

Question 2  
Not yet answered  
Marked out of 1.00  
Flag question

In the closed-die forging process, preforming operations must include edging, blocking and finish forging

Select one:

True

False

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Time left 0:40:51

Question 6  
Not yet answered  
Marked out of 1.00  
Flag question

The flow of the material is almost completely constrained within the dies in

- a. non of the mentioned
- b. open-die forging
- c. flashless die forging
- d. closed-die forging

[Clear my choice](#)

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Time left 0:13:55

Question 19  
Not yet answered  
Marked out of 1.00  
Flag question

The strength coefficient is the stress value taken as the strain reaches the value of the strain hardening exponent

Select one:

True

False

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Time left 0:15:43

Question 18  
Not yet answered  
Marked out of 1.00  
Flag question

When producing externally-threaded components, the mechanical property that matters the most is the:

- a. fracture strength
- b. yield strength
- c. elastic modulus
- d. fatigue strength

[Clear my choice](#)

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# METAL FORMING PROCESSES

Time left 0:54:28

Question 3  
Not yet answered  
Marked out of 1.00  
Flag question

The strength values are independent on the direction in:

- a. hot-rolled products
- b. all rolled products
- c. warm-rolled products
- d. cold-rolled products

[Clear my choice](#)

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Time left 0:39:20

Question 8  
Not yet answered  
Marked out of 1.00  
Flag question

A steel slab is considered a consumer good

Select one:

True

False

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# METAL FORMING PROCESSES

Time left 0:00:25

Question 23  
Not yet answered  
Marked out of 1.00  
Flag question

The following material has the best hot-strength properties

- a. stainless steel
- b. TiC
- c. fiber-reinforced polymers
- d. thermoplastic polymers

[Clear my choice](#)

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# METAL FORMING PROCESSES

Time left 0:43:46

Question 4  
Not yet answered  
Marked out of 3.00  
Flag question

A plate that is 400 mm wide and 30 mm thick is to be reduced in 2 passes in a two-high rolling mill to a thickness of 20 mm. The roll has a diameter = 1000 mm. The work material has a strength coefficient = 200 MPa and a strain hardening exponent = 0.2. Determine roll force required to perform the first pass only. Note the draft must be equal on each pass.

- a. 2.37 MN
- b. 4.21 MN
- c. 3.72 MN
- d. 5.22 MN
- e. 4.76 MN

[Clear my choice](#)

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Time left 0:07:15

Question 22  
Not yet answered  
Marked out of 1.00  
Flag question

In rolling, spreading of the slab is controlled by

- a. chains
- b. shaped rollers
- c. vertical rollers
- d. guide rods

[Clear my choice](#)

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Question 20  
Not yet answered  
Marked out of 3.00  
Flag question

A 50.0-mm-thick plate to 30.0 mm in 5 passes in a rolling operation. The roll diameter is 500 mm. Determine the minimum required coefficient of friction that would make this rolling operation possible given that the draft must be equal on each pass.

- a. 0.182
- b. 0.207
- c. 0.257
- d. 0.163
- e. 0.221
- f. 0.139
- g. 0.126

[Clear my choice](#)

Time left 0:12:00

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Question 9  
Not yet answered  
Marked out of 4.00  
Flag question

A cylindrical part is cold forged in an open die. The initial diameter is 60 mm and the initial height is 50 mm. The coefficient of friction at the die-work interface is 0.15. The flow curve is defined by a strength coefficient of 600 MPa and a strain-hardening exponent of 0.18. Determine the force in the operation at an area of 3200 mm<sup>2</sup>.

- a. 1.03 MN
- b. 1.37 MN
- c. 1.43 MN
- d. 1.74 MN
- e. 1.6 MN

[Clear my choice](#)

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Time left 0:39:42

Question 7  
Not yet answered  
Marked out of 1.00  
Flag question

When planning some facility, the variety of a product must be considered

Select one:

- True
- False

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Time left 0:28:36

Question 11  
Not yet answered  
Marked out of 1.00  
Flag question

The continuous increment in the plastic stress value of the true stress-strain diagram is due to

- a. the fact that area reduction is taken into consideration
- b. growth of grains
- c. change in the lattice constant
- d. piling of immobile dislocations

[Clear my choice](#)

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# METAL FORMING PROCESSES

Time left 0:08:16

Question 21  
Not yet answered  
Marked out of 1.00  
Flag question

Barreling effect in compression can be minimized by using of lubrication

Select one:

- True
- False

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Time left 0:29:35

Question 10  
Not yet answered  
Marked out of 1.00  
Flag question

Most of the metallic products in our lives are based on:

- a. silver alloys
- b. iron alloys
- c. copper alloys
- d. aluminum alloys

[Clear my choice](#)

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