Question 18

Not yet answered

Marked out of 1.00

Flag question

Time le

The die swell ratio for a polymer melt has a value that is never less t one:

- a. true
- b. false

Clear my choice

Next pa

Quiz navigation

yet answered

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lag question

Time

What is the type of defect in the image below

Answer: knite line

Next

iz navigation

ENG

Question 9

Not yet answered

Marked out of 2.00

Flag question

Time l

In rotational molding

- a. High Zero Shear Viscosity is required to aid in the flow of the polymer within mold
- b. Medium Zero Shear Viscosity is required to aid in the flow of polymer within mold
- c. Low Zero Shear Viscosity is required to aid in the flow of the polymer within mold
- d. none of them is true

Clear my choice

Next

TICS ENGINEERING

One of the following statements are true regarding blow molding

- a. Most thermoset plastics can be blow molded (in theory)
- b. Most thermoplastics cannot be blow molded (in theory)
- c. Polyolefins are not the easiest to process
- d. PVC is not temperature sensitive
- e. none of them is true

Clear my choice

PLASTICS ENGINEERING

Question 23
Not yet answered
Marked out of 1.00
Flag question

In rotational molding in order to ensure uniformity of all thickness it is normal design practice to c
the point of intersection of the major and minor axis :

- a. does coincide with the edge of the mold
- b. does not coincide with the edge of the mold
- c. does coincide with the centroid of the mold
- d. does not coincide with the centroid of the mold

Clear my choice

ICS ENGINEERING

Which of the following is a thermosetting polymer?

- a. Epoxy
- b. nylons
- c. PS
- d. PP
- e. PVC

Clear my choice

https://jdexams.com/moodle/mod/quiz/attempt.php?attempt=422006&cmid=280589&page=3

STICS ENGINEERING

My courses > PLASTICS ENGINEERING > General > Final Exam

Time left 0:50:4

4

ut of

The most frequently used materials in blow molding are

- a. PS, LDPE, Nylon, and PMMA
- b. PS, LDPE, Nylon, and PU
- c. PS, LDPE, Nylon, and PA
- d. LDPE , HDPE, (PP), (PVC), and PET
- e. all of them are correct

Clear my choice

Next page

to search

Time left 0:21:53

What is the difference between plastic sheet and plastic film

- a. plastic sheet is made by film blowing while plastic films are made by extrusion
- b. plastic sheet is made by extrusion while plastic films are made by film blowing
- c. plastic sheet is made by injection molding while plastic films are made by film blowing
- d. plastic sheet is made by extrusion while plastic films are made by injection molding

Clear my choice

Next page

Quiz navigation

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Not syncing

Flag question

Time left 0:25:45

If a part is to be made of Nylon-6,6 by injection molding and one of its dimensions is 100 mm. Taking shrinkage into consideration Compute the corresponding dimension of the mold cavity in mm. The shrinkage value S= 0.014 for Nylon-6,6

WRITE YOUR FINAL ANSWER ROUNDED TO ONE DECIMAL PLACE AND DONT WRITE UNITS IN YOUR FINAL ANSWER JUST THE NUMERICAL VALUE

Answer: 101.4

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Quiz navigation

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17 18 19 20 21 22 23 24 25

ENG 10:34 AM 1/16/2021

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Flag question

Time

What type of resin is used to make LEGO

- a. PE
- b. ABS
- c. PS
- d. PET
- e. PVC

Clear my choice

Next p

Quiz navigation

ENG

Time left 0:17:43

Question 8

Not yet answered

Marked out of 2.00

Flag question

What is the difference between plastic sheet and plastic film

a. Plastic Sheet has a thickness less than 0.25 mm while plastic film has a thickness greater than 0.25 mm

b. Plastic Sheet has a thickness less than 0.025 mm while plastic film has a thickness greater than 0.025 mm

c. Plastic Sheet has a thickness greater than 0.25 mm while plastic film has a thickness less than 0.25 mm

d. Plastic Sheet has a thickness greater than 1 mm while plastic film has a thickness less than 1 mm

Time left 0:02:48

The Matched Die type of molding is used to make parts

- a. with very complex details
- b. with detail on both sides of the sheet
- c. that don't need to hold tighter tolerances than other Thermoforming processes
- d. with detail on both sides of the sheet and that don't need to hold tighter tolerances than other Thermoforming processes
- e. all of them

Question 19

Time left 0:06:50

Not yet answered

Marked out of 2.00

Flag question

What feature of alkene molecules allows them to act as monomers

- a. The presence of carbon atoms
- b. The presence of hydrogen atoms
- c. two carbon-carbon double bonds
- d. one carbon-carbon double bond
- e. the covalent bond between C and H

Clear my choice

Next page

STICS ENGINEERING

On of the following statements is true regarding rotational molding

- a. Parts made by rotational molding are symmetrical and hollow
- b. Parts made by rotational molding are symmetrical and not hollow
- c. Parts made by rotational molding are solid and complex
- d. Parts made by rotational molding are complex and small in size

Clear my choice

Time left 0:02:16

Question 23

Not yet answered

Marked out of 2.00

Flag question

Compared to HDPE, LDPE has

- a. none is tru
- b. a series of crosslinks leading to a higher melting point.
- c. less monomers leading to a lower melting point
- d. more branches in the chains, leading to a lower density
- e. much shorter molecules with weaker covalent bonds

Next page

Quiz

1 6 11 16 21

Finish

Question 2

Not yet answered

Marked out of 2.00

Flag question

One of the following polymers is not thermoformed

- a. PVC
- b. PMMA
- c. ABS
- d. POM
- e. none of them is correct

Clear my choice

Time left 0:16:21

Question 9

Not yet answered

Marked out of 2.00

Flag question

One of the following statements is true regarding Tg of polymers

a. plastics having a Tg less than room temperature tend to be brittle and easy to break at room temperature

b. plastics having a Tg greater than room temperature tend to be brittle and easy to break at room temperature

c. Only amorphous plastics having a Tg greater than room temperature tend to be brittle and easy to break at room temperature

d. Only semi crystalline plastics having a Tg greater than room temperature tend to be brittle and easy to break at room temperature

e. Tg is always greater than Tm

Quiz navigati

1 2 3
7 8 9
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19 20 21
25

Finish attempt

Time left 0:

One of the following is a difference in the equipment between extrusion of crystalline thermoplastics and extrusion of amorphous thermoplastic

- a. The differences is that extrusion machines used for extrusion of crystalline plastics have higher L/D ratio
- b. The differences is that extrusion machines used for extrusion of crystalline plastics have lower L/D ratio
- c. The differences is that extrusion machines used for extrusion of crystalline plastics have the same L/D ratio but difference in nozzle used
- d. none of the statements is correct

Clear my choice

Next page

Quiz navigation

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Question 14

Not yet answered

Marked out of 1.00

Flag question

Time left 0:2

Thermoforming is used to manufacture

a. Water tanks

b. Bottles

c. bathtubs

d. all of them

Clear my choice

Next page

Quiz navigation

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Time left 0:21:47

Question 5

Not yet answered

Marked out of 2.00

Flag question

What is the type of defect in the image below

Answer:

Next page

Quiz navig

1 2

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Finish atte

TICS ENGINEERING

What type of resin is used to make car dash boards

- a. ABS
- b. PP
- c. PVC
- d. PC
- e. all of them

TICS ENGINEERING

Time left

An extruder has a barrel diameter of 100 mm. The screw rotates at 100 rpm, has a channel depth of 5 mm, and a flight angle of 0.29671 rad. What is the maximum flow rate in mm^3/s (open discharge) of polypropylene that can be achieved

Write your numerical answer only rounded up to the nearest whole number NO DIGITS witho units

Answer: 0.0689

Time left 0:41:16

If a part is to be made of LDPE by injection molding and one of its dimensions is 100 mm. Taking shrinkage into consideration Compute the corresponding dimension of the mold cavity. The shrinkage value S= 0.03 for LDPE

WRITE YOUR FINAL ANSWER ROUNDED TO ONE DECIMAL PLACE AND DONT WRITE UNITS IN YOUR FINAL ANSWER JUST THE NUMERICAL VALUE

Answer:

Next page

Time left 0:13:47

Question 10

Not yet answered

Marked out of 2.00

Flag question

An extrusion machnine having a barrel diameter = 85 mm and its length = 2.00 m. The screw rotates at 55 rev/min, its channel depth = 8.0 mm, and its flight angle = 19°. Head pressure at the die end of the barrel = $10.0(10^6)$ Pa. Viscosity of the polymer melt = 100 Pa-s. Find the volume flow rate of plastic at the die end of the barrel

- a. $25.6 * 10^{-6}\ m^3/s$
- b. $20.11 * 10^{-6}\ m^3/s$
- c. $31.09 * 10^{-6}\ m^3/s$
- d. $20.11 * 10^{-6}\ cm^3/s$
- e. $20.11 * 10^{-6}\ m^3/min$

Next page

Tim

Question 4

Not yet answered

Marked out of 1.00

Flag question

In rotational molding in order to ensure uniformity of all thickne
normal design practice to arrange that the point of intersection
major and minor axis :

- a. does coincide with the edge of the mold
- b. does not coincide with the edge of the mold
- c. does coincide with the centroid of the mold
- d. does not coincide with the centroid of the mold

Clear my choice

Nex

Time left

Question 10

Not yet answered

Marked out of 2.00

Flag question

When polymer exits the die of the extruder it will

- a. swell
- b. shrink
- c. obtain hollow geometry
- d. all of them are correct

Clear my choice

Next

Time left 0:47:11

Marked out of 1.00

Flag question

Instead of increasing the thickness of the parts during forming of polymers one can use:

- a. fibers as reinforcement
- b. metal reinforcement
- c. copolymers
- d. ribs and gussets

Clear my choice

Next page

Final Exam (page 8 of 25)

mm^2 to m^2 - Bing

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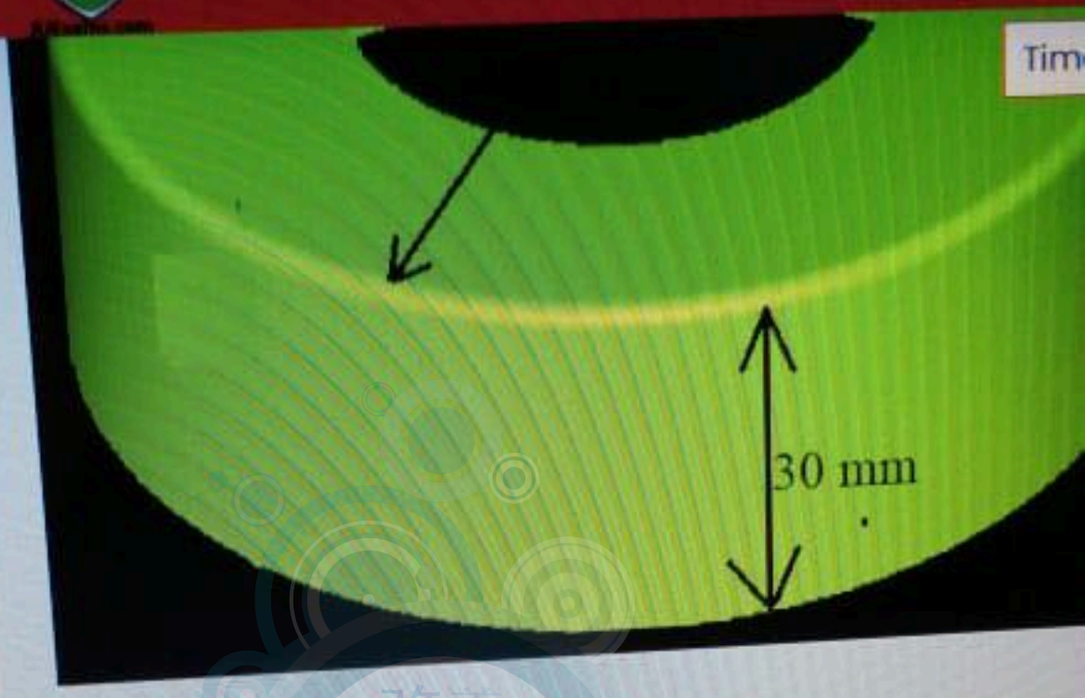
Tim



Answer: 3.5

Quiz navigation

1 2 3 4 5 6 7 8 9 10 11 12 13

Time left 0:22:52

In blow molding

- a. Polymer particles are injection molded around a blowing rod
- b. Injection mold is filled with polymer particles
- c. Soft polymer particles are inflated to conform to the blow mold
- d. A Parison is injected molded around a blowing rod and is transferred to a blow mold then it is inflated

Next page

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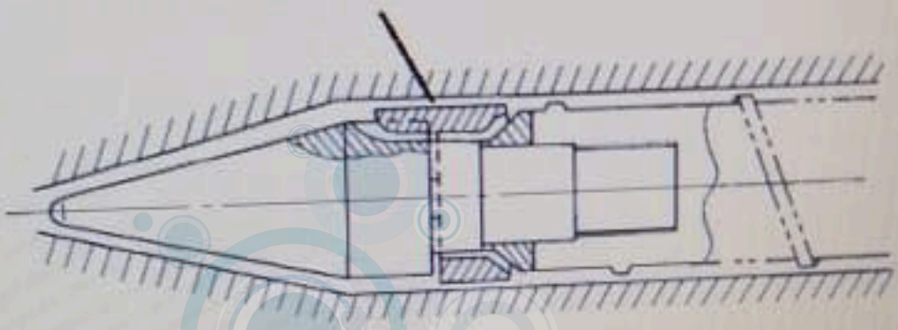
Time l

The function of the check ring in the injection molding machine is a as:



- a. pressure regulating valve
- b. a nozzle
- c. all of them
- d. forward flow prevention valve
- e. backflow prevention valve

Clear my choice

STICS ENGINEERING

The Matched Die type of molding is used to make parts

- a. with very complex details
- b. with detail on both sides of the sheet
- c. that don't need to hold tighter tolerances than other Thermoforming processes
- d. with detail on both sides of the sheet and that don't need to hold tighter tolerances than othe Thermoforming processes
- e. all of them

Clear my choice

search

Time left 0:28

If the open discharge flow rate of an extruder is 250 cm^3/s and the pressure during closed discharge is 10 MPa. Also If the shape factor of the die is $15 \times 10^{-12}\ m^5/Ns$. what is the operating point of the extruder

- a. (6.32 MPa, $9.47 \times 10^{-5}\ m^3/s$)
- b. (10 MPa, $1.9 \times 10^{-4}\ m^3/s$)
- c. (6.25 MPa, $9.38 \times 10^{-5}\ m^3/s$)
- d. (5.77 MPa, $10.4 \times 10^{-5}\ m^3/s$)

Next page

ASTICS ENGINEERING

13

ut of

Jetting occurs when polymer melt is

- a. pushed at a low strain rate through the nozzle
- b. pushed at a low stress through the nozzle
- c. pushed at a high velocity through the nozzle
- d. pushed at a high viscosity through the nozzle

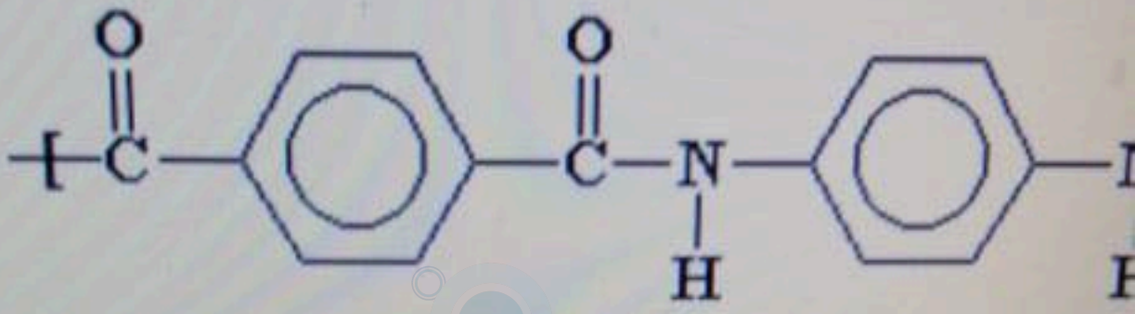
Clear my choice

arked out of 2.00

Flag question

Time

The following polymer is a :



- a. polyester
- b. urethane polymer
- c. TPE polymer
- d. aramid polymer
- e. PS

Clear my choice

STICS ENGINEERING

Time left 0:50:55

2

If a pressure difference of 1.20000 bar is needed to maintain a constant volume flow rate of 600000 cm^3/min out from the extrusion machine. Calculate the power required to achieve this in Watt.

Write your answer without units and round to one decimal place

Answer: 600

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New tab | Final Exam (page 18 of 25)

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STICS ENGINEERING

My courses | PLASTICS ENGINEERING | General | Final Exam

Time lef

18

Instead of increasing the thickness of the parts during forming of polymers one can use:

- a. fibers as reinforcement
- b. metal reinforcement
- c. copolymers
- d. ribs and gussets

Clear my choice

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to search

Exam (page 11 of 25)

mm^2 to m^2 - Bing

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Not syncing

Question 11

Not yet answered

Marked out of 2.00

Flag question

Time left 0:32:43

On of the following statements is true regarding rotational molding

- a. Parts made by rotational molding are symmetrical and hollow
- b. Parts made by rotational molding are symmetrical and not hollow
- c. Parts made by rotational molding are solid and complex
- d. Parts made by rotational molding are complex and small in size

Clear my choice

Next page

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ENG 10:27 AM 1/16/2021

Tin

One of the following statements are true regarding blow molding

- a. Most thermoset plastics can be blow molded (in theory)
- b. Most thermoplastics cannot be blow molded (in theory)
- c. Polyolefins are not the easiest to process
- d. PVC is not temperature sensitive
- e. none of them is true

Clear my choice

Nex

Time left 0:55:16

Question 1

Not yet answered

Marked out of 3.00

Flag question

An extruder has a barrel diameter of 100 mm. The screw rotates at 100 rpm, has a channel depth of 5 mm, and a flight angle of 0.29671 rad. What is the maximum flow rate in mm^3/s (open discharge) of polypropylene that can be achieved

Write your numerical answer only rounded up to the nearest whole number NO DIGITS without units

Answer:

Next page

Quiz

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Not syn

g question

Time left 0:2

a part is to be made of Nylon-6,6 by injection molding and one of its imensions is 100 mm. Taking shrinkage into consideration Compute he corresponding dimension of the mold cavity in mm. The shrinkage alue S= 0.014 for Nylon-6,6

VRITE YOUR FINAL ANSWER ROUNDED TO ONE DECIMAL PLACE AND DONT VRITE UNITS IN YOUR FINAL ANSWER JUST THE NUMERICAL VALUE

Answer: 0.1

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ENG

10:31

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