Time left 0:43:37

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for a certain shaft , if both the upper deviation and the lower deviation are positive then the fundamental deviation is equal to ----------

- a. the upper deviation
- b. the lower deviation
- c. both a and b are feasible
- d. none of the above is correct

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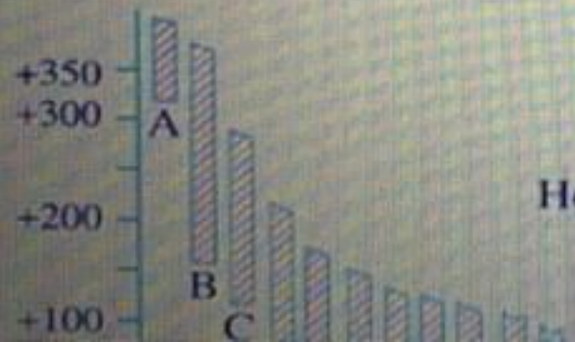
given the following figure for fundamental deviation values for the holes



Time left 0:42:57

Question 5

Not yet answered

Marked out of 2.00

Flag question

in the vernier caliper , the size of division on the main scale is always greater than the size of division on the vernier scale, and the difference between the two values is equal to the accuracy of the device.

Select one:

- True
- False

Question 6

Not yet answered

Marked out of 2.00

for a certain shaft , if both the upper deviation and the lower deviation are positive then the fundamental deviation is equal to ----------

- a. the upper deviation
- b. the lower deviation

Time left 0:40:5

for a shaft and hole system, if the upper deviation of the hole is equal to (0.01 mm) and its lower deviation is equal to (minus 0.02 mm), then the tolerance of the hole is -------

- a. 0.01 mm
- b. minus 0.01 mm
- c. minus 0.03 mm
- d. 0.03 mm
- e. the value depends on the shaft deviations.
- f. none of the above is correct

Clear my choice

In the following figure , the operator is trying to measure ---------

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In the following figure , the operator is trying to measure ---------

- a. the major diameter of the thread
- b. the minor diameter of the thread
- c. the effective diameter of the thread
- d. the diameter of the wire

for any shaft and hole system, the basic size of the hole must equal to the basic size of the shaft.

Select one:

- True
- False

Next

Time left 0:37:57

In a shaft and hole system, the tolerance of the hole is always greater than the tolerance of the shaft.

Select one:

- True
- False

Question 4

Not yet answered

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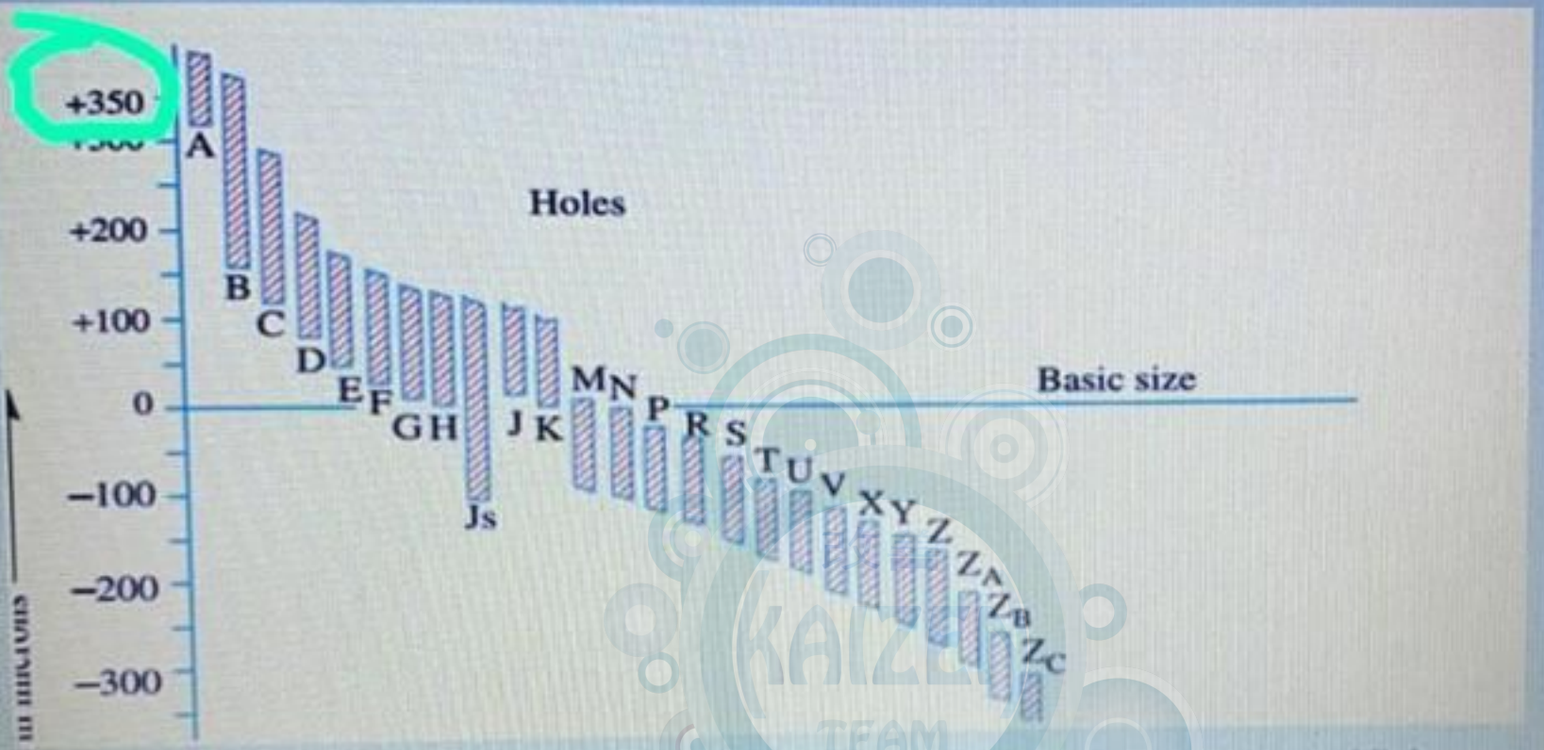
Flag question

Time left 0:43:29

Finish attempt ...

given the following figure for fundamental deviation values for the holes



if a hole of type H is to be assembled with a shaft of type a , then the type of fit is ----------

- a. clearance
- b. interference
- c. transition
- d. none of the above is correct

Question 4

Not yet answered

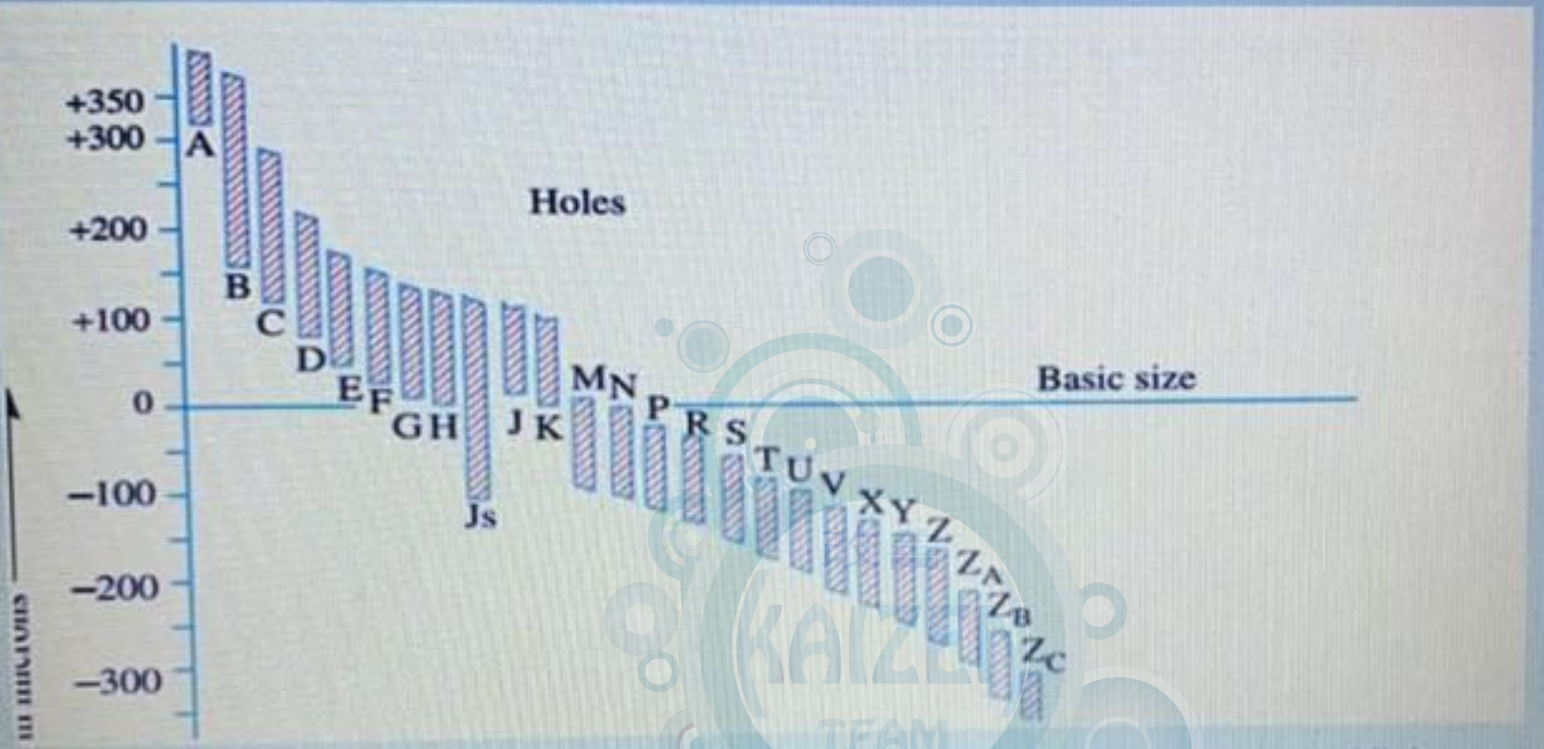
Marked out of 2.00

Flag question

Time left 0:43:29

Finish attempt ...

given the following figure for fundamental deviation values for the holes



if a hole of type H is to be assembled with a shaft of type a , then the type of fit is ----------

- a. clearance
- b. interference
- c. transition
- d. none of the above is correct

given the following Table for an (S) Type thermocouple

Time left 0:36:23

TABLE 15 ***Type S Thermocouple — thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C***

°C	0	1	2	3	4	5	6	7	8	9	10	°C
						Thermoelectric Voltage in Millivolts						
-50	-0.236											-50
-40	-0.194	-0.199	-0.203	-0.207	-0.211	-0.215	-0.219	-0.224	-0.228	-0.232	-0.236	-40
-30	-0.150	-0.155	-0.159	-0.164	-0.168	-0.173	-0.177	-0.181	-0.186	-0.190	-0.194	-30
-20	-0.103	-0.108	-0.113	-0.117	-0.122	-0.127	-0.132	-0.136	-0.141	-0.146	-0.150	-20
-10	-0.053	-0.058	-0.063	-0.068	-0.073	-0.078	-0.083	-0.088	-0.093	-0.098	-0.103	-10
0	0.000	-0.005	-0.011	-0.016	-0.021	-0.027	-0.032	-0.037	-0.042	-0.048	-0.053	0
0	0.000	0.005	0.011	0.016	0.022	0.027	0.033	0.038	0.044	0.050	0.055	0
10	0.055	0.061	0.067	0.072	0.078	0.084	0.090	0.095	0.101	0.107	0.113	10
20	0.113	0.119	0.125	0.131	0.137	0.143	0.149	0.155	0.161	0.167	0.173	20
30	0.173	0.179	0.185	0.191	0.197	0.204	0.210	0.216	0.222	0.229	0.235	30
40	0.235	0.241	0.248	0.254	0.260	0.267	0.273	0.280	0.286	0.292	0.299	40

A voltage of 3.427 mV is measured with a type S thermocouple at 23 degree C reference temperature. The **voltage** of the sensing junction is ---------- mV

Answer:

the difference between its upper deviation and its lower deviation

d. None of the above is correct

In the GO and NOT GO system, the GO part is always used to check the maximum metal limit and the NOT GO is always used to check the minimum metal limit

Select one:

- True
- False

Next page

Time left 0:39:10

for a certain shaft , if both the upper deviation and the lower deviation are positive then the fundamental deviation is equal to ----------

- a. the upper deviation
- b. the lower deviation
- c. both a and b are feasible
- d. none of the above is correct

In the GO and NOT GO system, the GO part is always used to check the maximum metal limit and the NOT GO is always used to check the minimum metal limit

Select one:

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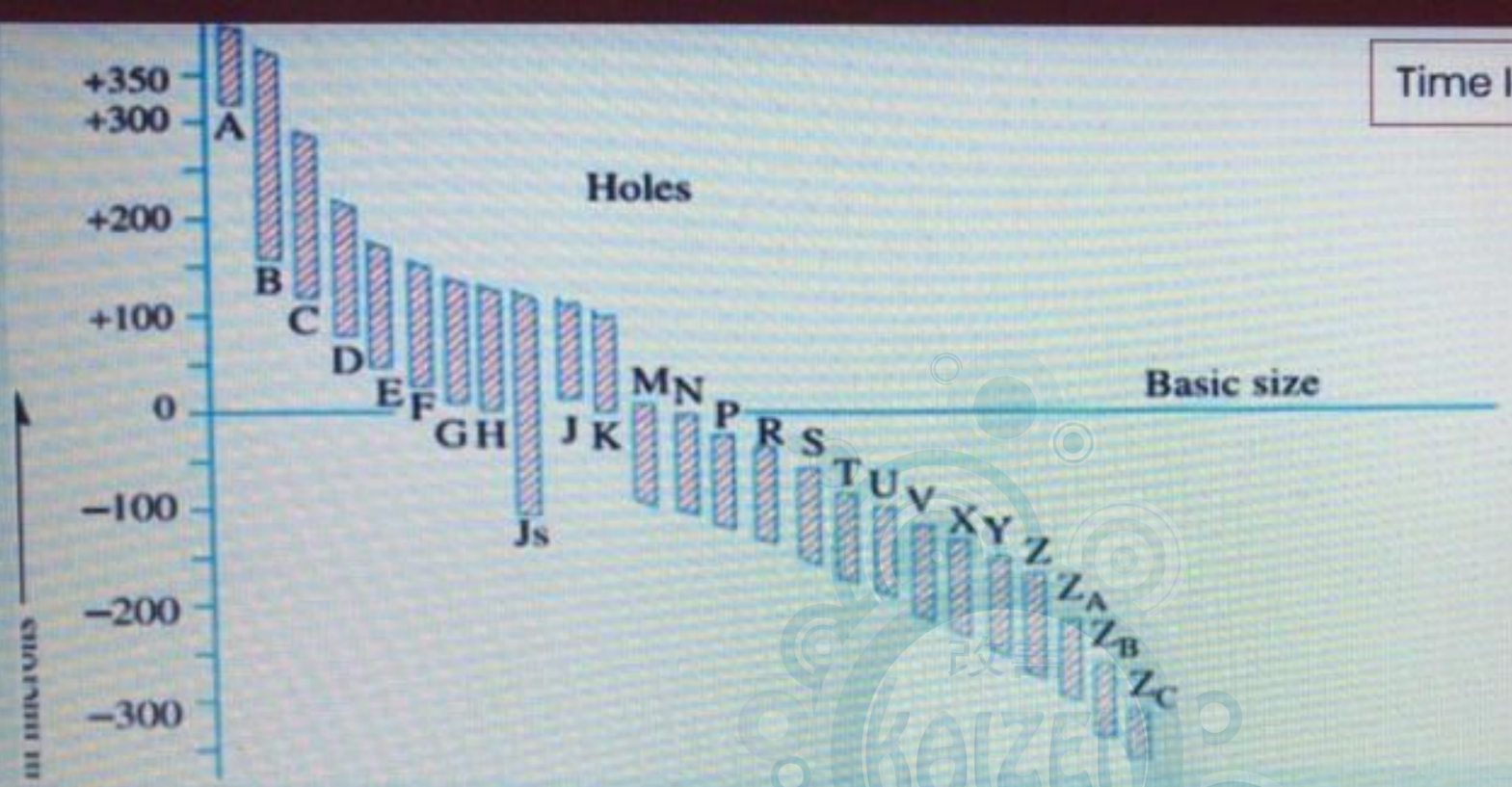
Time left 0:36:47



if a hole of type H is to be assembled with a shaft of type a , then the type of fit is -

---

- a. clearance
- b. interference
- c. transition
- d. none of the above is correct

Clear my choice

There are basically two approaches for measuring the surface roughness is : (1) the comparison, (2) the direct measurements. the former is the simpler but the second is the more accurate.

Select one:

- True
- False

Next page

touch

Time left 0:35:11

In thermocouples, the relationship between voltage and temperature is nonlinear

Select one:

- True
- False

given the following Table for an (S) Type thermocouple

TABLE 15 ***Type S Thermocouple*** *— thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C*

°C	0	1	2	3	4	5	6	7	8	9	10	°C

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the gear in the following figure is an example on ----------

- a. Spur gear
- b. Herringbone gear
- c. bevel gear
- d. none of the above is correct

Clear my choice

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In the GO and NOT GO system, the GO part is always used to check the maximum metal limit and the NOT GO is always used to check the minimum metal limit

Select one:

- True
- False

Next page

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Question 9

Not yet answered

Marked out of 2.00

Flag question

In a shaft and hole system, the tolerance of the hole is always greater than the tolerance of the shaft.

Select one:

- True
- False

Question 10

Not yet answered

Marked out of 2.00

Flag question

the tolerance of any shaft is equal to the difference between its upper deviation and its lower deviation.

Select one:

- True
- False

1 2 7 8 13 14 19 20 25

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Time left 0:35:00

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Finish attempt ...

Question 8

Not yet answered

Marked out of 2.00

Flag question

given the following Table for an (S) Type thermocouple

TABLE 15 *Type S Thermocouple — thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C*

°C	0	1	2	3	4	5	6	7	8	9	10	°C
Thermoelectric Voltage in Millivolts												
-50	-0.236											-50
-40	-0.194	-0.199	-0.203	-0.207	-0.211	-0.215	-0.219	-0.224	-0.228	-0.232	-0.236	-40
-30	-0.150	-0.155	-0.159	-0.164	-0.168	-0.173	-0.177	-0.181	-0.186	-0.190	-0.194	-30
-20	-0.103	-0.108	-0.113	-0.117	-0.122	-0.127	-0.132	-0.136	-0.141	-0.146	-0.150	-20
-10	-0.053	-0.058	-0.063	-0.068	-0.073	-0.078	-0.083	-0.088	-0.093	-0.098	-0.103	-10
0	0.000	-0.005	-0.011	-0.016	-0.021	-0.027	-0.032	-0.037	-0.042	-0.048	-0.053	0
0	0.000	0.005	0.011	0.016	0.022	0.027	0.033	0.038	0.044	0.050	0.055	0
10	0.055	0.061	0.067	0.072	0.078	0.084	0.090	0.095	0.101	0.107	0.113	10
20	0.113	0.119	0.125	0.131	0.137	0.143	0.149	0.155	0.161	0.167	0.173	20
30	0.173	0.179	0.185	0.191	0.197	0.204	0.210	0.216	0.222	0.229	0.235	30
40	0.235	0.241	0.248	0.254	0.260	0.267	0.273	0.280	0.286	0.292	0.299	40

A voltage of 3.427 mV is measured with a type S thermocouple at 23 degree C reference temperature. The **voltage** of the sensing junction is ---------- mV

Answer:

Type here to search

ENG

Time left 0:31:46

for a certain shaft , if both the upper deviation and the lower deviation are positive then the fundamental deviation is equal to ----------

- a. the upper deviation
- b. the lower deviation
- c. both a and b are feasible
- d. none of the above is correct

The reading of this micrometer is ---------- mm.

Note: the number of divisions on the thimble is 50 divisions.

Time left 0:35:00

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Finish attempt ...

Question 8

Not yet answered

Marked out of 2.00

Flag question

given the following Table for an (S) Type thermocouple

TABLE 15 ***Type S Thermocouple — thermoelectric voltage as a function of temperature (°C); reference junctions at 0 °C***

°C	0	1	2	3	4	5	6	7	8	9	10	°C
Thermoelectric Voltage in Millivolts												
-50	-0.236											-50
-40	-0.194	-0.199	-0.203	-0.207	-0.211	-0.215	-0.219	-0.224	-0.228	-0.232	-0.236	-40
-30	-0.150	-0.155	-0.159	-0.164	-0.168	-0.173	-0.177	-0.181	-0.186	-0.190	-0.194	-30
-20	-0.103	-0.108	-0.113	-0.117	-0.122	-0.127	-0.132	-0.136	-0.141	-0.146	-0.150	-20
-10	-0.053	-0.058	-0.063	-0.068	-0.073	-0.078	-0.083	-0.088	-0.093	-0.098	-0.103	-10
0	0.000	-0.005	-0.011	-0.016	-0.021	-0.027	-0.032	-0.037	-0.042	-0.048	-0.053	0
0	0.000	0.005	0.011	0.016	0.022	0.027	0.033	0.038	0.044	0.050	0.055	0
10	0.055	0.061	0.067	0.072	0.078	0.084	0.090	0.095	0.101	0.107	0.113	10
20	0.113	0.119	0.125	0.131	0.137	0.143	0.149	0.155	0.161	0.167	0.173	20
30	0.173	0.179	0.185	0.191	0.197	0.204	0.210	0.216	0.222	0.229	0.235	30
40	0.235	0.241	0.248	0.254	0.260	0.267	0.273	0.280	0.286	0.292	0.299	40

A voltage of 3.427 mV is measured with a type S thermocouple at 23 degree C reference temperature. The **voltage** of the sensing junction is ---------- mV

Answer:

Type here to search

ENG

The reading of this micrometer is ---------- mm.

Note: the number of divisions on the thimble is 50 divisions.

Answer: 7.3

Thermocouple Voltage to Temperatu

Thermocouple Voltage to Temperature Converter

Thermocouple (mV)

Reference Junction Temperature

3.427

Seebeck Coefficient dV/dT

0.005489 mV/°C

Standard Limits of Error

± 1.500°C

Special Limits of Error

± 0.600°C

Temperature

3.427

°C °F K

Select Thermocouple Type

Type B Type E Type J

Type K Type N Type R

Type S Type T Type C

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Question 16

Not yet answered

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Flag question

for any shaft and hole system, the basic size of the hole must equal to the basic size of the shaft.

Select one:

- True
- False

Next page

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Time left 0:28:03

Autocollimator is one of the angular measuring devices and it can be used to measure the error of straightness

Select one:

- True
- False

In thermocouples, the relationship between voltage and temperature is nonlinear

If an intermediate metal is inserted into a thermocouple circuit at any point , the net voltage will not be affected even though the two junctions introduced by the third metal are at different temperature.

Select one:

- True
- False

Next pag

Answer:

which of the following is a method for measuring the effective diameter of an external thread.

- a. one wire method
- b. two wires method
- c. three wires method
- d. all of the above are correct

Next page

False

In thermocouples, the relationship between voltage and temperature is nonlinear

Select one:

- True
- False

Next page

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A bench micrometer was used to measure the dimensions for an external thread; the readings are given as:

The reading over the thread =	12.6520 mm
The reading over the cylinder =	12.7216 mm
The reading over the thread (with wires) =	11.0766 mm
The reading over the cylinder (with wires) =	14.2838mm
The reading over the thread (with prisms) =	12.9052 mm
The reading over the cylinder (with prisms) =	16.5464 mm

And you know that the diameter of the standard cylinder is equal to 30.0000 mm , the flank angle of the thread(θ) = 30^0, the diameter of the wire (d) = 2.0207 mm, and the pitch size of the thread (p) = 3.5 mm

The minor diameter of the thread is equal to --------- mm.

Answer:

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which of the following is a method for measuring the effective diameter of an external thread.

Clear my choice

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If an intermediate metal is inserted into a thermocouple circuit at any point , the net voltage will not be affected even though the two junctions introduced by the third metal are at different temperature.

Select one:

- True
- False

Next page

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There are basically two approaches for measuring the surface roughness is : (1) the comparison, (2) the direct measurements. the former is the simpler but the second is the more accurate.

Select one:

- True
- False

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In a shaft and hole system, the tolerance of the hole is always greater than the tolerance of the shaft.

Select one:

False

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for any shaft and hole system, the basic size of the hole must equal to the basic size of the shaft.

Select one:

- True
- False

Next page

Time left 0:15:47

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A bench micrometer was used to measure the dimensions for an external thread; the readings are given as:

The reading over the thread =	12.6520 mm
The reading over the cylinder =	12.7216 mm
The reading over the thread (with wires) =	11.0766 mm
The reading over the cylinder (with wires) =	14.2838mm
The reading over the thread (with prisms) =	12.9052 mm
The reading over the cylinder (with prisms) =	16.5464 mm

And you know that the diameter of the standard cylinder is equal to 30.0000 mm , the flank angle of the thread(θ) = 30^0, the diameter of the wire (d) = 2.0207 mm, and the pitch size of the thread (p) = 3.5 mm

The minor diameter of the thread is equal to --------- mm.

Answer: 26.3588

Question 16

In thermocouples, the relationship between voltage and temperature is nonlinear

one of the advantages of the thermocouples is that the devices are self powered and do not require any auxiliary power source.

Select one:

- True
- False

Next page

Question 17

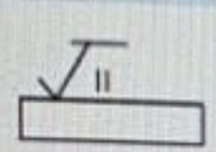
Not yet answered

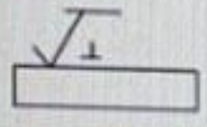
Marked out of 2.00

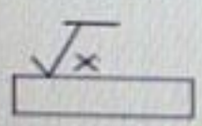
Flag question

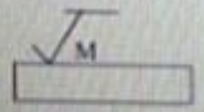
Time left 0:13:24

In the surface texture symbolic representation, which of the following symbols is used when the lay is angular in both directions to line representing the surface to which the symbol is applied

a. 

b. 

c. 

d. 

Clear my choice

Question 18

Not yet

in the vernier caliper , the size of division on the main scale is always greater than the size of division on the vernier scale, and the difference between the two values is equal to the accuracy of the device.

○ False

In a shaft and hole system, the tolerance of the hole is always greater than the tolerance of the shaft.

Select one:

○ True

○ False

Next page

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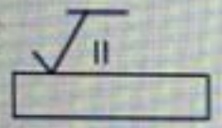
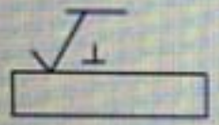
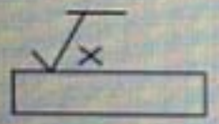
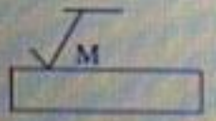
In the surface texture symbolic representation, which of the following symbols is used when the lay is angular in both directions to line representing the surface to which the symbol is applied

a. 

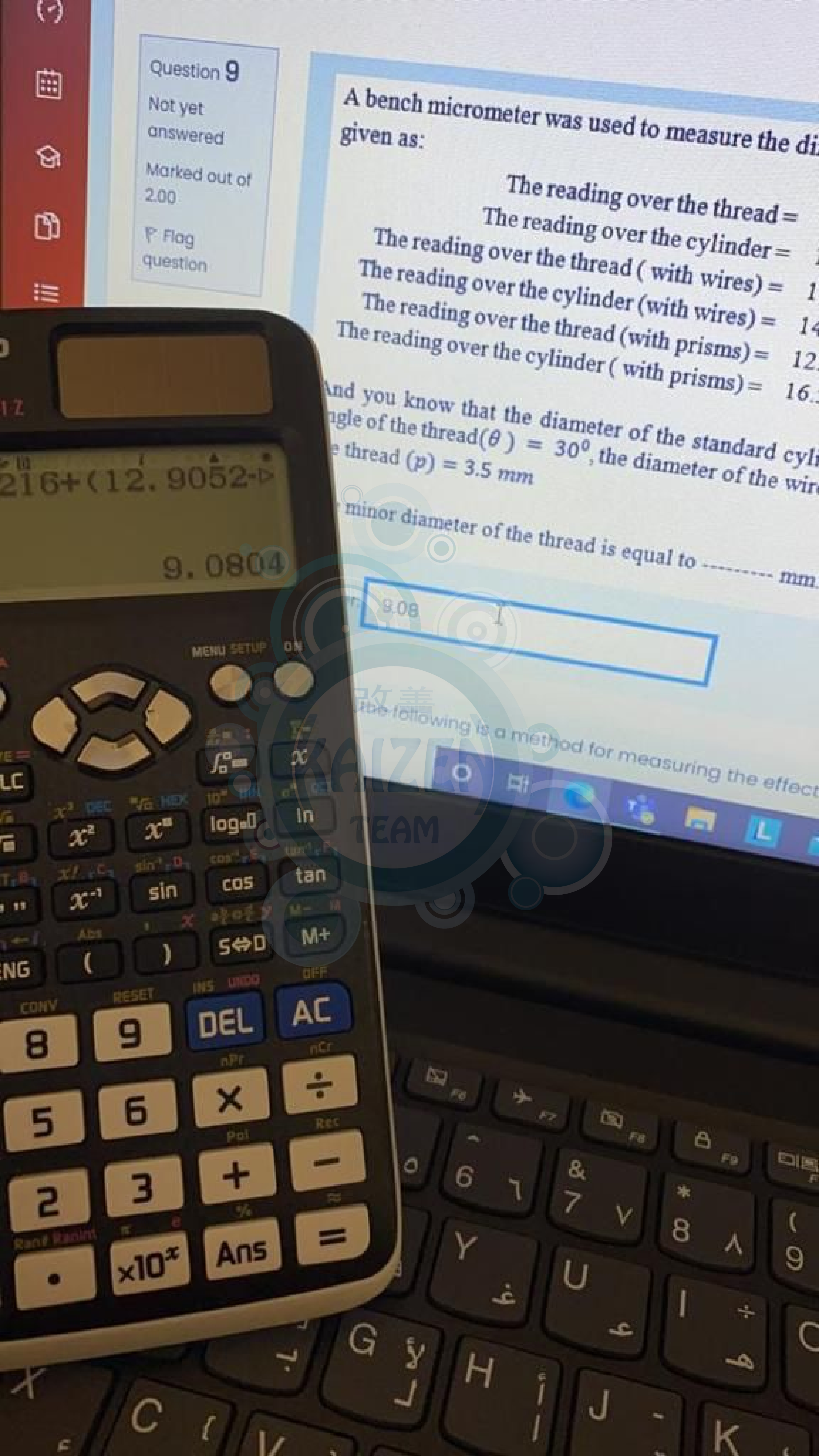
b. 

c. 

d. 

on 18

A bench micrometer was used to measure the dimensions for an external thread: the readings are



Question 9
Not yet answered
Marked out of 2.00
Flag question
A bench micrometer was used to measure the di
given as:
The reading over the thread =
The reading over the cylinder =
The reading over the thread (with wires) =
The reading over the cylinder (with wires) =
The reading over the thread (with prisms) =
The reading over the cylinder (with prisms) =
And you know that the diameter of the standard cyl
ngle of the thread(θ) = 30°, the diameter of the wire
e thread (p) = 3.5 mm
minor diameter of the thread is equal to --------- mm.
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A bench micrometer was used to measure the dimensions for an external thread; the readings are given as:

The reading over the thread =	**10.6320 mm**
The reading over the cylinder =	**10.7216 mm**
The reading over the thread (with wires) =	**11.0766 mm**
The reading over the cylinder (with wires) =	**14.2838mm**
The reading over the thread (with prisms) =	**12.9356 mm**
The reading over the cylinder (with prisms) =	**16.5464 mm**

And you know that the diameter of the standard cylinder is equal to 30.0000 mm , the flank angle of the thread(θ) = 30^0, the diameter of the wire (d) = 2.0207 mm, and the pitch size of the thread (p) = 3.5 mm

The major diameter of the thread is equal to -------- mm.

Answer:

Question 24

Not yet answered

Marked out of 2.00

Flag question

Autocollimator is one of the angular measuring devices and it can be used to measure the error of straightness

Select one:

- [x] True
- [ ] False

Next page

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Clear my choice

in the vernier caliper , the size of division on the main scale is always greater than the size of division on the vernier scale, and the difference between the two values is equal to the accuracy of the device.

Select one:

- True
- False

Next page

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In thermocouples, the relationship between voltage and temperature is nonlinear

Select one:

- True
- False

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Time left 0:18:59

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If an intermediate metal is inserted into a thermocouple circuit at any point , the net voltage will not be affected even though the two junctions introduced by the third metal are at different temperature.

Select one:

- True
- False

Question 16

Not yet
answered

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2.00

Flag
question

for a shaft and hole system, if the upper deviation of the hole is equal to (0.01 mm) and its lower deviation is equal to (minus 0.02 mm), then the tolerance of the hole is -------

- a. 0.01 mm
- b. minus 0.01 mm
- c. minus 0.03 mm
- d. 0.03 mm
- e. the value depends on the shaft deviations.
- f. none of the above is correct

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19 20 21
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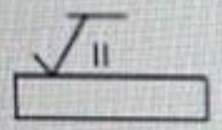
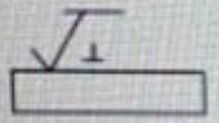
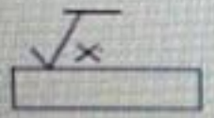
Finish attempt ...

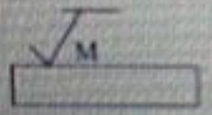
Time left 0:14:13

In the surface texture symbolic representation, which of the following symbols is used when the lay is angular in both directions to line representing the surface to which the symbol is applied

a. 

b. 

c. 

d. 

18 in the vernier caliper , the size of division on the main scale is always greater than the size of division on the

Time left 0:20:59

Autocollimator is one of the angular measuring devices and it can be used to measure the error of straightness

Select one:

- True
- False

In the GO and NOT GO system, the GO part is always used to check the maximum metal limit and the NOT GO is always used to check the minimum metal limit

Select one:

- True
- False

1 2 7 8 13 14 19 20 25

Finish atte

RTD is an example on the non contact temperature measuring devices

Select one:

- True
- False

given the following Table for an (S) Type thermocouple

Time left 0:20:21

In the GO and NOT GO system, the GO part is always used to check the maximum metal limit and the NOT GO is always used to check the minimum metal limit

Select one:

- True
- False

the tolerance of any shaft is equal to the difference between its upper deviation

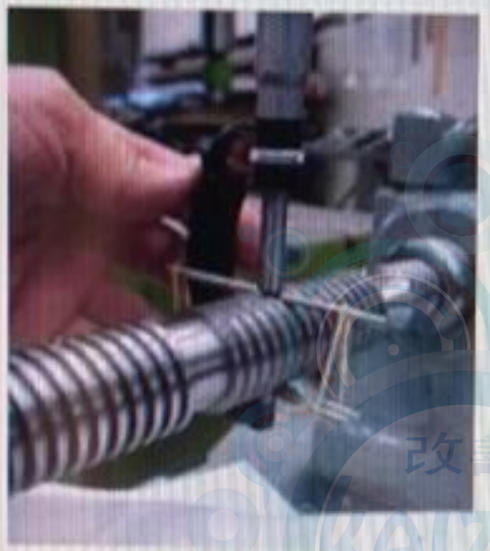
Question 17

Not yet answered

Marked out of 2.00

Flag question

In the following figure , the operator is trying to measure ---------



- a. the major diameter of the thread
- b. the minor diameter of the thread
- c. the effective diameter of the thread
- d. the diameter of the wire

Clear my choice

If an intermediate metal is inserted into a thermocouple circuit at any point , the net voltage will not be affected even though the two junctions introduced by the third metal are at different temperature.

Select one:

- True
- False

Next page

Time left

Calibration of the measuring device can help in reducing the the random error occurs during measurements.

Select one:

- True
- False

If an intermediate metal is inserted into a thermocouple circuit at any point , the net voltage will not be affected even though the two junctions introduced by the third metal are at different temperature.

for any shaft and hole system, the basic size of the hole must equal to the basic size of the shaft.

Select one:

- True
- False

Next page

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to search