

Boilermaker



1. The sequence of operation of a circuit can be determined from what kind of drawing?
☐ (A) Connection diagram ☐ (B) Block diagram
☒ (C) Schematic diagram ☐ (D) Wiring diagram
2. What is the minimum and maximum hydrostatic relief valve pressure?
☒ (A) 375 psi minimum and 500 psi maximum ☐ (B) 100 psi minimum and 300 psi maximum
☐ (C) 250 psi minimum and 400 psi maximum ☐ (D) 500 psi minimum and 600 psi maximum
3. Where do you measure the flue gas temperature?
☐ (A) In the combustion chamber. ☐ (B) At the exhaust of the boiler.
☒ (C) Immediately upstream of the draft hood or barometric draft regulator. ☐ (D) Near the fuel supply line.
4. At many work sites, the proper voltage is not available to power all tools. To correct the problem, use a _____.
☐ (A) power strip ☒ (B) step-down transformer
☐ (C) voltage regulator ☐ (D) battery charger
5. What is the first thing boilermaker should do before opening a drum
☐ (A) Inspect the drum for leaks and damage ☐ (B) Ensure the drum is painted and clean
☒ (C) Verify the drum is lock and blind ☐ (D) Check the weight of the drum before opening
6. the maximum steaming capacity of a boiler shall be based on the:
☐ (A) ability of the fireman ☐ (B) temperature of ht boiler feed water
☐ (C) type of boiler under test ☒ (D) capacity of the fuel burning equipment, air supply, draft, etc.

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7. The control designed as a safety back up, should the operating fail is:
- ☐ (A) A low limit control ☐ (B) An operating pressure control
- ☒ (C) A high limit control ☐ (D) Neither
8. The flow rate of water passing through a heating coil of an air handler is controlled by the:
- ☐ (A) aquastat on the water heater ☐ (B) mixing valve on the domestic hot water system
- ☐ (C) mixing valve on the heating loop ☒ (D) balancing valve on the heating loop
9. Cooling units that cool building spaces are designed to _____ heat from the air.
- ☒ (A) absorb ☐ (B) sense
- ☐ (C) condense ☐ (D) release
10. How do you tighten a head properly on an exchanger
- ☐ (A) Tighten in a circular pattern ☐ (B) Tighten only the corners first
- ☐ (C) Tighten until you hear a click ☒ (D) Tighten in a star pattern
11. How are air blowers that provide ventilation to a crew working in a tower normally set up
- ☐ (A) Blowers are installed outside the tower ☐ (B) Blowers are set to blow air out of the tower
- ☒ (C) Blowers are place in the top and bottom mainway with the air blowing in the mainway in the middle is left open ☐ (D) Blowers are placed only at the bottom of the tower
12. how is a burner orifice cleaned?
- ☐ (A) with a small file ☐ (B) with a min hand drill set
- ☒ (C) soak it in non-oily solvents and then blow air through it ☐ (D) with a stiff brass bristle brush
13. What safety control protects a steam boiler if the condensate pump fails to return water to the boiler?
- ☐ (A) Low pressure limit control ☐ (B) Flame safeguand control
- ☒ (C) Low water cut off ☐ (D) High pressure limit control

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1281. P.A.S.S. stands for:

- ☐ (A) Point, Aim, Sweep, Squeeze.
- ☒ (B) Pull, Aim, Squeeze, Sweep.
- ☐ (C) Push, Activate, Squeeze, Stop.
- ☐ (D) Neither

1282. Circulators are never controlled by

- ☒ (A) a pressure-relief valve.
- ☐ (B) an aquastat.
- ☐ (C) the burner coming on.
- ☐ (D) the boiler electrical power.

1283. What is the minimum length of a hose connector that has an inside diameter of 1 ½-inches?

- ☒ (A) 10 inch
- ☐ (B) 14 inch
- ☐ (C) 8 inch
- ☐ (D) 12 inch

1284. HSS shaper tool can resist heat at about

- ☐ (A) 1200 Degree Centigrade
- ☐ (B) 1000 Degree Centigrade
- ☒ (C) 600 Degree Centigrade
- ☐ (D) 800 Degree Centigrade

1285. Thermistors are solid state devices that can change resistance with

- ☐ (A) condensation
- ☐ (B) current
- ☒ (C) temperature
- ☐ (D) pressure

1286. What is the maximum machining length in a CNC lathe?

- ☒ (A) 245 mm
- ☐ (B) 320 mm
- ☐ (C) 200 mm
- ☐ (D) 340 mm

1287. Which of the following statements is true for cast iron sectional boilers?

- ☐ (A) Can be expanded in size
- ☐ (B) These boilers do not require water
- ☐ (C) Cast iron sectional boilers have fire tubes
- ☒ (D) None of the above

1288. A safety valve test performed to determine if a safety valve opens at the proper pressure within allowable tolerances.

- ☒ (A) Pop Test
- ☐ (B) Lit Splint Test
- ☐ (C) Limewater Test
- ☐ (D) Try Lever Test

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1289. which type of combustion is when all fuel is burned using only the minimal amount of excess air ____
- ☒ (A) explosive combustion ☐ (B) exothermic reaction
☒ (C) complete combustion ☐ (D) partial combustion
1290. When using a steel hanger to support copper pipe, the steel hanger must be insulated by _____ on either side of the hanger?
- ☐ (A) 2 inches ☐ (B) 4 inches
☒ (C) 1 inch ☐ (D) 1/2 inch
1291. What types of appliances must use a flexible metal connector?
- ☐ (A) Appliances that operate solely on battery power. ☒ (B) Appliances that vibrate, expand and contract or other movements that could damage a rigid connection.
☐ (C) Appliances that require a constant power supply without movement. ☐ (D) Appliances that are permanently installed and do not move.
1292. If a leak occurs in the propane line between the first and second stage regulator, what is the first action that must be taken?
- ☐ (A) Call emergency services immediately ☐ (B) Check the pressure gauge on the tank
☐ (C) Open all windows and doors ☒ (D) Shut off the valve at the outlet of Tank
1293. The heating of oil in the storage tanks shall be by means of _____ using low pressure _____ or _____, or by means of _____ heaters.
- ☐ (A) Pipes, cold air, gas, solar ☐ (B) Fans, hot air, electric, geothermal
☐ (C) Tanks, warm oil, diesel, propane ☒ (D) Coils, hot water, steam, electric
1294. The initial pass of a weld that requires multiple passes is called the _____.
- ☐ (A) Filler pass ☐ (B) Final pass
☐ (C) Surface pass ☒ (D) Root pass