Electrode extension and visible extension mean the same thing?

True **False**

Reverse polarity, referred to as DCEP, means the electrode must be connected to the positive output terminal.

True False

A wider and flatter crowned bead is generally a result of a drag gun technique.

True **False**

Spray transfer is done with a __**Argon** _____ rich shielding gas mixtures.

A constant potential welding machine is deigned to control ____**voltage _____.**

Extreme heat produced during axial spray metal transfer can cause

a. excessive heat felt by the welder
b. the weld to be too fluid for out of position work
c high deposition rates
d. all the above

In Gas Metal Arc Welding amperage is adjusted upward or downward by

a**. changing the wire feed speed (WFS)**
b. changing the arc length
c. changing the voltage
d. changing the watts

Where does the wire electrode pick up the welding current in GMAW?

a. drive rollers
b. the plasma
c**. contact tip**
d. conduit

Bird nesting

a. is a term referring to poor cleanup practices
b. can be corrected by increasing the drive roller pressure
c. can be caused by roller conduit misalignment
d. is due to a problem with the feed motor

Flow meters may have different scales on the glass tube because

a. different gases have different gas densities
b. each gas has different cylinder pressure
c. the meter is read at different angles
d. because of different shielding gas manufactures

Which type of GMAW metal transfer results in the ***least*** amount of penetration?

a. globular
b. **short circuiting**
c. spray
d. pulsed spray

In GMAW, the type of metal transfer requiring a special power supply is:

a. spray
b. globular
c. **pulsed arc**
d. short circuiting

The primary welding variables which affect heat input are:

a. voltage and current
b. current and travel speed
c. **voltage, current and travel speed**
d. travel speed, preheat temperature and voltage
e. voltage, current and preheat temperature

What is the purpose of the nozzle on the end of the GMAW welding gun?

a. to protect the tip
b. to direct shielding gas
c. to catch the spatter
d. to insulate the contact tube

Which GMAW gas is used for spray transfer on carbon steel?

a. Ar
b. ArO2
c. C-8
d. CO2
e. C-25

When welding on thin sheet metal sections, the best method is

a. spray transfer
b. globular metal transfer
c. short circuit transfer
d. pulse spray transfer

GMAW uses a power source that is

a. constant arc voltage
b. constant arc amperage
c. drooping arc voltage
d. both a and b

Surface contamination such as moisture, oil, grease, rust and paint will result in _____ in GMAW Welding.

a. cracking
b. lack of fusion
c. porosity
d. all the above

CO2

a. is an inert gas
b. is not an inert gas
c. cannot be used to weld aluminum
d. both b and c

The S in the AWS designation E70S means

a. silicon wire
b. super wire
c. solid wire
d. none of these

The feed roller

a. size must match the wire size
b. must be smoothly grooved
c. size must be equal or smaller than the wire size
d. none of the above

What shielding gas is recommended for welding of aluminum?

a. 75% Argon, 25% CO2
b. CO2
c. Argon
d. 90% Argon, 10% CO2

What must be determined before shielding gas is selected?

a. **The type and thickness of material**
b. The welding operator's skill
c. Welding procedure must be qualified
d. none of the above

What is the purpose of peak current in Pulsed GMAW?

a. To maintain an arc during pulses
b. To transfer droplets of molten metal across the arc
c. To reduce the heat input in the weld puddle
d. To reduce the fumes generated

What gun travel angle is recommended for GMAW-P aluminum?

a. Pull
b. Push
c. Drag
d. This depends upon the welding position.

What polarity does GMAW-P require?

a. Alternating current
b. Direct current reverse polarity
c. Direct current straight polarity
d. Direct current electrode negative

Two inert gases used in GMAW are .

a. Argon and Oxygen
b. Helium and Nitrogen
c. Argon and CO2
d. Argon and Helium