

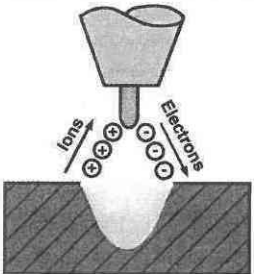
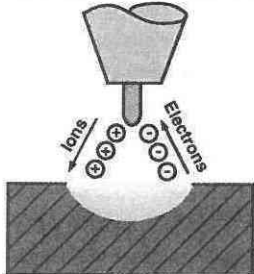
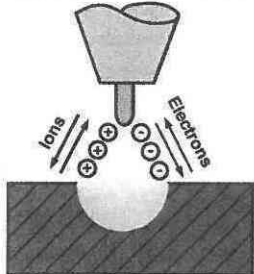
CURRENT - TYPE	DC	DC	AC (balanced)
ELECTRODE POLARITY	Negative	Positive	
ELECTRON AND ION FLOW			
PENETRATION CHARACTERISTICS			
OXIDE CLEANING ACTION	NO	YES	YES - Once every half cycle
HEAT BALANCE IN THE ARC (approx.)	70% At work end 30% At electrode end	30% At work end 70% At electrode end	50% At work end 50% At electrode end
PENETRATION	Deep; narrow	Shallow; wide	Medium
ELECTRODE CAPACITY	Excellent (e.g. 3.18 mm [1/8 in.] - 400 A)	Poor (e.g. 6.35mm [1/4 in.] - 120 A)	Good (e.g. 3.18 mm [1/8 in.] - 225 A)

Figure 3.21—Effect of Welding Current Type on Penetration for Gas Tungsten Arc Welding