

WARNING: To prevent serious injury, read manual warnings and instructions before use.

220 ST ARC WELDER QUICK START GUIDE

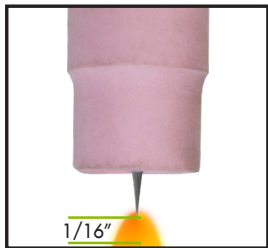
TIG

- 1** Attach a size 50 Dinse TIG torch (Size 17 or 26 with valve is recommended)
- 2** Verify proper shielding gas is used for TIG welding. (100% Argon)
- 3** Make sure process switch is on TIG
- 4** Adjust amperage
- 5** Open gas valve on torch and use lift arc technique



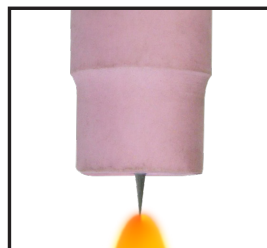
TIG WELDING TIPS

OPTIMAL ARC LENGTH



- Optimal arc length varies by electrode type and diameter but is approximately 1/16"

ARC START



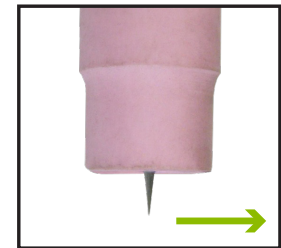
- A scratch or lift arc is often used to initiate the arc
- Try to minimize electrode and tungsten contamination

AMPERAGE



- Affects penetration and bead width
- Amperage is often referred to as "heat" in TIG Welding

TRAVEL SPEED



- Affects bead width and height
- Can also affect penetration

WARNING: To prevent fire and serious injury: Keep torch and wire clear of grounded objects while welder is plugged in. Be sure to follow safe welding procedures and wear proper PPE (clothes, welding helmet, safety glasses, welding gloves, boots, etc.)

WARNING: To prevent serious injury, read manual warnings and instructions before use.

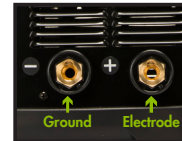
220 ST ARC WELDER QUICK START GUIDE

STICK

1 Plug in welder to 230V or 120V with adaptor



2 Adjust polarity for the stick electrode (Usually DCEP - Electrode Positive)



3 Make sure process switch is on STICK



4 Adjust amperage per electrode manufacturer's recommendations



GENERAL AMPERAGE RECOMMENDATION

Ø	E6011, E6013, E7014	E7018	E308, E309, E316, E312
1/16"	30-40A	N/A	20-40A
5/64"	40-60A	N/A	30-50A
3/32"	50-70A	70-80A	40-70A
1/8"	80A - 120A	100A - 130A	50-80A
5/32"	100A - 150A	120A - 160A	70A - 110A
3/16"	130A - 200A	150A - 220A	100A - 160A

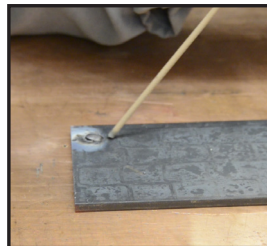
STICK WELDING TIPS

OPTIMAL STICKOUT



- Optimal stickout varies by electrode type and diameter but is approximately 1/16"

STRIKE ARC



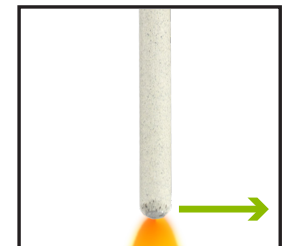
- Scratch or tap technique is often used

AMPERAGE



- Affects penetration and bead width
- Can also affect spatter, electrode starting and ability to weld vertical or overhead

TRAVEL SPEED



- Affects bead width and height
- Can also affect penetration