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

## 100 ST WELDER QUICK START GUIDE

## TIG

1
Attach a size 25 Dinse TIG torch (Size 9 or 17 with valve is recommended)


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

OPTIMAL ARC LENGTH


- Optimal arc length varies by electrode type and diameter but is approximately $1 / 16^{\prime \prime}$

ARC START


- A scratch or lift Start 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.

## 100 ST WELDER QUICK START GUIDE

## STICK

1 Plug in welder

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

3 Make sure process switch is on STICK


Adjust amperage per electrode manufactures recommendations


| GENERAL AMPERAGE RECOMMENDATION |  |  |  |
| :---: | :---: | :---: | :---: |
| $\varnothing$ | E6011, E6013, E7014 | E7018 | E308, E309, E316, E312 |
| $1 / 16^{\prime \prime}$ | $30-40 \mathrm{~A}$ | N/A | $20-40 \mathrm{~A}$ |
| $5 / 64^{\prime \prime}$ | $40-60 \mathrm{~A}$ | N/A | $30-50 \mathrm{~A}$ |
| $3 / 32^{\prime \prime}$ | $50-70 \mathrm{~A}$ | $70-80 \mathrm{~A}$ | $40-70 \mathrm{~A}$ |
| $1 / 8^{\prime \prime}$ | 80 A | 80 A (DIFFICULT) | $50-80 \mathrm{~A}$ |

## STICK WELDING TIPS

OPTIMAL STICKOUT


- Optimal stickout varies by electrode type and diameter but is approximately $1 / 16^{\prime \prime}$

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

