

# SanRex

## Arc Welding Power Supplies & Accessories

**Catalog**  
Fourth Edition



**SanRex**

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[www.sanrexwelding.com](http://www.sanrexwelding.com)  
SANREX CORPORATION  
PORT WASHINGTON, NY, USA

Form No.:111521CAT

### SANSTICK 140S

***Comes with: 6.5ft. Work and Electrode lead, 120/240 vac adaptor and Carry case.***

- STICK (SMAW)
- TIG (GTAW) Lift Start
- Auto Switch - Multi-voltage 115/208-230 VAC, single phase
- Preset Hot Start & Arc Force
- CSA Certification
- 1 Year Warranty

#### Machine Specifications

Input Voltage	115/230 VAC 1 Phase
Input Frequency	50/60 Hz
Output range	5 - 140 amps (115V/230V)
Rated Output	140A @ 15% Duty Cycle (115v 1 phase) 140A @ 25% Duty Cycle (230v1 phase)
Max OCV	65
Consumable Size	3/32" - 1/8" STICK electrode
Dimensions (HxWxD)	8.6" x 4.7" x 11" (220 x 120 x 280mm)
Weight	10 lbs. (4.5 kg)



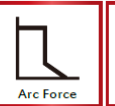
### SANSTICK 160S

***Comes with: 6.5ft. Work and Electrode lead, 120/240 vac adaptor and Carry case.***

- STICK (SMAW) (**E6010 Performance**)
- TIG (GTAW) Lift Start
- Auto Switch - Multi-voltage 115/208-230 VAC, single phase
- **PFC—Power Factor Correction.** Will use less current when operating on 120 VAC.
- Preset Hot Start & Arc Force
- CSA Certification
- 3 Year Warranty

#### Machine Specifications

Input Voltage	115/230 VAC 1 Phase
Input Frequency	50/60 Hz
Output range	8 - 125 Amps (115V) 10 - 160 Amps (230V)
Rated Output	125A @ 30% Duty Cycle (115v 1 phase) 160A @ 40% Duty Cycle (230v1 phase)
Max OCV	65
Consumable Size	3/32" - 5/32" STICK electrode
Dimensions (HxWxD)	9" x 5.5" x 14.4" (230 x 140 x 365mm)
Weight	17.6 lbs. (8 kg)



### SANARG 160P



- DC TIG (GTAW) Lift & HF Start with Rapid Pulse control.
- DC STICK (SMAW)
- Auto Switch - Multi-voltage 115/208-230 VAC, single phase
- Adjustable Hot Start
- Embedded microprocessor with Digital Controls
- Intelligent self diagnostic & heat sensing fan
- Digital Amperage and Voltage Meter
- Job Save & Load to store 5 exact optimized welding programs
- 8 pin Remote amperage and contactor receptacle
- Standards compliant integrated voltage reduction device (VRD)
- Perfectly Smooth, Stable TIG Arc down to 1 Amp.
- 3 year Warranty

#### Machine Specifications

Input Voltage	115/230 VAC 1 Phase
Input Frequency	50/60 Hz
Output range	1 - 85 Amps (115V) 1 - 160 Amps (230V)
Rated Output	85A @ 100% Duty Cycle (115v 1 phase) 160A @ 35% Duty Cycle (230v1 phase)
Max OCV	65
Consumable Size	3/32" - 5/32" STICK electrode
Dimensions (HxWxD)	10.2" x 5.1" x 12.6" (260 x 130 x 320mm)
Weight	17.6 lbs. (8 kg)



### SANARG 180AP



- AC/DC TIG (GTAW) Lift & HF Start with Rapid Pulse control.
- STICK (SMAW)
- Auto Switch - Multi-voltage 115/208-230 VAC, single phase
- PFC—Power Factor Correction. Will use less current when operating on 120 VAC.
- True square wave output with AC Frequency & Balance control
- Pre and Post Flow gas timer.
- Adjustable Hot Start
- Digital Amperage and Voltage Meter
- 8 pin Remote amperage and contactor receptacle
- CSA Certification
- 3 Year Warranty

#### Machine Specifications

Input Voltage	115/230 VAC 1 Phase
Input Frequency	50/60 Hz
Output range	5 - 140 Amps (115V) 5 - 200 Amps (230V)
Rated Output	140A @ 40% Duty Cycle (115v 1 phase) 180A @ 40% Duty Cycle (230v1 phase)
Max OCV	65

*Comes with: 10ft. Work and Electrode lead, 120/240 vac adaptor, 12ft. TIG Torch w/ Remote On/OFF & Current control, Regulator/Flow gauge w/13ft. Gas Hose.*





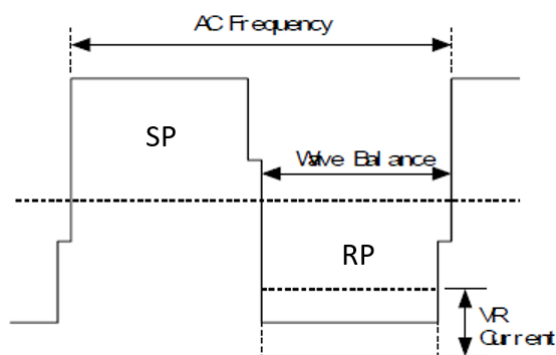
## SANARG 200AP

- AC/DC TIG (GTAW) Lift & HF Start with Rapid Pulse control.
- STICK (SMAW)
- Smart Switch - Multi-voltage 208-230/460 VAC, single/Three phase
- True square wave output with AC Frequency & Balance control
- Program Save/Load Function
- Pre and Post Flow gas timer.
- Adjustable Hot Start
- Digital Amperage and Voltage Meter
- 14 pin Remote amperage and contactor receptacle
- Simple Automation I/O.
- 3 Year Warranty



### Machine Specifications

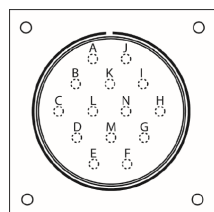
Input Voltage	208-230/460 VAC 1/3 Phase
Input Frequency	50/60 Hz
Output range	5 - 320 Amps DC / 10- 300 Amps AC
Rated Output	200A @ 20% Duty Cycle (STICK/TIG) 160A @ 40% Duty Cycle (STICK/TIG)
Max OCV	65
Dimensions (HxWxD)	14.2" x 7.1" x 16.5" (360 x 180 x 420 mm)
Weight	53 lbs. (24 kg)



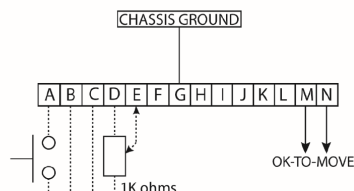
The 200AP AC output uses advanced embedded micro processor technology. This control of the wave form changes the amount of time spent on DCEP (cleaning) and DCEN (penetration) parts of each cycle, increasing arc stability. The DCEP cycle insures that the aluminum oxide is thoroughly removed, allowing the DCEN cycle a thorough penetration of the base metal. Both cycles enhance weld quality and significantly improve performance.

When a conventional system changes its wave balance, there can be as much as a 50% increase in amperage draw. Sanrex® 200AP amperage draw is unaffected by any adjustments. The 200AP increases efficiency and eliminates tungsten spitting and enables the use of a smaller diameter tungsten electrodes to operate at a higher current levels. Figures 1 & 2 show the difference in TIG torch electrode and heat and cleaning variations.

**Simple Automation** Interface for Fixed, hard and Robotic automation applications includes Remote Weld ON/OFF, Remote Amperage Control, OK-to-Move Weld Arc ON signals.



Front view of 14-Pin  
Socket Receptacle



## SANARG 300AP

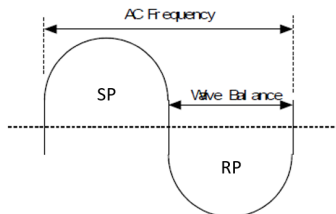
- AC/DC TIG (GTAW) Lift & HF Start with Rapid Pulse control.
- STICK (SMAW)
- Smart Switch - Multi-voltage 208-230/460 VAC, single/Three phase
- True square wave output with AC Frequency & Balance control
- Program Save/Load Function
- Pre and Post Flow gas timer.
- Adjustable Hot Start
- Digital Amperage and Voltage Meter
- 14 pin Remote amperage and contactor receptacle
- Simple Automation I/O.
- 3 Year Warranty



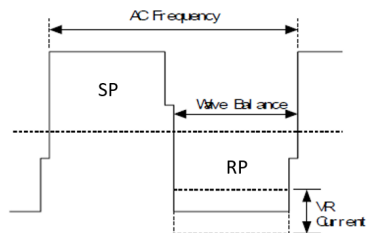
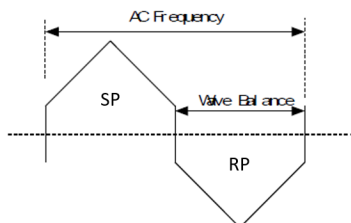
### Machine Specifications

Input Voltage	208-230/460 VAC 1/3 Phase
Input Frequency	50/60 Hz
Output range	5 - 300 Amps DC / 10- 300 Amps AC
Rated Output	300A @ 25% Duty Cycle (STICK/TIG) 250A @ 40% Duty Cycle (STICK/TIG)
Max OCV	65
Dimensions (HxWxD)	16.5" x 8.3" x 17.7" (420 x 210 x 450mm)
Weight	53 lbs. (24 kg)

AC Soft



Triangle Wave



**AC Soft** includes all the benefits of AC square wave with the addition of maximum puddle control and good wetting action of the weld puddle which helps to overcome surface tension.

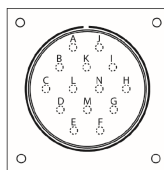
**Triangle Wave** provides the punch of the peak amperage, while reducing overall heat input. Fast puddle formation increases travel speed, limiting heat input and reducing weld distortion, especially on thin materials.

**VR Current** (Variable of Reverse Polarity Current) is the independent adjustment of the RP Current half cycle of the AC wave to precisely control the heat input to the work and the electrode.

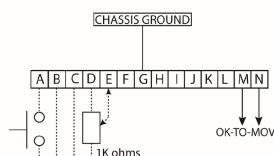
The SP amperage controls the amount of heat directed to the work, while the RP amperage effects the arc cleaning action.

VR Current along with AC Wave Balance dramatically effects the RP cleaning action. Reducing VR Current will reduce the heat input to the TIG Torch and reduce electrode geometry degradation and increases heat input to the work piece for increased travel speeds. Increasing VR Current will enhance cleaning when welding on a dirty work piece.

**Simple Automation** Interface for Fixed, hard and Robotic automation applications includes Remote Weld ON/OFF, Remote Amperage Control, OK-to-Move Weld Arc ON signals.



Front view of 14-Pin Socket Receptacle



### SANMIG 200MF



- Full Multi-Process DC MIG/ L-TIG / STICK
- Built-in Wire feeder
- Synergic - Simple Setup
- Auto Switch - Multi-voltage 115/208-230 VAC, single phase
- PFC—Power Factor Correction. Will use less current when operating on 120 VAC.
- Adjustable Inductance & Hot Start
- Digital Amperage and Voltage Meter
- Remote receptacle for Spool Gun
- CSA Certification
- 3 Year Warranty

*Comes with: 10ft. Work and Electrode lead, 120/240 vac adaptor , 12ft. Mig Gun, Regulator/Flow gauge w/13ft. Gas Hose.*



#### Machine Specifications

Input Voltage	115/230 VAC 1 Phase
Input Frequency	50/60 Hz
Output range	5 - 140 amps (115V), 5 - 200 amps (230V) 10 - 26 volts (115/230V) 0.030 - 0.035 dia. (.8 - .9 mm) Wire 7 - 425 IPM Wire Feed Speed
Rated Output	140A @ 35% Duty Cycle (115 1 phase) 200A @ 25% Duty Cycle (230 1 phase)
Max OCV	65
Material Thickness	1/4"
Dimensions (HxWxD)	10.2"x5.1"x12.6" (260x130x320mm)
Weight	39.2 lbs. (17.8 kg)

### SANMIG 250MF



- Full Multi-Process DC MIG/ L-TIG / STICK
- Built-in Wire feeder
- Synergic - Simple Setup
- Auto Switch - Multi-voltage 115/208-230 VAC, single phase
- PFC—Power Factor Correction. Will use less current when operating on 120 VAC.
- Adjustable Inductance & Hot Start
- Digital Amperage and Voltage Meter
- Remote receptacle for Spool Gun
- CSA Certification
- 3 Year Warranty

*Comes with: 10ft. Work and Electrode lead, 120/240 vac adaptor , 15ft. Mig Gun w/remote control, Regulator/Flow gauge w/13ft. Gas Hose.*



#### Machine Specifications

Input Voltage	115/230 VAC 1 Phase
Input Frequency	50/60 Hz
Output range	5 - 140 amps (115V), 5 - 250 amps (230V) 10 - 26 volts (115/230V) 0.030, 0.035, 0.045" dia. (.8, .9, 1.2 mm) Wire 7 - 425 IPM Wire Feed Speed
Rated Output	140A @ 100% Duty Cycle (115 1 phase) 250A @ 25% Duty Cycle (230 1 phase)
Max OCV	65
Material Thickness	3/8"
Dimensions (HxWxD)	10.2"x5.1"x12.6" (260x130x320mm)
Weight	48.5 lbs. (22 kg)

### SANMIG 400M/MP



- Full Multi-Process MIG/ L-TIG / STICK/CAG (E6010 Compatible)
- Standards compliant integrated voltage reduction device (VRD)
- 14 Pin Receptacle
- Simple Automation I/O.
- Smart Switch - Multi-voltage 208-230/460 VAC, single/three phase
- Adjustable Inductance
- Adjustable Arc Control
- Adjustable Hot Start
- Digital Amperage and Voltage Meter
- Job Save/Load
- 3 Year Warranty

#### Machine Specifications

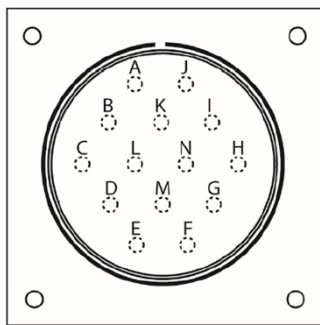
Input Voltage	208-230/460 VAC 1/3 Phase
Input Frequency	50/60 Hz
Output range	5 - 400 Amps 10 - 36 volts (115/230V)
Rated Output	300A @ 60% Duty Cycle 400A @ 25% Duty Cycle
Max OCV	65
Dimensions (HxWxD)	16.5"x8.3"x17.7" (420x210x450mm)
Weight	55.6 lbs. (25.22 kg)



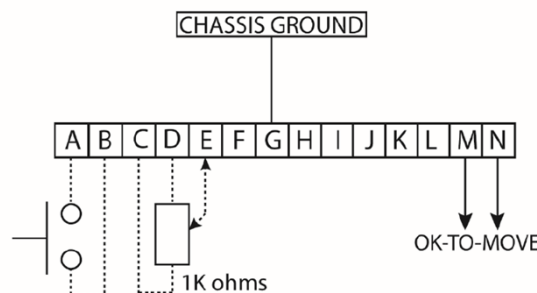
### SANMIG 400M/MP

Simple interface included in the 400M and 400MP for Fixed, hard and Robotic automation applications

- Arc ON/OFF Pins A & B.
- Remote Amperage/Voltage Pins C,D,E.
- OK-to-Move Pins M & N.



Front view of 14-Pin  
Socket Receptacle





### SANFEED Sky 4

- EURO Gun Connection
- Digital Meters (Voltage and Amperage)
- Remote Voltage Control
- Heavy Duty 4 Roll System
- Inch/Purge
- Gun Trigger Hold (2T/4T)
- Electronic Speed Control & Dynamic Breaking
- Welding Wire Spool Cover
- Coax Interface Cable
- 14 Pin Connection
- 3 Year Warranty

#### Machine Specifications

Input Voltage	24 VAC Single Phase
Input Frequency	50/60 Hz
Output range	58 - 850 IPM (1.5 - 22 m/min) 0.024" - 5/64" (0.6 - 2.0mm) Solid or Flux Cored.
Rated Output	500A @ 100% Duty Cycle
Max OCV	65
Dimensions (HxWxD)	13.38"x12.60"x21.65" (340x320x550mm)
Weight	35.27 lbs. (16 kg)



Coaxial Cable  
Includes Gas Hose, Power and control cables

### SANFEED Sky 4HD

- TWECO® Gun Connection
- Digital Meters (Voltage and Amperage)
- Remote Voltage Control
- Heavy Duty 4 Driven Roll System
- Inch/Purge
- Gun Trigger Hold (2T/4T)
- Electronic Speed Control & Dynamic Breaking
- Welding Wire Spool Cover
- Coax Interface Cable
- 14 Pin Connection
- 3 Year Warranty

#### Machine Specifications

Input Voltage	24 VAC Single Phase
Input Frequency	50/60 Hz
Output range	58 - 850 IPM (1.5 - 22 m/min) 0.024" - 5/64" (0.6 - 2.0mm) Solid or Flux Cored.
Rated Output	500A @ 100% Duty Cycle
Max OCV	65
Dimensions (HxWxD)	13.38"x12.60"x21.65" (340x320x550mm)
Weight	35.27 lbs. (16 kg)



Coaxial Cable  
Includes Gas Hose, Power and control cables



### SANFEED Field 4HD

- Voltage Sensing
- TWECO® Gun Connection
- Heavy Duty Plastic Case
- Digital Meters (Voltage and Amperage)
- Heavy Duty 4 driven Roll System
- Inch/Purge
- Gun Trigger Hold (2T/4T)
- Electronic Speed Control & Dynamic Breaking.
- Heavy Duty Contactor
- 3 Year Warranty

#### Machine Specifications

Input Voltage	15 - 100 VDC
Output range	58 - 850 IPM (1.5 - 22 m/min) 0.024" - 5/64" (0.6 - 2.0mm) Solid or Flux Cored.
Rated Output	400A @ 100% Duty Cycle
Dimensions (HxWxD)	13.38"x12.60"x21.65" (340x320x550mm)
Weight	35.27 lbs. (16 kg)



## SANPAW 150PW

### The Alternative to TIG and Laser Automation

- Plasma Welding - Melt-in Fusion & Key Hole process.
- Simple to Setup - A self contained unit, which requires attaching input power, Gases, then mounting the torch.
- Cost Savings: Price competitively with automated TIG systems.
- Easy to use: Simple interface for automated or manual control.
- Repeatable Arc Starting: Pilot arc allows for repeatable arc starts, reducing defects and rework.
- Ultra Smooth DC Arc: For repetitive TIG quality welds.
- Digital Meters: Weld Current and adjustable controls.
- Job Save Load: Allow operator to store up to 9 exact optimized welding parameters then digitally recall them with perfect repeatability.
- 3 Year Warranty

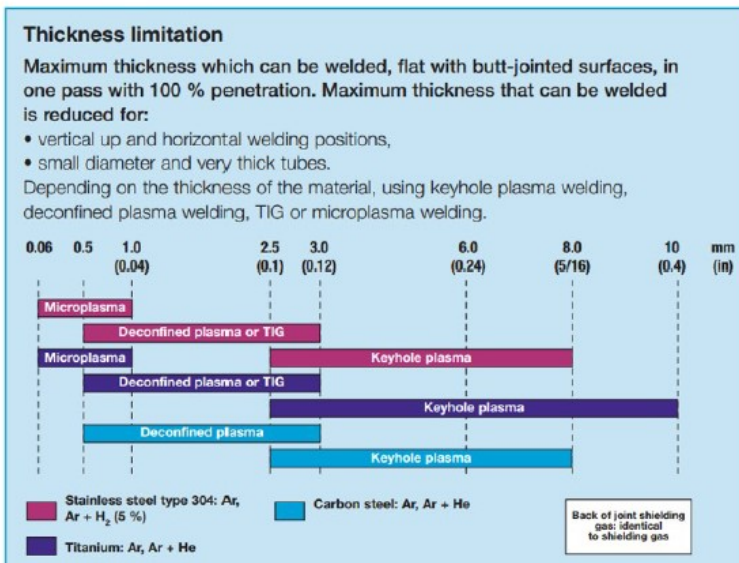
### Machine Specifications

Input Voltage	208-230/460 Three Phase
Input Frequency	50/60Hz
Output range	.5 - 200 Amps
Rated Output	200A @ 35% Duty Cycle
Material Thickness	Up to 3/16" Ferrous Metals
Dimensions (HxWxD)	26.77"x9.84"x23.63" (680x250x600mm)
Weight	79.4 lbs. (36 kg)



## WHY PLASMA WELDING?

Plasma arc welding is measurably the lower cost process with savings gained through increased productivity, reduced scrap, reduced downtime and fewer electrode changes.



Thickness	Electrode (SMAW)	Manual TIG (GTAW)	Plasma (PAW)
3 mm (0.12")			
8 mm (5/16")			
> 8 mm (> 5/16")			

Welding in one pass without preparation:  
carbon steel and stainless steel, austenitic up to 8 mm (5/16"), titanium up to 10 mm (0.4").

**Example of productivity gain with carbon steel (5 mm / 0.2"):**

- Electrode: preparation + 2 passes at 15 to 20 cm/min (6 to 8 in/min) grinding.
- Manual TIG: preparation + 2 passes at 10 cm/min (4 in/min).
- Keyhole plasma: 1 pass at 40 cm/min (15 in/min).

## SANPAW 300PW

### The Alternative to TIG and Laser Automation

- Plasma Welding - Melt-in Fusion & Key Hole process.
- Simple to Setup - A self contained unit, which requires attaching input power, Coolant recirculator and gases, then mounting the torch.
- Cost Savings: Price competitively with automated TIG systems.
- Easy to use: Simple interface for automated or manual control.
- Repeatable Arc Starting: Pilot arc allows for repeatable arc starts, reducing defects and rework.
- Ultra Smooth DC Arc: For repetitive TIG quality welds.
- Digital Meters: Weld Current and adjustable controls.
- Job Save Load: Allow operator to store up to 30 exact optimized welding parameters then digitally recall them with perfect repeatability.
- 3 Year Warranty

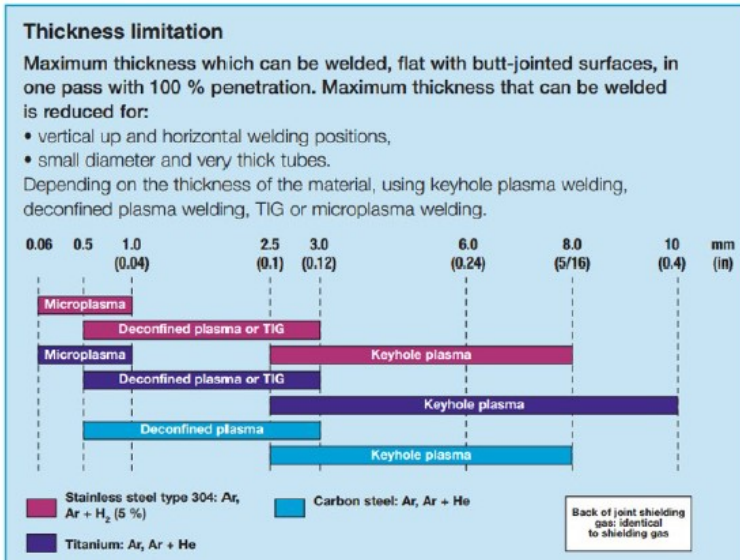


### Machine Specifications

Input Voltage	208-230/460 Three Phase
Input Frequency	50/60Hz
Output range	5 - 300 Amps
Rated Output	300A @ 60% Duty Cycle
Material Thickness	Up to 5/16" Ferrous Metals
Dimensions (HxWxD)	25.59"x15.75"x23.62" (650x400x600mm)
Weight	131 lbs. (59.4 kg)

## WHY PLASMA WELDING?

Plasma arc welding is measurably the lower cost process with savings gained through increased productivity, reduced scrap, reduced downtime and fewer electrode changes.



Thickness	Electrode (SMAW)	Manual TIG (GTAW)	Plasma (PAW)
3 mm (0.12")			
8 mm (5/16")			
> 8 mm (> 5/16")			

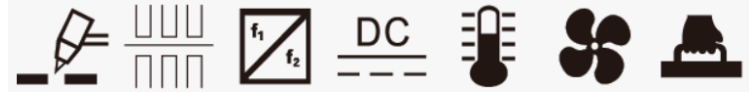
Welding in one pass without preparation:  
carbon steel and stainless steel, austenitic up to 8 mm (5/16"), titanium up to 10 mm (0.4").

**Example of productivity gain with carbon steel (5 mm / 0.2"):**

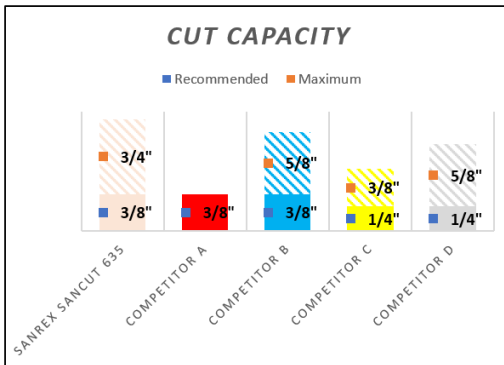
- Electrode: preparation + 2 passes at 15 to 20 cm/min (6 to 8 in/min) grinding.
- Manual TIG: preparation + 2 passes at 10 cm/min (4 in/min).
- Keyhole plasma: 1 pass at 40 cm/min (15 in/min).



### SANCUT 638



- Cut Capacity:
  - Recommended 1/4" (6.3mm) 120 vac, 3/8" (9.5mm) 240 vac.
  - Maximum 1/2" (12.7 mm) 120 vac, 3/4" (19mm) 240 vac.
  - Pierce 1/4" (6.3mm) 120 vac, 3/8" (9.5mm) 240 vac.
- 120/240 vac Dingle Phase
- 20ft. Torch
- Auto Air Regulator
- CSA Certified
- 3 Year Warranty



## Ordering Information

Product	Part Number	Description
SANSTICK 140S	IDU-W140S-U1DV	DC STICK Power Supply with STICK Package and Carry Case.
SANSTICK 160S	IDU-W160S-U1DVP	DC STICK Power Supply with STICK Package and Carry Case.
SANARG 160P	ID-1600TP-U1E	DC TIG Power Supply Only.
SANARG 180AP	IAU-W180AP-U1DVP	AC/DC TIG Power Supply with TIG and STICK Package.
SANARG 200AP	IA-2000TP-U2E	AC/DC TIG Power Supply Only.
SANARG 300AP	IA-3000TP-U2E	AC/DC TIG Power Supply Only.
SANMIG 200MF	IAU-W200MF-U1DV	DC Multi-process Power supply with MIG and STICK Package.
SANMIG 250MF	IAU-W250MF-U1DV	DC Multi-process Power supply with MIG and STICK Package.
SANMIG 400M	ID-4000C-U1E	DC Multi-process power supply Only.
SANMIG 400MP	ID-4000CP-U1E	DC Multi-process w/MIG Pulse power supply only.
SANPAW 150PW	IDU-W150PW-U1DVP	150PW Plasma Arc Welder only.
SANPAW 300PW	ID-3000PW-U1E	300PW Plasma Arc Welder only.
SANFEED Sky 4	WF-1100	Sky 4 Wire Feeder only. Setup for 0.035 & 0.045 solid wire.
SANFEED Sky 4HD	WF-1300	Sky 4HD Wire Feeder only. Setup for 0.035 & 0.045 Solid wire.
SANFEED Field 4HD	WF1200	Field 4HD Wire Feeder only. Setup for 0.035 & 0.045 Solid wire.
SANCUT 638	IDU-W638PC-U1DV	SANCUT 638 with 20ft. Torch.

See Product Brochures for details and accessories.