

STC-205Di

3-in-1 Multi-process: DC TIG+Plasma Cutting



Quick Specs

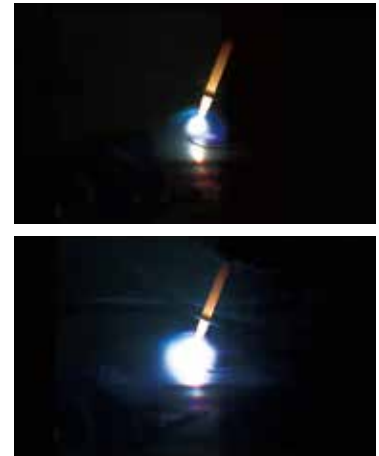
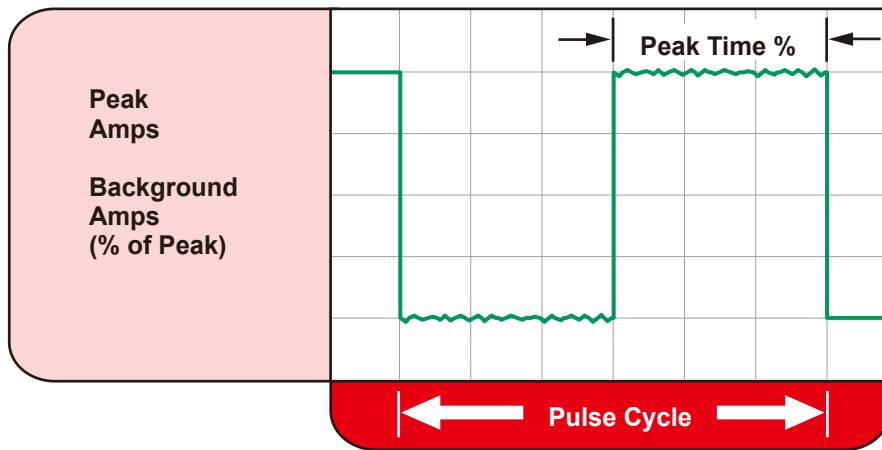
- ◆ **Processes:**
DC TIG,
MMA(Stick),
Plasma cutting
- ◆ **Input Power:**
200-240V/1-PH/50-60Hz
- ◆ **Rated Output at 40°C (104°F):**
TIG: 200A/18V/60%
PAC: 50A/100V/ 60%
MMA: 160A/26.4V/60%
- ◆ **Applications:**
Metal Fabrication
Maintenance and Repair
Auto Body
Light Industrial

TOP Features:

- ✓ **DC TIG Features** With the Pulse function, it can reduce heat input and increase control of the weld puddle, penetration and distortion.
- ✓ **Plasma Cutting Features** 50A@60% Duty cycle power source for cutting 10mm metal @500mm/min.
- ✓ HF start for a better ignition
- ✓ DC+/DC-: Improved TIG starting
- ✓ Pre-flow and post-flow adjustment
- ✓ 2T and 4T selection
- ✓ Capable to remote control
- ✓ 10 channels memory capacity

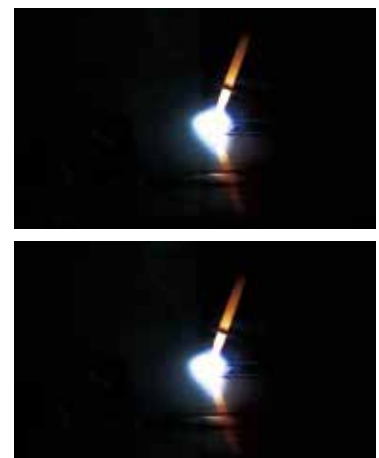
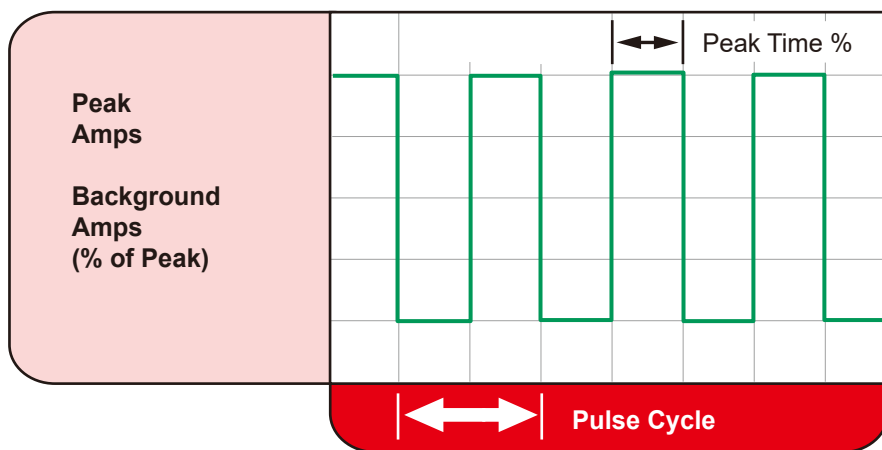
Pulse TIG

◆ Conventional Pulsed TIG



Typically from 0.2 to 10 PPS. Provides a heating and cooling effect on the weld puddle and can reduce distortion by lowering the average amperage. This heating and cooling effect also produces a distinct ripple pattern in the weld bead. The relationship between pulse frequency and travel speed determines the distance between the ripples. Slow pulsing can also be coordinated with filler metal addition and can increase overall control of the weld puddle.

◆ High Speed Pulsed TIG



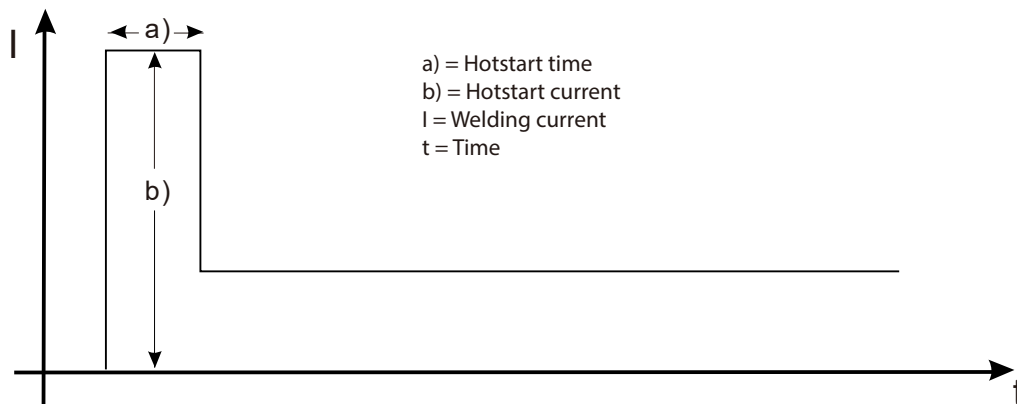
In excess of 40 PPS, Pulsed TIG becomes more audible than visible—causing increased puddle agitation for a better as-welded microstructure. Pulsing the weld current at high speeds — between a high Peak and a low Background amperage — can also constrict and focus the arc. This results in maximum arc stability, increased penetration and increased travel speeds.

Cutting Capacity

Capacity	Cutting	Cut speed
Recommended	10mm	500mm/min
	15mm	250mm/min
Severance(hand cutting)	18mm	125mm/min

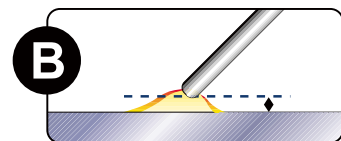
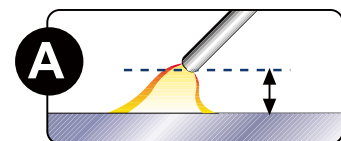
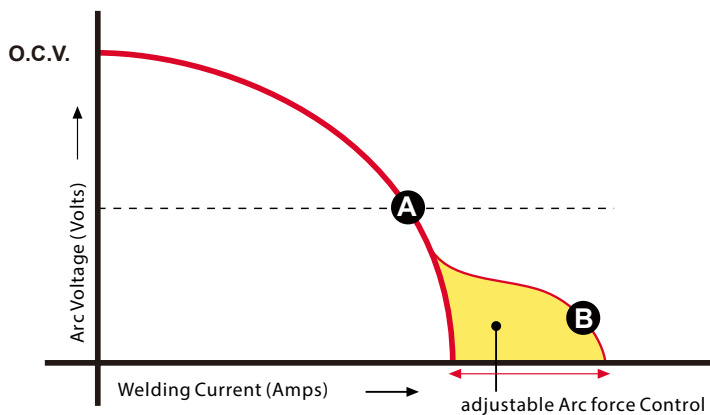
HOT START

Hot Start function reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam. This solution makes lack of fusion and cold welds a thing of the past and significantly reduces weld reinforcement. Adjust the hot start current here and the time here.



ARCFORCE CORRECTION (WELDING CHARACTERISTICS)

During the welding process, arcf force prevents the electrode sticking in the weld pool with increases in current. This makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.



Technical Specifications

Item No	STC-205Di
Rated Input Voltage	1PH ~ 230V ±15%
Max. Load Power Capacity	TIG: 5.63KVA MMA: 6.60KVA PAC:8.20KVA
Rated Duty Cycle(40℃) 60%	TIG: 200A/18V MMA: 160A/26.4V PAC: 50A/105V
100%	TIG: 160A/16.4V MMA: 130A/25.2V PAC: 40A/100V
Welding Current/Voltage Range	TIG: 5A/10.2V~200A/18V MMA: 10A/20.4V~160A/26.4V PAC: 20A/90A~50A/105V
Open Circuit Voltage	TIG/MMA:70V~80V PAC:260V~290V
Power Factor	0.8
Efficiency	80%
TIG Pulse Frequency	0.2Hz~200Hz
Pulse Width (Ratio)	1~100%
Arc-starting Current	5A~200A
Crater-filling Current	5A~200A
Current Up-slope Time	0.1S~15S
Current Down-slop Time	0.1S~15S
Pre-Gas Time	0.1S~15S
Flow-Gas Time	0.1S~15S
Spot Arc Time	0.1S~10S
MMA Arc Force	10A~160A
Hot Start Time	10A~160A
Hot Start Current	0.1~3S
PAC Required Air Pressure	0.3~0.5MPa
Gas Pro-?ow/Retard Time	0.1S~15S
Quality Cutting Thickness(500mm/min)	12mm
Severance Cutting Thickness(125mm/min)	22mm
Dimension (LxWxH)	410X190X305mm
Weight (KG)	15KG

Water-cooling Unit: WC-100 (optional)

Operating Voltage	230V 50/60Hz
Rated Power	260W
Cooling Power	1.5KW(1L/MIN)
Maximum Pressure	0.3MPA/60HZ
Recommended Cooling Liquid	20%~40% ethanol/water
Tank Volume	6.5L

Accessories

Standard accessories


TIG-26




Technical data (EN 60 974-7):	
Type of cooling:	Gas cooled
Rating:	180A DC
	150AAC
Duty cycle:	35%
Tungsten electrodes:	Ø 0.5–4 mm

Consumables:

-  Back cap
-  Collet
-  Insulating ring/Adaptor
-  Collet body
-  Gas nozzle, ceramic

 Plasma torch: HT-50CB
Current: 50 Amp, Ignition: HF


 Electrode holder with cable 2M
Earth clamp with cable 2M


Optional accessories


ABITIG® GRIP 26




Technical data (EN 60 974-7):	
Type of cooling:	air cooled
Rating:	180A DC
	130AAC
Duty cycle:	35%
Tungsten electrodes:	Ø 0.5–4.0 mm

 Plasma torch: Trafimet S25
Current: 25 A, Ignition: Without HF

 Argon gas regular

 Trolley: WT-100

 Water-cooling unit: WC-100

 Foot Pedal