

Forney® FLEX™ 30 PLASMA ST



ITEM# 320 SPECS	APPLICATIONS: DIY/Garage Farm & Ranch Maintenance Light Industrial Contractors Metal Art Small Fabrication	PROCESS: DC Stick (SMAW) DC TIG (GTAW) Plasma Arc Cutting INPUT VOLTAGE: 120V / 240V	OUTPUT AMPERAGE RANGE: Stick - 120V: 10-80A 240V: 10-160A TIG - 120V: 10-85A 240V: 10-160A Plasma - 120V: 10-20A 240V: 10-30A	WELDING/CUTTING CAPACITY: Clean Cut: 3/8" Sever Cut: 5/8" Welding Plate Thickness: 24 ga - 3/8" Electrode Diameter Range: 3/32" - 5/32"
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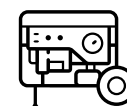


INCLUDES:

- ITEM# 320 Flex™ 30 Plasma ST
- 8' (2.4m) electrode holder & clamp
- 8' (2.4m) ground clamp & cable
- 240V to 120V adapter
- 6' (1.83m) power cord
- 15' Plasma torch and leads
- Extra plasma consumables

GENERATOR FRIENDLY:

- 120V - 4,000W continuous output
- 240V - 10,000W continuous output



ITEM#	Process	Input Power	Output/Stick Duty-Cycle	Output / TIG Duty-Cycle	Output / Plasma Duty-Cycle	Weight	Dimensions
320	Stick (SMAW)	120 - 50/60Hz	30% @ 80A	30% @ 85A	35% @ 20A	19 lbs (8.62 kg)	L: 16.68" (423mm) W: 11.94" (303mm) H: 8.25" (210mm)
	TIG (GTAW)						
	Plasma	240 - 50-60Hz	25% @ 160A	30% @ 160A	60% @ 30A		

FORNEY FLEX™ 30 PLASMA ST IS YOUR SOLUTION FOR PORTABLE WELDING POWER

- Lightweight – at 19 pounds you can go anywhere easily
- Generator Friendly – extremely stable arc, even on a power generator
- Easy Start – Built-in hot start makes every strike easy
- Plasma Arc Cutting Capable - Weld and cut with one compact machine
- Dual-Voltage – 120V and 240V makes it easy for you to find the right power for the job
- TIG Welder – DC lift arc TIG welding
- Powerful – with 160A for welding and 30A for cutting, you can weld up to 3/8" and cut up to 1/2"

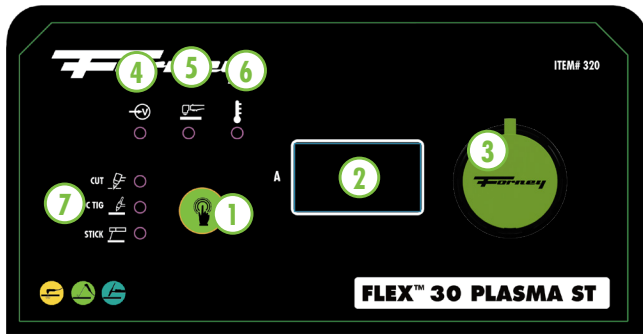


FORNEY INDUSTRIES

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CONTROL PANEL



1. Process selector button
2. Amperage display
3. Amperage adjustment knob
4. Power indicator light
5. Torch active indicator light
6. Over temp indicator light
7. Process indicator light

COMPRESSED GAS/AIR REQUIREMENTS

- Clean, dry air – filter out particulates, moisture, and oil
- Oil-free compressor recommended
- 60-100 PSI (4.1-6.9 bar) 80 recommended
- 4.5 CFM (127 l/min)

CUTTING CAPACITY (240V)

Recommended Capacity						Severance Capacity
Steel	Stainless Steel	Aluminum	Galvanized	Brass	Copper	5/8"
3/8"	3/8"	1/8"	3/8"	3/8"	3/8"	

RECOMMENDED CAPACITY

- Optimal system performance
- Ideal operating range for excellent cut quality
- Rated with new consumables.

SEVERANCE CAPACITY

- Top end of machine capabilities
- Intended for occasional severance requirements; where a lower degree of cut quality is acceptable
- Slower cut speeds

ELECTRODE CHART

Excellent performance for most E6010, E6011, E7014 & E7018 electrodes.

Note: E6010: General welding acceptable but not recommended for open root pipe or long arc applications.

	DIAMETER		AMPS
	Inch	Millimeter	Amps
E6010 & E6011	3/32	2.4	30-75
	1/8	3.2	35-125
	5/32	4.0	80-160
E6013	1/16	1.6	10-50
	3/32	2.4	40-90
	1/8	3.2	50-130
	5/32	4.0	90-160
E7014	3/32	2.4	40-90
	1/8	3.2	60-130
	5/32	4.0	90-160
E7018	3/32	2.4	50-80
	1/8	3.2	80-160
	5/32	4.0	90-160

POLARITY CHART

ELECTRODE	DC	PENETRATION
E6010	EP	DEEP
E6011	EP	DEEP
E6013	EP-EN	SHALLOW
E7014	EP-EN	MEDIUM
E7018	EP-EN	MEDIUM
NICKEL	EP	SHALLOW
STAINLESS STEEL	EP	SHALLOW

EP = Electrode Positive • EN = Electrode Negative

ACCESSORIES (Not Included)

ITEM#	DESCRIPTION
85659	Air Cooled 150A 17FV Series (Flex & Valve) TIG Torch 12.5' with Dinse adapter
85364	Argon/CO2 Flow meter, CGA580 Inlet Connection
85669	Electrode Holder and lead (replacement part)
85667	Ground Clamp and lead (replacement part)
93097	Deluxe Electrode Storage Container
70600	Chipping Hammer, Spring Handle
85755	Plasma Electrode (2-Pack)
85684	Plasma Cutting Tip (2-Pack)
85680	Plasma Torch (replacement)
555	Fornair™ 4.5 CFM Air Compressor