THERMAL DYNAMICS®

AUTOMATION

Auto-Cut®

Automated Plasma Cutting System

Automated Plasma Cutting Systems

Automated Plasma Cutting

Automated Plasma Cutting

The Thermal Dynamics® Auto-Cut® range is designed for conventional cutting of mild steel and non-ferrous materials where the quality of a High Precision unit is not necessary. The systems are built for the toughest environments and designed to run at a low cost of operation. All power supplies can be run with a variety of plasma gases, O_2, N_2, H35 or Air. While all Auto-Cut systems cut with O_2 as a plasma gas, the Auto-Cut O_2 Series also delivers outstanding parts life with oxygen.

Auto-Cut 300
Power Supply

Quality

- Excellent cuts using Air plasma
- Virtually dross-free cuts using oxygen plasma
- Unmatched cut quality on non-ferrous materials using our unique Water Mist Secondary (WMS®)

Ease of Use

- Fast and easy installation
- Simple set-up and user-friendly gas console
- Quick-change consumable design
- Easy to identify and troubleshoot

Plasma Gas Pressure Gauge
RUN/SET Switch
Shield Gas Pressure Gauge
Current Select Knob
Secondary Water Mist Flow Meter
Secondary Mode Selection Switch
Plasma Gas Pressure Control
Shield Gas Pressure Control

Productivity

- Highest cut speed in its class on stainless steel. The cut speed can be up to 3 times faster than with similar cutting systems.
- Best parts life in its class
- Reduced downtime during parts changes due to the SpeedLok™ cartridge design of the XT™-301 torch

Technology

- Microprocessor controlled to produce the best cut quality
- Fiber optic communication decreases HF interference (Auto-Cut O_2 systems only)
- Precision torch design offers the best cut quality in its class

Reliability

- Exhaustive lab testing and field trials ensure on-going performance and reliability

Auto-Cut 300$_2$
Power Supply

GCM-2000
Gas Control Console

RAS-1000
Remote Arc Starter

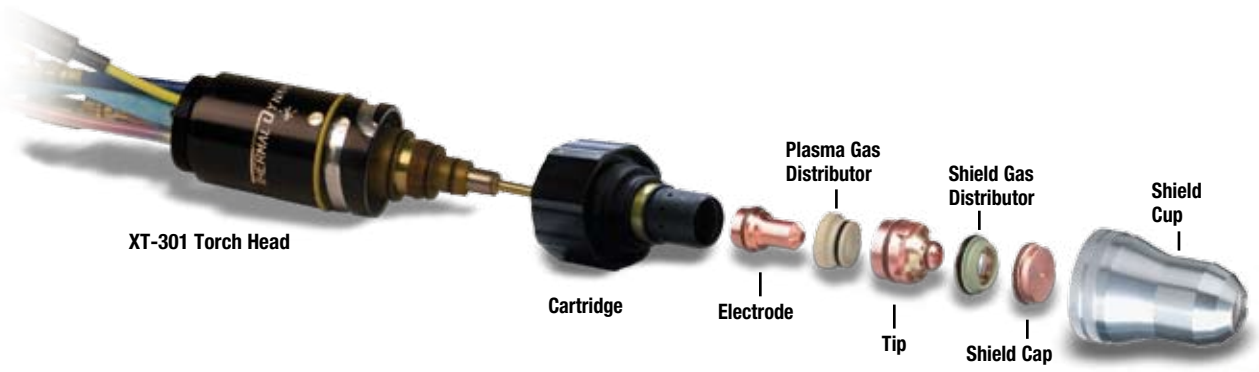
THERMAL DYNAMICS®

AUTOMATION

XT™ Torch Technology

Unique 'Keyless' Consumables Cartridge

The unique Consumables Cartridge houses consumable parts only, no built-in head/torch body to drive replacement costs up. Changing a cartridge is fast and easy – a couple of twists and the unique 'rapid engagement' retaining collar threads release the cartridge. Down-time is reduced to minutes and you can change from one process to another or from one application to another quickly and easily.



No Tools Required

Unlike other torches, no tools are required to change either the torch consumables or any major components in the torch head.

'Leakless' Torch Head Design

Coolant doesn't drip from the torch head when the consumables cartridge is removed. Prevents air from entering the system and becoming trapped in the leads.

Self-centering Components

Consumable parts and torch body are precisely engineered to lock into place for absolute alignment and remain positioned cut after cut. Independently-aligned tip and electrode assures accurate re-centering of the consumable cartridge after each parts change.

Rapid Engagement SpeedLok™ Collar

Cuts down on time for changing consumables.

Superior Warranty

The XT-301 warranty covers components and service for a full year.

Quality Cuts on all Metals

The XT-301's dual gas technology provides a high arc density plasma stream for cuts on mild steel, stainless steel, aluminum and other non-ferrous materials. Choices for plasma gas include O_2, N_2, H35, or Air.

Relaxed Cutting Parameters

The operating window of the XT-301 permits a +/- 30% travel speed variance which means you'll get great cuts more often and less wasted material and time.

- Less critical standoff height
- Wider 'Operating Window' for dross-free cutting

Automated Plasma Cutting

Water Mist Secondary (WMS®) For Non-Ferrous Materials

WMS is recommended for materials up to 1" (25mm) thick. The WMS process uses nitrogen as the plasma gas while water is used as the secondary gas (shield gas). The water in the torch is divided into its principal components (hydrogen and oxygen) during the cutting process. The hydrogen creates a reduced atmosphere in the cutting zone, isolating it from contaminating elements, and producing a clean, dross-free and oxide-free cut surface. The majority of the water used during the process (from 4 to 8 GPH (0.25 to 0.5 l/min)) is converted to principal components (gas) and thereby does not require disposal.

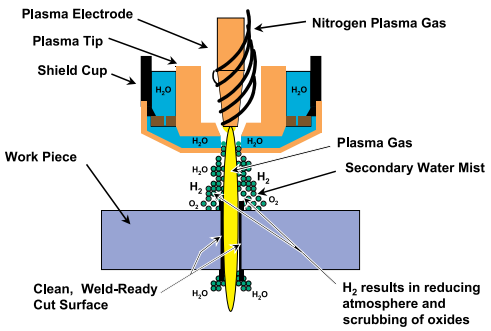
Example for 3/4" (20mm) with WMS

Example for 1/4" (6mm) Aluminum cut with WMS

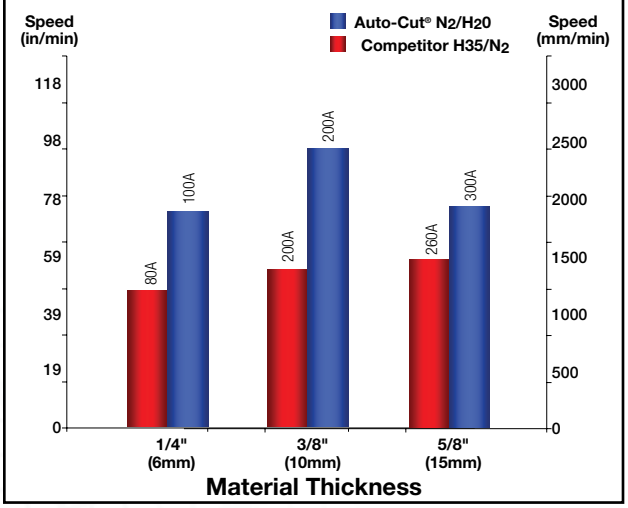
WMS Benefits

- Lowest operating cost
- Up to 3 times faster cutting speeds than H35
- Dross-free cutting
- Oxide-free cut surface
- Wide parameter window
- Easy to use
- Laser-like cut quality on Aluminum
- Small heat effected zone
- Less distortion
- Same weldability as H35

Effect of N_2/H_2O Plasma on Non-Ferrous



Stainless Steel - Cutting Speed Comparison



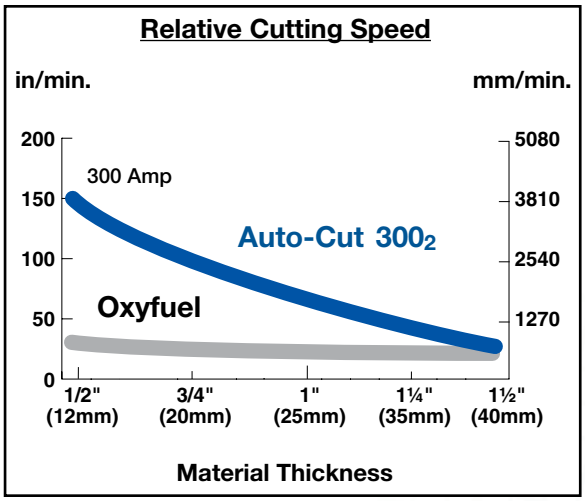
THERMAL DYNAMICS

AUTOMATION

MaximumLife® Consumables For Mild Steel

The Auto-Cut® O_2 systems offer high-speed oxygen cutting for excellent, virtually dross-free cuts. With MaximumLife consumable parts, the Auto-Cut systems offer the best parts life in their class.

The Auto-Cut delivers economic performance on mild steel and non-ferrous materials. The power supplies are designed for reliable, low cost operation. Features like the XT™-301 consumable parts cartridge and the machine status message center make the Auto-Cut systems easy to operate.



Auto-Cut 300_2 vs Oxyfuel

- Averages 3 times faster cut speeds
- Pierces 1¼" (35mm) in 1 second
- One Auto-Cut 300_2 can replace up to 3 oxy-fuel torches - each requiring their own height controls.
- Patented consumable technology

How To Select The Right System

	Mainly Air/Air and N_2/H_20 cutting			Mainly O_2/Air and N_2/H_20 cutting	
	Auto-Cut 100	Auto-Cut 200	Auto-Cut 300	Auto-Cut 200_2	Auto-Cut 300_2
Production Pierce	5/8" (15mm)	1" (25mm)	1¼" (35mm)	1" (25mm)	1½" (40mm)
1/4" (6mm)	150 ipm (3.21m/min)	185 ipm (4.70m/min)	———	235 ipm (5.97m/min)	———
1/2" (12mm)	75 ipm (1.90m/min)	100 ipm (2.54m/min)	110 ipm (2.80m/min)	125 ipm (3.18m/min)	150 ipm (3.21m/min)
3/4" (20mm)	30 ipm (0.76m/min)	60 ipm (1.52m/min)	75 ipm (1.90m/min)	75 ipm (1.90m/min)	100 ipm (2.54m/min)
1" (25mm)	20 ipm (0.51m/min)	35 ipm (0.89m/min)	50 ipm (1.27m/min)	50 ipm (1.27m/min)	70 ipm (1.78m/min)
1¼" (35mm)	———	20 ipm (0.51m/min)	35 ipm (0.89m/min)	30 ipm (0.76m/min)	50 ipm (1.27m/min)
1½" (40mm)	———	———	20 ipm (0.51m/min)	———	35 ipm (0.89m/min)

Cutting mild steel with Air/Air at maximum current

Cutting mild steel with O_2/Air at maximum current

Automated Plasma Cutting

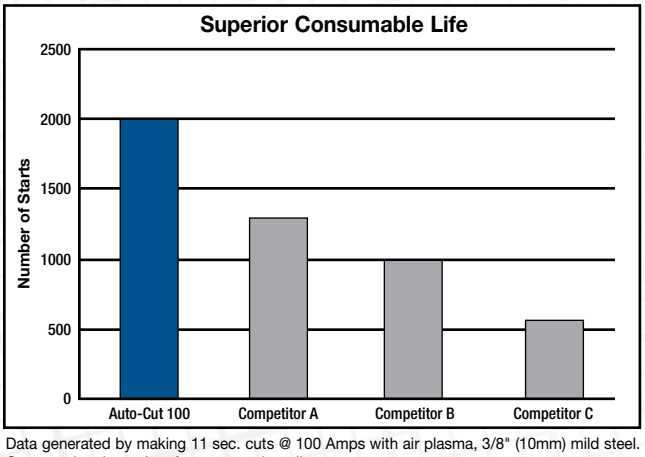
Auto-Cut® 100

Automated Plasma Cutting System

- **Production cut: 5/8" (15mm)**
- **Maximum cut: 3/4" (20mm)**
- **Ideal where a gas cooled plasma system doesn't deliver the required parts life and cut speed**

Specifications (subject to change without notice)

Rated Output	100 Amps
Output Range (A)	10 - 100 Amps
Output (V)	80 - 160V
Input Volts	208-230/460V, 3ph, 50/60 Hz, 400V, 3ph, 50/60 Hz, 600V, 3ph, 50/60 Hz
Input Amps @ Rated Output	67A @ 208V, 64A @ 230V, 36A @ 460V
Duty Cycle (@104˚F / 40˚C)	100% @ 100A @ 160V (16kW)
MAX OCV	380 VDC
Plasma Gas	Air, O_2, H35, N_2 @ 120 psi (8.3bar)
Shield Gas	Air, N_2 @ 120 psi (8.3bar) H_20 @ 10 GPH (0.6 l/min)
Weight	Power Supply - 397 lbs. (181kg)
Dimensions	H 48.75" (1238mm) x W 27.5" (700mm) x D 38.5" (978mm) (Fully Assembled Power Supply)
Warranty	Two Years Power Supply & One Year Torch
Certifications	CE, CCC, CSA



Data generated by making 11 sec. cuts @ 100 Amps with air plasma, 3/8" (10mm) mild steel. Comparative data taken from competitors literature.

Cutting Speed Chart

Torch Model	**XT™-301**
Production Piercing & Cutting Capacity *(Mild Steel)*	**5/8" (15mm)**
Maximum Piercing & Cutting Capacity *(Mild Steel)*	**3/4" (20mm)**
Maximum Edge Start *(Mild Steel)*	**1" (25mm)**

Material	Thickness Inch	Speed IPM	Amps	Plasma/ Shield	Thickness mm	Speed mm/min.
Mild Steel						
	21 ga.	500	55	Air/Air	1	11500
	10 ga,	190			3	5460
	3/16	130			5	3180
	21 ga.	600	55	O_2/Air	1	14040
	10 ga.	180			3	5830
	3/16	120			5	2920
	1/4	150	100	Air/Air	6	4150
	3/8	85			10	2120
	1/2	75			12	1960
	3/4	30			20	720
	1	20			25	520
	1/4	130	100	O_2/Air	6	3610
	1/2	57			12	1580
	3/4	25			20	580
	1	10			25	280
Stainless Steel						
	16 ga.	350	55	Air/Air	1.5	9750
	10 ga.	100			4	2180
	3/16	60			5	14500
	1/4	40			6	1130
	3/8	65	100	Air/Air	10	1580
	1/2	45			12	1260
	1/4	60	100	N_2/H_2O	6	1750
	3/8	50			10	1210
	1/2	35			12	970
	3/8	50	100	H35/N_2	10	1220
	1/2	37			12	1010
Aluminum						
	16 ga.	400	55	Air/Air	2	8790
	3/16	100			5	2360
	1/4	100	100	Air/Air	6	2650
	1/2	45			12	1310
	3/4	35			20	890
	1/4	60	100	N_2/H_2O	6	1640
	3/8	50			10	1210
	1/2	35			12	970
	3/8	60	100	H35/N_2	10	1450
	1/2	40			12	1130

Note: This cutting speed chart includes preliminary data and is subject to change without notice. Take care in comparison. The speeds noted above are best cut speeds. Often, competitors show maximum cutting speeds. Although much higher speeds can be achieved, edge quality and bevel angle may be compromised. The capabilities shown in this table were obtained by using new consumables, correct gas and current settings, accurate torch height control and with the torch perpendicular to the workpiece. The operating chart does not list all processes available for the Auto-Cut 100. Please contact Thermal Dynamics® for more information.

THERMAL DYNAMICS®

AUTOMATION

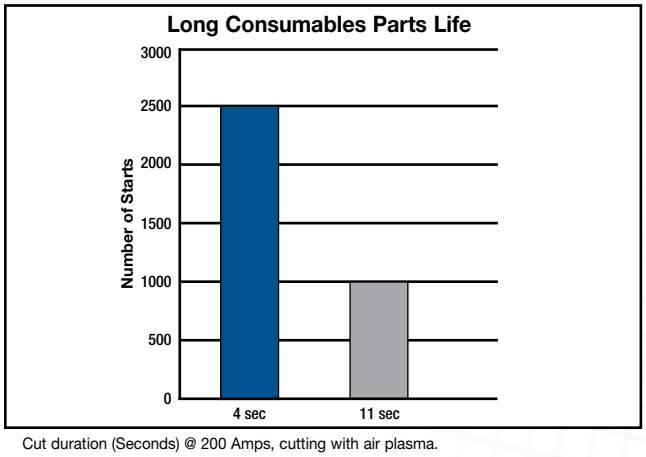
Auto-Cut® 200

Automated Plasma Cutting System

- **Production cut: 1" (25mm)**
- **Maximum cut: 1¼" (30mm)**
- **Work horse for all materials up to 1" (25mm) where cost of ownership is the most important requirement**

Specifications (subject to change without notice)

Rated Output	200 Amps
Output Range (A)	10 - 200 Amps
Output (V)	80 - 160V
Input Volts	208-230/460V, 3ph, 50/60 Hz, 400V, 3ph, 50/60 Hz, 600V, 3ph, 50/60 Hz
Input Amps @ Rated Output	117A @ 208V, 115A @ 230V, 77A @ 400V, 68A @ 460V, 51A @ 600V
Duty Cycle (@104˚F / 40˚C)	100% @ 200A @ 160V (32kW)
MAX OCV	380 VDC
Plasma Gas	Air, O_2, H35, N_2 @ 120 psi (8.3bar)
Shield Gas	Air, N_2 @ 120 psi (8.3bar) H_20 @ 10 GPH (0.6 l/min)
Weight	Power Supply - 487 lbs. (221kg)
Dimensions	H 48.75" (1238mm) x W 27.5" (700mm) x D 38.5" (978mm) (Fully Assembled Power Supply)
Warranty	Two Years Power Supply & One Year Torch
Certifications	CE, CCC, CSA



Cut duration (Seconds) @ 200 Amps, cutting with air plasma.

Cutting Speed Chart

Torch Model	**XT™-301**
Production Piercing & Cutting Capacity *(Mild Steel)*	**1" (25mm)**
Maximum Piercing & Cutting Capacity *(Mild Steel)*	**1¼" (30mm)**
Maximum Edge Start *(Mild Steel)*	**2" (50mm)**

Material	Thickness Inch	Speed IPM	Amps	Plasma/ Shield	Thickness mm	Speed mm/min.
Mild Steel						
	21 ga.	500	55	Air/Air	1	11500
	10 ga.	190			3	5460
	3/16	130			5	3180
	10 ga.	180			3	5830
	3/16	120			5	2920
	1/4	150	100	Air/Air	6	4150
	3/8	85			10	2120
	1/2	75			12	1960
	1/4	130	100	O2/Air	6	3610
	1/2	57			12	1580
	3/4	25			20	580
	3/8	130	200	Air/Air	10	3190
	1/2	100			12	2710
	3/4	60			20	1430
	1	35			25	920
Stainless Steel						
	16 ga.	350	55	Air/Air	1.5	9750
	10 ga.	100			4	2180
	3/16	60			5	1450
	1/4	100	100	Air/Air	6	3020
	1/2	45			12	1260
	1/4	60	100	N2/H20	6	1750
	3/8	50			10	1210
	1/2	35			12	970
	1/2	37	100	H35/N2	12	1010
	3/4	50	200	H35/N_2	20	940
	1	25			25	650
Aluminum						
	16 ga.	400	55	Air/Air	2	8790
	3/16	100			5	2360
	1/4	100	100	Air/Air	6	2650
	1/2	45			12	1310
	1/4	60	100	N2/H20	6	1640
	3/8	50			10	1210
	1/2	35			12	970
	1/2	40	100	H35/N2	12	1130
	3/4	70	200	H35/N_2	20	1660
	1	40			25	1060

Note: This cutting speed chart includes preliminary data and is subject to change without notice. Take care in comparison. The speeds noted above are best cut speeds. Often, competitors show maximum cutting speeds. Although much higher speeds can be achieved, edge quality and bevel angle may be compromised. The capabilities shown in this table were obtained by using new consumables, correct gas and current settings, accurate torch height control and with the torch perpendicular to the workpiece. The operating chart does not list all processes available for the Auto-Cut 200. Please contact Thermal Dynamics® for more information.

Automated Plasma Cutting

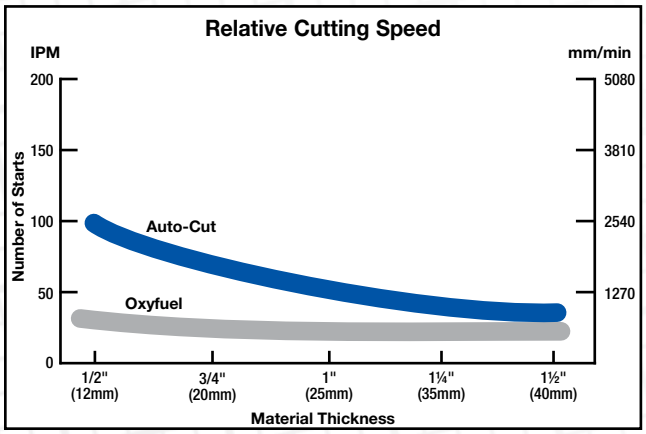
Auto-Cut® 300

Automated Plasma Cutting System

- **Production cut: 1¼" (30mm)**
- **Maximum cut: 1½" (40mm)**
- **The most powerful basic Auto-Cut system. Edge start capability up to 2¾" (70mm) on mild steel.**

Specifications (subject to change without notice)

Rated Output	300 Amps
Output Range (A)	10 - 300 Amps
Output (V)	80 - 180V
Input Volts	208-230/460V, 3ph, 50/60 Hz, 400V, 3ph, 50/60 Hz, 600V, 3ph, 50/60 Hz
Input Amps @ Rated Output	188A @ 208V, 183A @ 230V, 190A @ 400V, 107A @ 460V, 79A @ 600V
Duty Cycle (@104˚F / 40˚C)	100% @ 300A @ 180V (54kW)
MAX OCV	380 VDC
Plasma Gas	Air, O_2, H35, N_2 @ 120 psi (8.3bar)
Shield Gas	Air, N_2 @ 120 psi (8.3bar), H_20 (WMS®)
Weight	Power Supply - 535 lbs. (243kg)
Dimensions	H 60" (1524mm) x W 27.5" (700mm) x D 38.5" (978mm) (Fully Assembled Power Supply)
Warranty	Two Years Power Supply & One Year Torch
Certifications	CE, CCC, CSA



Cutting Speed Chart

Torch Model	**XT™-301**
Production Piercing & Cutting Capacity *(Mild Steel)*	**1¼" (30mm)**
Maximum Piercing & Cutting Capacity *(Mild Steel)*	**1½" (40mm)**
Maximum Edge Start *(Mild Steel)*	**2¾" (70mm)**

Material	Thickness Inch	Speed IPM	Amps	Plasma/ Shield	Thickness mm	Speed mm/min.
Mild Steel						
	21 ga.	500	55	Air/Air	1	11500
	10 ga.	190			3	5460
	3/16	130			5	3180
	1/4	150	100	Air/Air	6	4150
	1/2	75			12	1960
	3/4	30			20	720
	1	20			25	520
	3/8	130	200	Air/Air	10	3190
	1/2	100			12	2710
	3/4	60			20	1430
	1	35			25	920
	1/2	110	300	Air/Air	12	2790
	3/4	75			20	1960
	1	50			25	1300
	1-1/4	35			35	920
	1-1/2	20			38	510
	2	8			50	220
	2-3/4	4			70	100
Stainless Steel						
	16 ga.	350	55	Air/Air	1.5	9750
	10 ga.	100			4	2180
	3/16	60			5	1450
	1/4	100	100	Air/Air	6	3020
	3/8	65			10	1580
	1/2	45			12	1260
	1/4	60	100	N_2/H_20	6	1750
	3/8	50			10	1210
	1/2	35			12	970
	3/4	50	200	$H35/N_2$	20	940
	1	25			25	650
	3/4	100	300	Air/Air	20	3020
	1	60			25	1750
	1-1/4	40			35	1060
Aluminum						
	16 ga.	400	55	Air/Air	2	8790
	3/16	100			5	2360
	1/4	100	100	Air/Air	6	2650
	1/2	45			12	1310
	3/4	35			20	890
	1/4	60	100	N_2/H_20	6	1640
	3/8	50			10	1210
	1/2	35			12	970
	3/4	70	200	$H35/N_2$	20	1660
	1	40			25	1060
	3/4	90	300	Air/Air	20	1600
	1	70			25	1490
	1-1/4	45			35	1320

Note: This cutting speed chart includes preliminary data and is subject to change without notice. Take care in comparison. The speeds noted above are best cut speeds. Often, competitors show maximum cutting speeds. Although much higher speeds can be achieved, edge quality and bevel angle may be compromised. The capabilities shown in this table were obtained by using new consumables, correct gas and current settings, accurate torch height control and with the torch perpendicular to the workpiece. The operating chart does not list all processes available for the Auto-Cut 300. Please contact Thermal Dynamics® for more information.

THERMAL DYNAMICS®

AUTOMATION

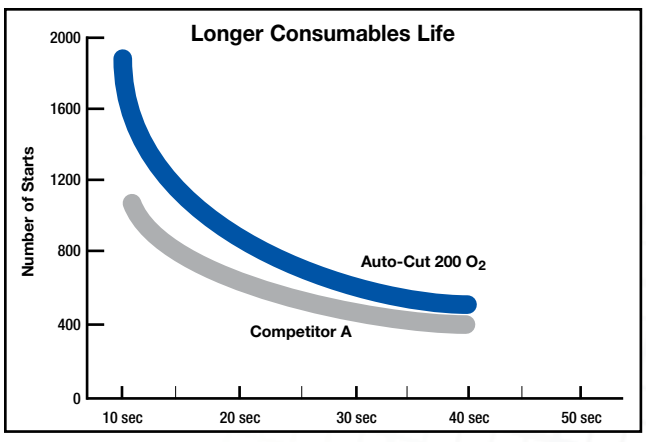
Auto-Cut® 200 $_2$

Automated Plasma Cutting System

- **Production cut: 1" (25mm)**
- **Maximum cut: 1½" (40mm)**
- **Outstanding cut quality and parts life with conventional cutting of mild steel with oxygen or air**

Specifications (subject to change without notice)

Rated Output	200 Amps
Output Range (A)	10 - 200 Amps
Output (V)	80 - 180V
Input Volts	208-230/460V, 3ph, 50/60 Hz, 400V, 3ph, 50/60 Hz, 600V, 3ph, 50/60 Hz
Input Amps @ Rated Output	130A @ 208V, 125A @ 230V, 77A @ 400V, 75A @ 460V, 78A @ 600V
Duty Cycle (@104˚F / 40˚C)	100% @ 200A @ 180V (36kW)
MAX OCV	380 VDC
Plasma Gas	Air, O_2, H35, N_2 @ 120 psi (8.3bar)
Shield Gas	Air, N_2 @ 120 psi (8.3bar) H_20 @ 10 GPH (0.6 l/min)
Weight	Power Supply - 433 lbs. (197kg)
Dimensions	H 41.5" (1054mm) x W 27.5" (700mm) x D 38.5" (978mm) (Fully Assembled Power Supply)
Warranty	Two Years Power Supply & One Year Torch
Certifications	CE, CCC, CSA



Cut duration (seconds) at 200 Amps, cutting with Oxygen plasma.

Cutting Speed Chart

Torch Model	**XT™-301**
Production Piercing & Cutting Capacity *(Mild Steel)*	**1" (25mm)**
Maximum Piercing & Cutting Capacity *(Mild Steel)*	**1½" (40mm)**
Maximum Edge Start *(Mild Steel)*	**2" (50mm)**

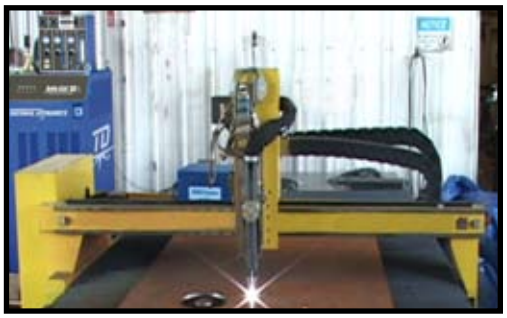
Material	Thickness Inch	Speed IPM	Amps	Plasma/ Shield	Thickness mm	Speed mm/min.
Mild Steel						
	21 ga.	500	55	Air/Air	1	11500
	10 ga.	190			3	5460
	3/16	130			5	3180
	10 ga.	180	55	O_2/Air	3	5830
	3/16	120			5	2920
	1/4	150	100	Air/Air	6	4150
	3/8	85			10	2120
	1/2	75			12	1960
	1/4	130	100	O_2/Air	6	3610
	1/2	57			12	1580
	3/4	25			20	580
	3/8	130	200	Air/Air	10	3190
	1/2	100			12	2710
	3/4	60			20	1430
	1	35			25	920
	3/8	160	200	O_2/Air	10	3900
	1/2	125			12	3400
	3/4	75			20	1800
	1	50			25	1300
	1-1/4	30			35	800
Stainless Steel						
	16 ga.	350	55	Air/Air	1.5	9750
	3/16	60			5	1450
	1/4	100	100	Air/Air	6	3020
	1/2	45			12	1260
	1/4	60	100	N_2/H_20	6	1750
	3/8	50			10	1210
	1/2	35			12	970
	1/2	37	100	H35/N_2	12	1010
	1/2	145	200	Air/Air	12	3990
	3/4	80			20	1880
	1/2	65	200	H35/N_2	12	1790
	3/4	40			20	980
Aluminum						
	16 ga.	400	55	Air/Air	2	8790
	3/16	100			5	2360
	1/4	100	100	Air/Air	6	2650
	1/2	45			12	1310
	1/4	60	100	N_2/H_20	6	1640
	3/8	50			10	1210
	1/2	35			12	970
	1/2	40	100	H35/N_2	12	1130
	3/4	70	200	H35/N_2	20	1750
	1	40			25	1060
	1/2	120	200	Air/Air	12	2500
	3/4	70			20	1060

Note: This cutting speed chart includes preliminary data and is subject to change without notice. Take care in comparison. The speeds noted above are best cut speeds. Often, competitors show maximum cutting speeds. Although much higher speeds can be achieved, edge quality and bevel angle may be compromised. The capabilities shown in this table were obtained by using new consumables, correct gas and current settings, accurate torch height control and with the torch perpendicular to the workpiece. The operating chart does not list all processes available for the Auto-Cut 200 O2. Please contact Thermal Dynamics® for more information.

Automated Plasma Cutting

Auto-Cut® 300$_2$

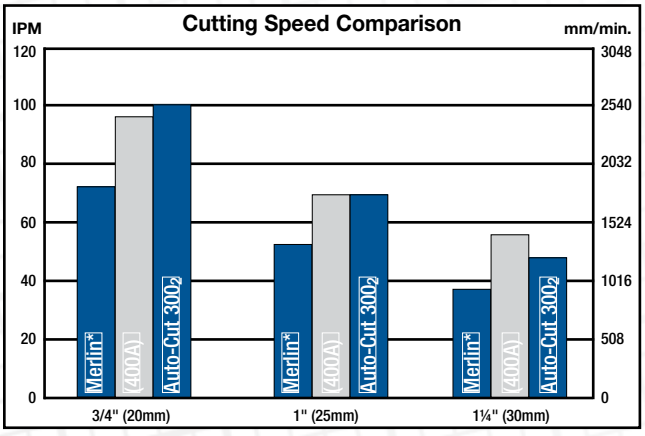
Automated Plasma Cutting System



- **Production cut: 1½" (40mm)**
- **Maximum cut: 1¾" (45mm)**
- **Maximum cut capacity for conventional O_2/Air cutting on mild steel**

Specifications (subject to change without notice)

Rated Output	300 Amps
Output Range (A)	10 - 300 Amps
Output (V)	80 - 180V
Input Volts	208-230/460V, 3ph, 50/60 Hz, 400V, 3ph, 50/60 Hz, 600V, 3ph, 50/60 Hz
Input Amps @ Rated Output	206A @ 208V, 181A @ 230V, 112A @ 460V, 109A @ 400V, 78A @ 600V
Duty Cycle (@104˚F / 40˚C)	100% @ 300A @ 180V (54kW)
MAX OCV	380 VDC
Plasma Gas	Air, O_2, H35, N_2, Air @ 120 psi (8.3bar)
Shield Gas	Air, N_2 @ 120 psi (8.3bar) H_20 55psi (3.8bar) @ 10 GPH (0.6 l/min)
Weight	Power Supply - 535 lbs. (243kg)
Dimensions	H 41.5" (1054mm) x W 27.5" (700mm) x D 38.5" (978mm) (Fully Assembled Power Supply)
Warranty	Two Years Power Supply & One Year Torch
Certifications	CE, CCC, CSA



Thickness of mild steel

Data gathered by cutting with Oxygen at 300 Amps unless otherwise specified

Cutting Speed Chart

Torch Model	**XT™-301**
Production Piercing & Cutting Capacity *(Mild Steel)*	**1½" (40mm)**
Maximum Piercing & Cutting Capacity *(Mild Steel)*	**1¾" (45mm)**
Maximum Edge Start *(Mild Steel)*	**3" (75mm)**

Material	Thickness Inch	Speed IPM	Amps	Plasma/ Shield	Thickness mm	Speed mm/min.
Mild Steel						
	10 ga.	190	55	Air/Air	3	5460
	3/16	130			5	3180
	10 ga.	180	55	O_2/Air	3	5830
	3/16	120			5	2920
	1/4	150	100	Air/Air	6	4150
	1/2	75			12	1960
	1/4	130	100	O_2/Air	6	3610
	1/2	57			12	1580
	1/2	100	200	Air/Air	12	2710
	1/2	125	200	O_2/Air	12	340
	3/4	100	300	O_2/Air	20	2540
	1	70			25	1780
	1 1/2	35			40	660
Stainless Steel						
	10 ga.	100	55	Air/Air	4	2180
	3/16	60			5	1450
	1/4	100	100	Air/Air	6	3020
	1/2	45			12	1260
	1/4	60	100	N_2/H_20	6	1750
	1/2	35			12	970
	3/8	50	100	H35/N_2	10	1220
	1/2	37			12	1010
	3/4	80	200	Air/Air	20	1880
	1/2	65	200	H35/N_2	12	1790
	3/4	40			20	980
	3/4	55	300	N_2/H_20	20	1320
	1	40			25	1030
	3/4	55	300	H35/N_2	20	1320
	1	35			25	920
Aluminum						
	16 ga.	400	55	Air/Air	2	8790
	3/16	100			5	2360
	1/4	100	100	Air/Air	6	2650
	1/4	60	100	N_2/H_20	6	1640
	3/8	50			10	1210
	1/2	35			12	970
	3/8	60	100	H35/N_2	10	1450
	1/2	40			12	1130
	3/4	70	200	H35/N_2	20	1750
	1/2	120	200	Air/Air	12	2500
	3/4	80	300	N_2/H_20	20	1960
	1	60			25	1560
	3/4	110	300	H35/N_2	20	2680
	1	85			25	2190

Note: This cutting speed chart includes preliminary data and is subject to change without notice. Take care in comparison. The speeds noted above are best cut speeds. Often, competitors show maximum cutting speeds. Although much higher speeds can be achieved, edge quality and bevel angle may be compromised. The capabilities shown in this table were obtained by using new consumables, correct gas and current settings, accurate torch height control and with the torch perpendicular to the workpiece. The operating chart does not list all processes available for the Auto-Cut 300 O2. Please contact Thermal Dynamics® for more information.

THERMAL DYNAMICS®

AUTOMATION

Height Control SC-11

- Manual Torch Up/Down
- Actual and Preset Voltage Display
- Pierce delay
- Arc Voltage Input to 200V
- Status LEDs
- Corner Lockout

The SC-11's automatic voltage control style standoff is regarded as the preferred method of height control for conventional cutting. The unit works by monitoring the actual cutting arc voltage, which is directly related to the cutting height. The SC-11 will automatically adjust the height to the optimum level.

Operator Control

The torch lifter uses a DC servo motor to drive a rack & pinion assembly between two vertically mounted V rail guides to provide a consistent and precise method of maintaining torch standoff.

The remote operator's panel is used to set the desired pierce height, pierce time, cutting height, arc voltage, and retract height after cutting.

Torch Lifter

Specifications (subject to change without notice)

Lifter Station	
Height:	34" (864mm)
Width:	6.25" (159mm)
Depth:	5.75" (146mm)
Weight:	20 lbs. (9kg)
Stroke:	8" (203mm)

What You Get

Auto-Cut® Systems Include:

- Power supply
- Torch leads
- Torch installation starter kit

Auto-Cut O_2 Systems Include:

- Supply leads to RAS-1000
- Remote manual gas console (GCM-2000)
- Remote arc starter (RAS-1000)

Options And Accessories

- Spare parts kit
- Wheel kit
  Cat. No. 9-9379
- Ohmic clip
  Cat. No. 9-9414
- Water filter
  Cat. No. 9-1068
- Water filter cartridge
  Cat. No. 9-1069
- Water pressure regulator
  Cat. No. 8-6118
- RAS shelf kit and hardware
  Cat. No. 9-9484

DISTRIBUTED BY:

Torch Coolant

Extra Cool Coolant
Cat No. 7-3580
Resists freezing down to +10˚ (-12˚C)

Ultra Cool Coolant
Cat. No. 7-3581
Resists freezing down to -27˚ (-33˚C)

Extreme Cool Coolant
Cat. No. 7-3582
Resists freezing down to -65˚F (-51˚C)

De-I Cool Coolant
Cat. No. 7-3583
De-ionized water mixture for use where freezing protection is not required

For complete ordering information contact Thermal Dynamics® or your local Thermal Dynamics Automation Distributor.

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