

# Cutting Speed Chart

This cutting speed chart includes preliminary data and is subject to change without notice.

<b>Torch Model</b>	XT™-300					
<b>Production Piercing &amp; Cutting Capacity</b>	1-1/4" (35mm)					
<b>Maximum Piercing &amp; Cutting Capacity</b>	1-1/2" (40mm)					
<b>Maximum Edge Start</b>	3" (75 mm)					
<b>Material</b>	<b>Thickness Inch</b>	<b>Speed IPM</b>	<b>Amps</b>	<b>Plasma/Shield</b>	<b>Thickness mm</b>	<b>Speed mm/min.</b>
<b>Mild Steel Precision</b>						
	20 ga.	130	30	O <sub>2</sub> /O <sub>2</sub>	1	3050
	10 ga.	30			3	910
	10 ga.	210	70	O <sub>2</sub> /Air	3	6620
	1/4	120			6	3100
	3/16	190	100	O <sub>2</sub> /Air	5	4670
	1/4	150			6	4030
	3/8	95			10	2300
	1/2	100	150	O <sub>2</sub> /Air	12	2650
	5/8	75			15	2080
	3/4	50			20	1120
	7/8	30			22	800
	1/2	150	300	O <sub>2</sub> /Air	12	3810
	3/4	100			20	2540
	1	70			25	1780
	1-1/4	50			35	900
	3	7			70	285
<b>Mild Steel Conventional</b>						
	1/4	150	100	Air/Air	6	4150
	3/8	85			10	2120
	1/2	100	200	Air/Air	12	2710
	3/4	60			20	1430
<b>Stainless Steel</b>						
	26 ga.	350	30	Air/Air	.6	8300
	20 ga.	300			1	7190
	16 ga.	110			1.5	3100
	14 ga.	180	50	Air/Air	2	4542
	10 ga.	120			3	3230
	3/16	70			5	1523
	10 ga.	120	70	Air/Air	3	3300
	3/16	100			5	2380
	1/4	55			6	1440
	3/8	40			10	960
	1/2	25			12	720
	1/4	72	100	Ar-H <sub>2</sub> /N <sub>2</sub>	6	1880
	3/8	55			10	1350
	1/4	70	100	N <sub>2</sub> /H <sub>2</sub> O	6	1810
	1/2	50	150	Ar-H <sub>2</sub> /N <sub>2</sub>	12	1330
	5/8	40			15	1090
	3/4	30			20	720
	1	20			25	520
	3/4	45	150	N <sub>2</sub> /H <sub>2</sub> O	20	1140
<b>Aluminum</b>						
	16 ga.	140	50	Air/Air	2	2990
	11 ga.	60			3	1520
	3/16	40			5	950
	1/4	100	100	N <sub>2</sub> /H <sub>2</sub> O	6	2760
	3/8	70			10	1700
	1/2	75	150	Ar-H <sub>2</sub> /N <sub>2</sub>	12	2100
	5/8	40			15	1260
	3/4	35			20	850
	1	25			25	650
	3/4	40	150	N <sub>2</sub> /H <sub>2</sub> O	20	960

Note: 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 Ultra-Cut 300. Please contact Thermal Dynamics for more information.