

# Cutting Speed Chart

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

<b>Torch Model</b>	XT™-301					
<b>Production Piercing &amp; Cutting Capacity</b>	1.5" (40mm)					
<b>Maximum Piercing &amp; Cutting Capacity</b>	1.75" (45mm)					
<b>Maximum Edge Start</b>	3.0" (75mm)					
<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</b>						
	10 ga.	190	55	Air/Air	3	5460
	3/16	130			5	3180
	10 ga.	180	55	O <sub>2</sub> /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 <sub>2</sub> /Air	6	3610
	1/2	57			12	1580
	3/8	130	200	Air/Air	10	3190
	1/2	100			12	2710
	3/8	160	200	O <sub>2</sub> /Air	10	390
	1/2	125			12	340
	3/4	100	300	O <sub>2</sub> /Air	20	2540
	1	70			25	1780
	1-1/2	35			40	660
<b>Stainless Steel</b>						
	10 ga.	100	55	Air/Air	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 <sub>2</sub> /H <sub>2</sub> O	6	1750
	3/8	50			10	1210
	1/2	35			12	970
	3/8	50	100	Ar-H <sub>2</sub> /N <sub>2</sub>	10	1220
	1/2	37			12	1010
	1/2	145	200	Air/Air	12	3990
	3/4	80			20	1880
	1/2	65	200	H35/N <sub>2</sub>	12	1790
	3/4	40			20	980
	3/4	55	300	N <sub>2</sub> /H <sub>2</sub> O	20	1320
	1	40			25	1030
	3/4	55	300	H35/N <sub>2</sub>	20	1320
	1	35			25	920
<b>Aluminum</b>						
	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 <sub>2</sub> /H <sub>2</sub> O	6	1640
	3/8	50			10	1210
	1/2	35			12	970
	3/8	60	100	Ar-H <sub>2</sub> /N <sub>2</sub>	10	1450
	1/2	40			12	1130
	3/4	70	200	H35/N <sub>2</sub>	20	1750
	1	40			25	1060
	1/2	120	200	Air/Air	12	2500
	3/4	70			20	1060
	3/4	80	300	N <sub>2</sub> /H <sub>2</sub> O	20	1960
	1	60			25	1560
	3/4	110	300	H35/N <sub>2</sub>	20	2680
	1	85			25	2190

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 Auto-Cut 300<sub>2</sub>. Please contact Thermal Dynamics for more information.