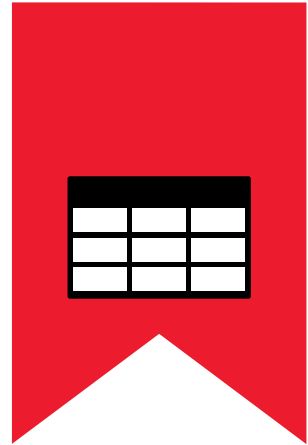
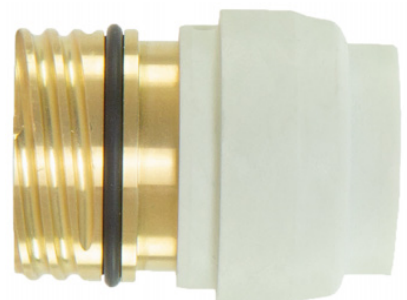


Hypertherm®**Powermax45 XP / 65 / 85 / 105®**Tabelas de Corte Mecanizado para Tochas
Duramax com Adaptador de Cartucho**Alusolda**

Aluguel de Máquinas de Solda

811300MU - REVISION 0





Alusolda
Aluguel de Máquinas de Solda

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Powermax45 XP / 65 / 85 / 105[®]

Cut Charts Guide for Cartridge Adapter

811300MU
REVISION 0

MULTILINGUAL
Multilingual instructions

Alusolda
February 2021
Aluguel de Máquinas de Solda



Aluguel de Máquinas de Solda

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For training and education resources, go to the Hypertherm Cutting Institute (HCI) online at www.hypertherm.com/hci.

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Como usar as tabelas de corte (Português/Portuguese)

⚠ ADVERTÊNCIA



RISCOS DE EXPLOSÃO – CORTE COM ALUMÍNIO PRÓXIMO À ÁGUA

Cortes subaquáticos com gases combustíveis ou alumínio podem causar risco de explosão.

- NÃO corte sob a água com gases combustíveis que contenham hidrogênio.
- NÃO corte ligas de alumínio sob a água ou em mesas de água, a não ser que consiga evitar o acúmulo de hidrogênio.

Fazer isso pode causar uma explosão durante a operação do sistema de corte. Consulte o *Safety and Compliance Manual (Manual de Segurança e de Conformidade)* (80669C) para obter mais informações.

⚠ ADVERTÊNCIA



RISCO DE EXPLOSÃO – CORTE COM GASES INFLAMÁVEIS OU GASES OXIDANTES

Não use gases inflamáveis ou gases oxidantes com os sistemas Powermax. Esses gases podem causar condições explosivas durante as operações de corte a plasma.

Um exemplo de gás oxidante é o oxigênio. Exemplos de gases inflamáveis: acetileno, propileno, metano e hidrogênio puro. Consulte o *Safety and Compliance Manual (Manual de Segurança e de Conformidade)* (80669C) para obter mais informações.

Para obter mais informações

- Para obter mais informações sobre como integrar seu sistema Powermax® com uma instalação de corte mecanizado, consulte o *Powermax45 XP Operator Manual (Manual do Operador)* (809240), *Powermax65/85 Operator Manual (Manual do Operador)* (806650) ou o *Mechanized Cutting Guide da Powermax105 (Guia de corte mecanizado)* (807390).

📄 Faça o download desses documentos em www.hypertherm.com/docs.

Sobre as tabelas de corte

As tabelas de corte nesse guia são um bom ponto de partida. Ajuste as variáveis nas tabelas de corte conforme necessário para obter os resultados ideais para o seu equipamento de corte e ambiente.

As tabelas de corte estão incluídas para:

- Corte de aço-carbono, aço inoxidável e alumínio a 45 A – 105 A com ar usando refis de corte padrão
- Corte de aço-carbono e aço inoxidável com ar usando refis FineCut



A Hypertherm coletou os dados da tabela de corte usando refis novos e obedecendo a todos os requisitos de alimentação elétrica, suprimento de gás e condições do local.

Selecione o cartucho que melhor se adequa ao material que deseja cortar

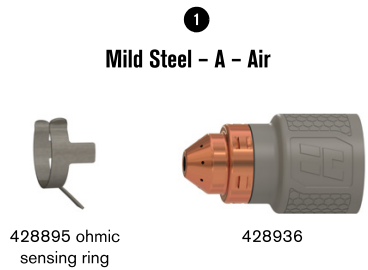
Espessura do material no sistema métrico (mm)	Espessura do material no sistema métrico (mm)											
	0,5	1	2	3	5	8	10	12	15	20	25	30
FineCut	■	■	■	■	■	■	■	■	■	■	■	■
45 A	■	■	■	■	■	■	■	■	■	■	■	■
65 A	■	■	■	■	■	■	■	■	■	■	■	■
85 A	■	■	■	■	■	■	■	■	■	■	■	■
105 A	■	■	■	■	■	■	■	■	■	■	■	■

Qualidade de corte ideal
Qualidade de corte quase ideal
Menor qualidade de corte ou velocidade

Espessura do material no sistema imperial (pol)	Espessura do material no sistema imperial (pol)										
	0.02	0.06	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4	1-1/2
FineCut	■	■	■	■	■	■	■	■	■	■	■
45 A	■	■	■	■	■	■	■	■	■	■	■
65 A	■	■	■	■	■	■	■	■	■	■	■
85 A	■	■	■	■	■	■	■	■	■	■	■
105 A	■	■	■	■	■	■	■	■	■	■	■

Elementos da tabela de corte

A ilustração a seguir identifica os elementos presentes em cada tabela de corte.



2 Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		mm/min	volts	mm/min	volts	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
		Edge start							

2 English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		in/min	volts	in/min	volts	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
		Edge start							

4 Gas flow rate - slpm / scfh

/	Hot (cutflow)
/	Cold (postflow)

- 1 Tipo de metal:
- Aço-carbono
 - Aço inoxidável
 - Alumínio

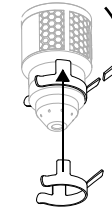
Processo de corte:

- A = corrente. A corrente se aplica a todos os ajustes apresentados na página em questão.
- Nas tabelas **FineCut**, a corrente para cada espessura está incluída na tabela de corte. Esse guia inclui tabelas para alta velocidade e baixa velocidade. Configurações de alta velocidade podem proporcionar melhor qualidade de corte e menos escória em algumas espessuras, se a mesa de corte permitir o corte nessa configuração.

Tipos de gás:

- Ar (ou nitrogênio)

Use um **anel de sensoriamento ôhmico** para conectar um cartucho mecanizado a um sistema de controle de altura da tocha (THC). Instale-o no cartucho, conforme mostrado. O kit 428895 inclui 3 anéis de sensoriamento ôhmico (420580).



3 Unidades de medida:

- mm = milímetros
- % = porcentagem
- seconds = segundos
- mm/min = milímetros por minuto
- volts = volts
- inches = polegadas
- in/min = polegadas por minuto
- A = corrente (tabelas FineCut)

Edge start = Iniciar o corte pela borda da peça de trabalho.

2 Metric = Medida métrica

English = Medida imperial

Material Thickness = Espessura da peça de trabalho (metal que está sendo cortado).

Cut Height = Distância entre a ponta do refil e a peça de trabalho durante o corte.

Initial Pierce Height = Distância entre a ponta do refil e a peça de trabalho quando a tocha é disparada, antes da descida até a altura de corte.

Pierce Delay = Tempo em que o arco plasma permanece parado na altura de perfuração enquanto corta a peça de trabalho.

Best Quality (Cut Speed e Arc Voltage*) = Configurações que fornecem o ponto de partida para alcançar a melhor qualidade de corte (melhor ângulo, mínimo de escória, melhor acabamento da superfície de corte). Ajuste a velocidade de sua aplicação e do sistema de corte para obter o resultado desejado.

Highest Production (Cut Speed e Arc Voltage*) = Configurações que aumentam as velocidades de corte em 20% - 30%. Essas velocidades geram um maior número de peças cortadas, mas não necessariamente com a melhor qualidade de corte possível.

Kerf Width = Largura do material removido pelo processo de corte. As larguras de kerf servem somente para referência. A Hypertherm as obtém por meio das configurações de "Best Quality (melhor qualidade)". As diferenças entre instalações e composição do material podem causar resultados reais diferentes dos resultados apresentados nas tabelas.

* Para informações sobre como usar a tensão do arco para controlar a altura de corte, consulte o *Powermax45 XP Operator Manual (Manual do Operador)* (809240), *Powermax65/85 Operator Manual (Manual do Operador)* (806650) ou o *Powermax105 (Manual do Operador)* (807390).

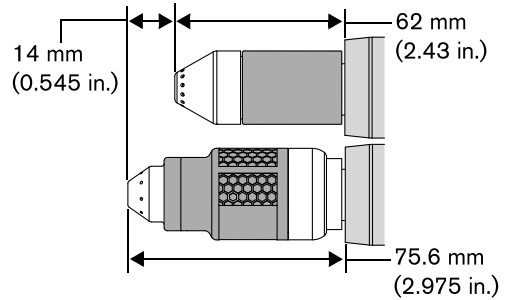
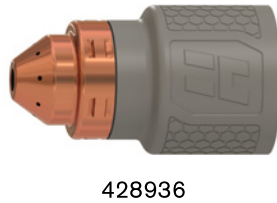
4 Cada tabela de corte relaciona as taxas de fluxo de gás quente e frio.

- slpm = litros por minuto padrão
- scfh = pés cúbicos por hora padrão

Hot (cutflow) = O arco plasma está ativo e há uma vazão constante de gás durante o corte.

Cold (postflow) = O arco plasma está desativado e há uma vazão constante de gás por vários segundos após o término do corte. Essa faixa de fluxo também se aplica ao modo de teste de gás.

Mild Steel – 105 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		mm/min	volts	mm/min	volts	
6	3.2	6.4	200	0.5	3960	139	4880	139	2.3
8					3050	141	3780	140	2.2
10				2240	143	2790	142	2.3	
12				1700	145	2080	143	2.4	
16				1040	148	1270	147	2.8	
20		710	151	840	150	3.3			
25		Edge Start			510	156	530	155	3.8
30			360	160	360	160	4.0		
32			300	163	300	163	4.0		
35			230	167	250	166	3.8		
40	150		175	180	172	3.0			

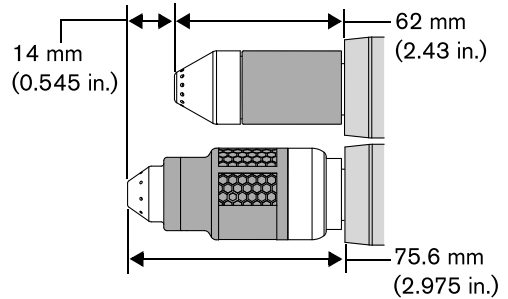
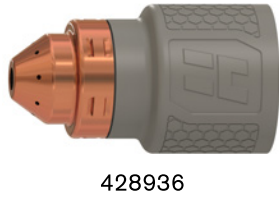
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		in/min	volts	in/min	volts	
1/4	0.125	0.250	200	0.5	156	140	192	139	0.089
3/8					95	142	118	141	0.090
1/2				61	145	75	144	0.098	
5/8				42	148	51	147	0.110	
3/4				30	151	36	149	0.124	
7/8		23	153	27	152	0.138			
1		Edge Start			19	156	20	155	0.150
1-1/8			15	160	16	159	0.158		
1-1/4			12	163	13	162	0.159		
1-1/2			7	172	8	170	0.134		

Gas flow rate – slpm / scfh

217 / 460	Hot (cutflow)
265 / 560	Cold (postflow)

Stainless Steel – 105 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width	
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage		
6	3.2	6.4	200	0.5	4700	140	5690	140	1.8	
8					3200	141	3890	140	2.4	
10					2160	142	2640	141	2.8	
12					1550	144	1880	143	3.1	
16		7.9	250	0.8	890	148	1090	147	3.4	
20					580	152	710	152	3.4	
25		Edge Start				380	158	480	158	3.2
30						250	164	300	162	3.0
32						230	166	250	162	2.9

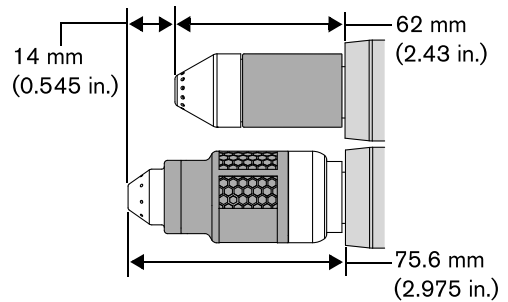
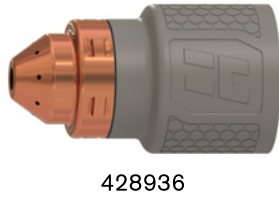
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width	
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage		
1/4	0.125	0.250	200	0.5	185	140	224	140	0.076	
3/8					93	142	113	141	0.106	
1/2					55	145	67	143	0.124	
5/8					36	148	44	147	0.132	
3/4		0.310	250	1.3	25	151	30	151	0.134	
7/8					19	155	23	155	0.131	
1		Edge Start				15	159	18	158	0.126
1-1/8						12	162	14	161	0.120
1-1/4						9	166	10	162	0.116

Gas flow rate – slpm / scfh

217 / 460	Hot (cutflow)
265 / 560	Cold (postflow)

Aluminum - 105 A - Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
6	3.2	6.4	200	0.5	5660	142	6730	142	2.4
8					3560	146	4780	145	2.5
10				0.8	2490	150	3380	148	2.5
12					1930	153	2510	150	2.6
16				1.0	1300	158	1550	155	2.5
20				1.3	910	162	1040	159	2.5
25		Edge Start			580	167	710	165	2.6
30			380	173	510	171	3.2		
32	330		176	460	175	3.6			

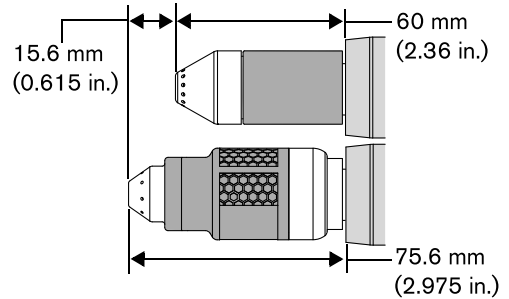
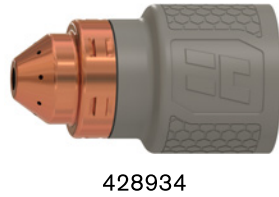
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
1/4	0.125	0.250	200	0.5	223	143	265	142	0.095
3/8					105	149	144	147	0.100
1/2				1.0	70	154	90	151	0.101
5/8					51	158	62	155	0.099
3/4				1.3	39	161	45	158	0.098
7/8				Edge Start			29	164	34
1		22	168		27	165	0.105		
1-1/8		17	172		22	169	0.118		
1-1/4	13	176	18	174	0.139				

Gas flow rate - slpm / scfh

217 / 460	Hot (cutflow)
265 / 560	Cold (postflow)

Mild Steel – 85 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
3	3.2	3.8	120	0.0	6930	127	9580	126	1.4
4				0.2	5560	127	7140	126	1.5
6				0.2	3560	128	4220	127	1.7
8				0.2	2360	129	2820	128	1.9
10		4.8	150	0.5	1630	130	2030	130	2.0
12				0.5	1240	132	1520	131	2.0
16				1.0	840	135	970	135	2.0
20				1.5	580	139	660	139	2.0
25	Edge Start				360	146	430	144	2.3
30	Edge Start				200	153	300	149	3.0

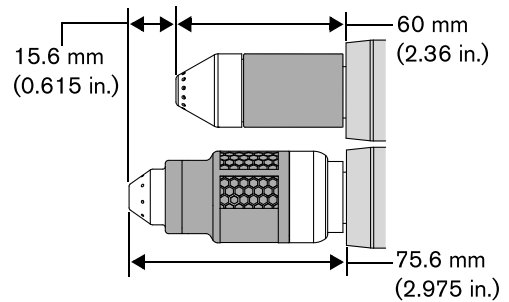
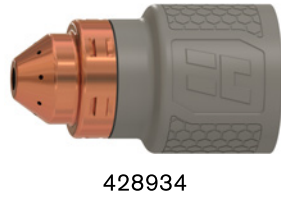
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width	
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage		
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches	
10 GA	0.125	0.150	120	0.2	250	127	334	126	0.056	
3/16				0.2	185	127	226	127	0.063	
1/4				0.2	130	128	153	127	0.070	
3/8				0.5	70	130	86	129	0.077	
1/2		0.188	150	0.5	46	132	55	132	0.079	
5/8				1.0	34	135	39	135	0.078	
3/4		0.250	200	1.5	25	138	28	138	0.079	
7/8		Edge Start				19	142	22	141	0.082
1		Edge Start				13	146	17	144	0.091
1-1/8		Edge Start				9	151	13	147	0.109
1-1/4	Edge Start				6	156	10	150	0.137	

Gas flow rate – slpm / scfh

212 / 450	Hot (cutflow)
264 / 560	Cold (postflow)

Stainless Steel - 85 A - Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		mm/min	volts	mm/min	volts	
3	3.2	3.8	120	0.2	8100	123	9860	123	1.2
4					6220	124	7570	123	1.4
6					3630	126	4470	125	1.6
8					2260	128	2790	127	1.8
10		4.8	150	0.5	1500	130	1880	129	2.0
12					1040	133	1350	132	2.1
16					690	139	790	137	2.3
20					480	143	530	141	2.5
25	Edge Start				300	146	380	143	3.0

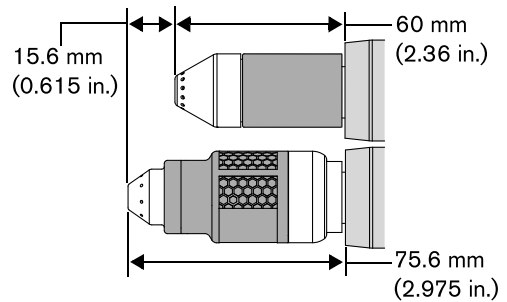
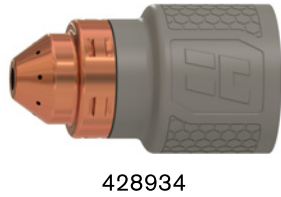
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		in/min	volts	in/min	volts	
10 GA	0.125	0.150	120	0.2	275	124	335	123	0.051
3/16					199	124	243	124	0.058
1/4					131	126	161	125	0.065
3/8					65	130	81	129	0.076
1/2		0.188	150	1.0	36	134	47	133	0.084
5/8					27	138	32	137	0.090
3/4					21	142	23	140	0.097
7/8					Edge Start			16	145
1	Edge Start				11	146	15	143	0.121

Gas flow rate - slpm / scfh

212 / 450	Hot (cutflow)
264 / 560	Cold (postflow)

Aluminum - 85 A - Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		mm/min	volts	mm/min	volts	
3	3.2	3.8	120	0.2	7980	129	9520	128	2.0
4					6050	130	7470	128	1.9
6					3630	132	4750	130	1.8
8					2440	134	3250	132	1.8
10		4.8	150	0.5	1780	137	2390	134	1.9
12					1400	139	1850	136	2.1
16					940	143	1190	141	2.5
20					Edge Start		580	146	890
25	Edge Start		380	151	530	150	2.3		

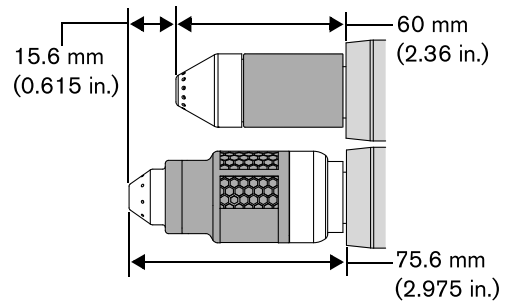
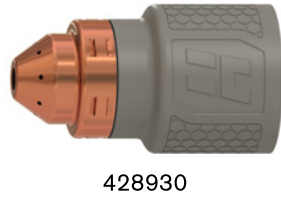
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width		
		inches	%		in/min	volts	in/min	volts			
1/8	0.125	0.150	120	0.2	300	129	360	128	0.078		
1/4					133	133	174	131	0.070		
3/8					75	136	101	134	0.074		
1/2					51	139	68	137	0.085		
5/8		0.188	150	1.0	38	143	48	141	0.097		
3/4					Edge Start		26	146	37	144	0.105
7/8					Edge Start		19	148	29	147	0.103
1					Edge Start		15	151	20	150	0.086

Gas flow rate - slpm / scfh

212 / 450	Hot (cutflow)
264 / 560	Cold (postflow)

Mild Steel – 65 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		mm/min	volts	mm/min	volts	
3	3.2	3.8	120	0.1	5330	128	6250	127	1.3
4					4220	128	5000	128	1.5
6					2570	129	3200	128	1.7
8					1550	130	2130	130	1.8
10					1040	132	1500	131	1.9
12		840	134	1120	133	1.9			
16		6.4	200	2.0	560	139	660	138	2.0
20	Edge Start			380	144	430	143	2.2	
25	Edge Start			200	149	280	147	2.8	

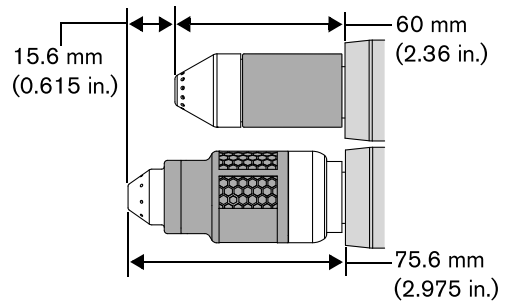
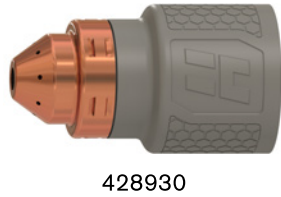
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		in/min	volts	in/min	volts	
10 GA	0.125	0.150	120	0.1	191	128	225	127	0.055
3/16					138	128	166	128	0.062
1/4					93	129	117	128	0.068
3/8					44	131	64	131	0.074
1/2					30	135	40	134	0.076
5/8		0.250	200	2.0	22	139	27	138	0.078
3/4		Edge Start			16	143	19	142	0.082
7/8	Edge Start			11	146	14	145	0.094	
1	Edge Start			8	149	10	147	0.116	

Gas flow rate – slpm / scfh

193 / 410	Hot (cutflow)
243 / 515	Cold (postflow)

Stainless Steel – 65 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
2	3.2	3.8	120	0.1	8760	122	10820	121	0.7
3					7650	123	9730	122	1.0
4					5160	124	6120	123	1.2
6		4.8	150	0.2	2440	126	2720	125	1.6
8					1350	128	1550	128	1.9
10					940	131	1120	131	2.0
12	Edge Start				740	134	890	134	2.0
16					480	140	510	140	2.1
20					330	146	360	144	2.1

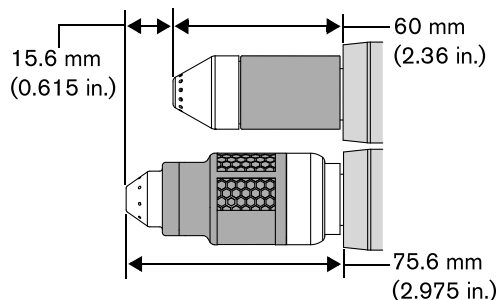
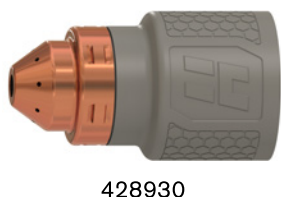
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
10 GA	0.125	0.150	120	0.1	241	123	295	122	0.046
3/16					150	124	171	124	0.056
1/4					86	126	95	126	0.066
3/8		0.188	150	0.7	40	131	47	131	0.077
1/2					27	135	31	136	0.081
5/8					19	140	21	140	0.081
3/4	Edge Start				14	145	15	144	0.083

Gas flow rate – slpm / scfh

193 / 410	Hot (cutflow)
243 / 515	Cold (postflow)

Aluminum - 65 A - Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
2	3.2	3.8	120	0.1	9270	128	10800	127	2.0
3					7540	129	8920	128	1.9
4					5380	131	6880	129	1.8
6		4.8	150	0.2	2900	134	4110	132	1.7
8					1780	137	2590	134	1.6
10					1220	140	1750	136	1.6
12	Edge Start			1.2	940	142	1320	138	1.7
16					610	147	810	144	1.9
20					380	152	530	150	2.2

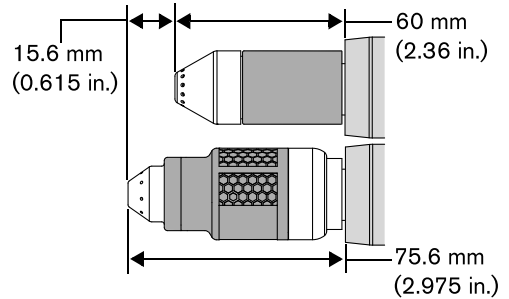
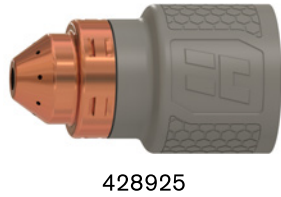
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
1/16	0.125	0.150	120	0.1	365	127	428	126	0.081
1/8					280	130	337	128	0.074
1/4					104	135	149	132	0.066
3/8		0.188	150	0.7	52	139	75	136	0.063
1/2					34	143	48	139	0.066
5/8					Edge Start		1.2	25	147
3/4	17	151	23	149				0.084	

Gas flow rate - slpm / scfh

193 / 410	Hot (cutflow)
243 / 515	Cold (postflow)

Mild Steel – 45 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
0.5	3.2	3.8	120	0.0	8890	129	12500	129	1.1
1				0.1	8890	129	10670	128	0.7
1.5					8890	129	10190	129	0.5
2				0.2	6600	130	7620	130	0.6
3				0.4	3630	134	4830	133	1.2
4					2260	138	3400	137	2.0
6					1240	143	2010	141	2.1

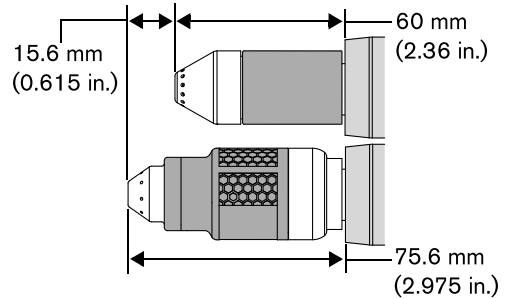
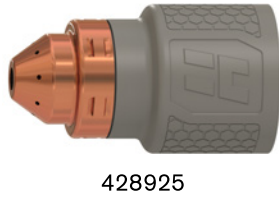
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
26 GA	0.125	0.150	120	0.0	350	129	501	129	0.044
22 GA					350	129	445	129	0.033
18 GA				0.1	350	129	408	128	0.023
16 GA					350	129	398	129	0.021
14 GA				0.2	278	130	318	129	0.023
12 GA				0.4	173	133	219	132	0.038
10 GA					115	136	162	135	0.06
3/16					0.5	68	141	107	140
1/4				0.6	46	142	74	140	0.068

Gas flow rate – slpm / scfh

182 / 385	Hot (cutflow)
217 / 460	Cold (postflow)

Stainless Steel – 45 A – Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
0.5	3.2	3.8	120	0.0	8890	128	12700	126	1.1
1				0.1	8890	129	10770	128	0.7
1.5					8890	130	10110	129	0.5
2				0.2	6220	131	8990	130	0.6
3				0.4	3230	134	4620	132	1.1
4				0.5	1960	137	2410	135	1.8
6				0.6	860	142	970	140	2.1

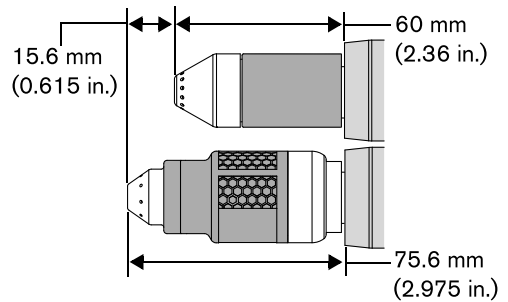
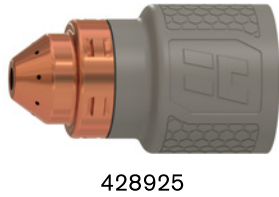
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
26 GA	0.125	0.150	120	0.0	350	128	501	126	0.042
22 GA					350	129	445	127	0.031
18 GA				0.1	350	130	408	129	0.022
16 GA					350	130	401	129	0.02
14 GA				0.2	248	131	357	130	0.023
12 GA				0.4	145	133	214	132	0.038
10 GA					94	136	124	134	0.06
3/16				0.5	55	139	63	136	0.087
1/4				0.6	30	142	35	141	0.07

Gas flow rate – slpm / scfh

182 / 385	Hot (cutflow)
217 / 460	Cold (postflow)

Aluminum - 45 A - Air



Metric

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		mm	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
mm	mm	mm	%	seconds	mm/min	volts	mm/min	volts	mm
1	3.2	3.8	120	0.0	8260	135	11400	135	1.4
2				0.1	5970	135	9040	135	1.2
3				0.1	3350	136	6400	135	1.4
4				0.1	2210	138	4600	136	1.8
6				0.2	1240	146	2570	145	1.9

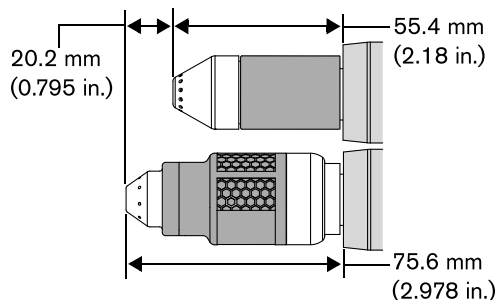
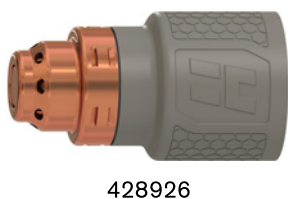
English

Material Thickness	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Highest Production		Kerf Width
		inches	%		Cut Speed	Arc Voltage	Cut Speed	Arc Voltage	
inches	inches	inches	%	seconds	in/min	volts	in/min	volts	inches
1/32	0.125	0.150	120	0.0	325	135	449	135	0.064
1/16				0.1	325	135	406	135	0.048
3/32				0.1	183	135	312	135	0.048
1/8				0.1	121	136	238	135	0.057
1/4				0.2	46	149	93	148	0.067

Gas flow rate - slpm / scfh

182 / 385	Hot (cutflow)
217 / 460	Cold (postflow)

Mild Steel – FineCut High Speed – Air



Metric

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width			
			mm	%		Cut Speed	Arc Voltage				
mm	A	mm	mm	%	seconds	mm/min	volts	mm			
0.5	40	3.5	3.5	100	0.0	8900	89	0.9			
0.6						8900	87	0.8			
0.8						8900	91	0.7			
1						8890	90	0.6			
1.5	45				3.5	3.5	100	0.2	6550	88	0.6
2								0.3	5260	86	0.5
3								0.4	2750	89	0.8
4								0.6	2250	90	0.8

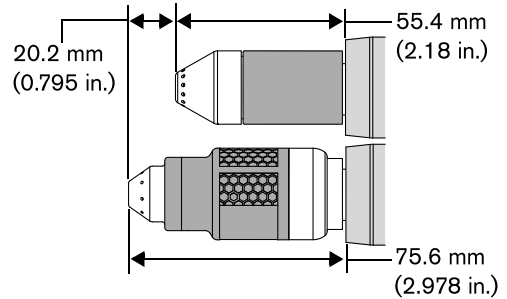
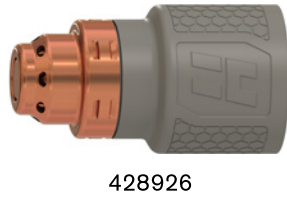
English

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width			
			inches	%		Cut Speed	Arc Voltage				
inches	A	inches	inches	%	seconds	in/min	volts	inches			
26 GA	40	0.14	0.14	100	0.0	350	90	0.034			
24 GA						350	87	0.033			
22 GA						350	91	0.029			
20 GA						350	90	0.024			
18 GA	45				0.14	0.14	100	0.1	350	89	0.020
16 GA								0.2	250	88	0.022
14 GA								0.3	220	86	0.017
12 GA								0.4	115	88	0.030
10 GA		0.14	0.14	100				0.5	100	89	0.030

Gas flow rate – slpm / scfh

162 / 343	Hot (cutflow)
180 / 382	Cold (postflow)

Stainless Steel – FineCut High Speed – Air



Metric

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width			
						Cut Speed	Arc Voltage				
mm	A	mm	mm	%	seconds	mm/min	volts	mm			
0.5	40	0.5	3.5	700	0.0	8900	63	0.6			
0.6						8900	65	0.6			
0.8						8900	65	0.5			
1	45				0.1	3.5	700	0.1	8890	64	0.4
1.5									6320	68	0.4
2									4830	67	0.4
3									2550	71	0.6
4									1050	67	0.7

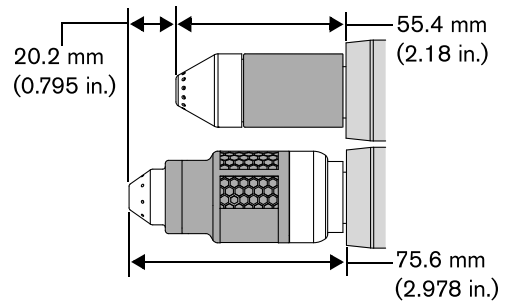
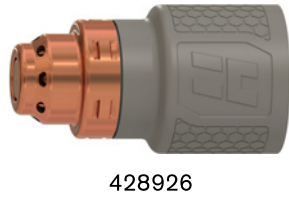
English

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width			
						Cut Speed	Arc Voltage				
inches	A	inches	inches	%	seconds	in/min	volts	inches			
26 GA	40	0.02	0.14	700	0.0	350	62	0.023			
24 GA						350	65	0.022			
22 GA						350	65	0.019			
20 GA	45				0.1	0.14	700	0.1	350	65	0.015
18 GA									350	63	0.011
16 GA									240	68	0.014
14 GA									200	67	0.016
12 GA									120	69	0.021
10 GA	75	68	0.024								

Gas flow rate – slpm / scfh

162 / 343	Hot (cutflow)
180 / 382	Cold (postflow)

Mild Steel – FineCut Low Speed – Air



Metric

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width
						Cut Speed	Arc Voltage	
mm	A	mm	mm	%	seconds	mm/min	volts	mm
0.5	30	3.5	3.5	100	0.0	3800	93	1
0.6						3800	92	1
0.8	35					3800	96	1.1
1						3800	93	1
1.5	40				0.2	3800	90	0.9
2					0.3	2370	90	1
3	45				0.4	2750	87	0.8
4					0.6	2250	90	0.8

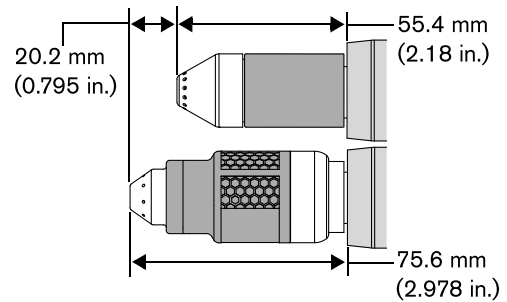
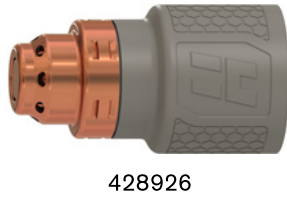
English

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width
						Cut Speed	Arc Voltage	
inches	A	inches	inches	%	seconds	in/min	volts	inches
26 GA	30	0.14	0.14	100	0.0	150	93	0.040
24 GA						150	92	0.041
22 GA	35					150	97	0.043
20 GA						150	93	0.039
18 GA	40				0.1	150	92	0.037
16 GA					0.2	150	90	0.036
14 GA	45				0.3	90	90	0.040
12 GA					0.4	115	88	0.030
10 GA	0.5	100	89	0.030				

Gas flow rate – slpm / scfh

162 / 343	Hot (cutflow)
180 / 382	Cold (postflow)

Stainless Steel – FineCut Low Speed – Air



Metric

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width	
						Cut Speed	Arc Voltage		
mm	A	mm	mm	%	seconds	mm/min	volts	mm	
0.5	30	0.5	3.5	700	0.0	3800	70	0.8	
0.6						3800	71	0.8	
0.8						3800	70	0.7	
1	40				0.1	3770	68	0.6	
1.5						0.3	3570	67	0.5
2						0.4	2830	73	0.6
3					45	0.5	2550	68	0.6
4	0.7					1050	67	0.7	

English

Material Thickness	Current	Cut Height	Initial Pierce Height		Pierce Delay	Best Quality		Kerf Width	
						Cut Speed	Arc Voltage		
inches	A	inches	inches	%	seconds	in/min	volts	inches	
26 GA	30	0.02	0.14	700	0.0	150	70	0.034	
24 GA						150	71	0.032	
22 GA						150	70	0.028	
20 GA	40				0.1	150	69	0.024	
18 GA						0.2	145	66	0.023
16 GA						0.3	140	67	0.021
14 GA					0.4	110	72	0.022	
12 GA	45				0.5	120	69	0.021	
10 GA		0.6	75	68		0.024			

Gas flow rate – slpm / scfh

162 / 343	Hot (cutflow)
180 / 382	Cold (postflow)