

**100 HE Plasma Parameters**

Carbides		Hardware				Gas SCFH			Power	Powder Feed		Torch
Powder	Composition	Particle Size	Nozzle	Pwdr Ports	Ext Attach	Ar	N2	H2	GV/KW	Gr/min	Cr Gas	Std Off
Amdry CRC	90 CrC/NiCr 10	5-45 micron	841121	NA	NA	240	120	60	199/70	100	20	4.5 in
SM 81 VFNS	75 CrC/NiCr 25	5-45 micron	866695	867750	2-Port	200	100	100	234/90	100	25	6.0 in
SM 81 VFNS	75 CrC/NiCr 25	5-45 micron	866695	867750	2-Port	200	100	100	234/90	80	25	4.5 in
SM 3007	80 CrC/NiCr 20	5.5-45 micron	868648	867750	2-Port	320	100	120	262/90	100	35	6.0 in
SM 3007	80 CrC/NiCr 20	5.5-45 micron	868648	867750	2-Port	300	100	120	278/90	50	35	5.0 in
PX CRC-106	75 CrC/NiCr 25	5-45 micron	868648	867750	2-Port	280	100	100	257/75	75	25	5.0 in
PX CRC-425-9	75 CrC/NiCr 25	5-22 micron	841187	867750	2-Port	300	100	60	275/70	50	30	6.0 in
PX WC-733	WC/CrC/Ni	5-45 micron	868648	867750	2-Port	280	120	60	252/95	80	30	4.5 in
SYL SX-199	WC/CrC/NiCr	5-45 micron	868648	867750	2-Port	160	100	120	248/50	50	20	5.0 in
SYL SX-199	WC/CrC/NiCr	5-45 micron	868648	867750	2-Port	350	120	120	280/90	50	24	6.0 in
PX W-124-4	46Cr/36W/12Co/4C	16-45 micron	868648	867750	2-Port	220	100	100	246/95	70	20	6.0 in
PX WC-114	88 WC/Co 12	10-45 micron	868648	867750	2-Port	320	120	100	255/90	80	23	6.0 in
HC 518.280	88 WC/Co 12	10-45 micron	868648	867750	2-Port	280	120	120	265/95	50	20	6.0 in
PX WC-726	88 WC/Co 12	5-45 micron	868648	867750	2-Port	320	120	50	255/90	50	20	6.0 in
PX WC-726	88 WC/Co 12	5-45 micron	866695	841151	2-Port	300	120	50	257/85	80	22	6.0 in
SM 71 VFNS	88 WC/Co 12	5-45 micron	868648	867750	2-Port	280	120	60	249/95	100	25	4.5 in
LA 3379	88 WC/Co 12	5-45 micron	868648	867750	2-Port	300	120	70	246/90	80	23	6.0 in
SYL SD-251	88 WC/Co 12	5-45 micron	868648	841151	2-Port	280	120	120	287/95	85	18	6.0 in
SYL SD-251	88 WC/Co 12	5-45 micron	868648	841151	2-Port	300	100	100	280/85	85	18	6.0 in
SM 71 VFNS-5	88 WC/Co 12	5-22 micron	868648	841151	2-Port	300	120	50	263/90	80	23	6.0 in
SM 71 VFNS-5	88 WC/Co 12	5-22 micron	868648	841151	2-Port	300	120	50	263/90	80	23	6.0 in
HC 526.350	73 WC/Co 17	11-53 micron	868648	867750	2-Port	320	120	100	262/80	100	18	6.0 in
SM 2005	73 WC/Co 17	5.5-38 micron	868648	867750	2-Port	320	100	120	275/90	70	22	6.0 in
SM 2005	73 WC/Co 17	5.5-38 micron	868648	867750	2-Port	320	120	100	262/80	100	18	6.0 in
SM 73SFNS	73 WC/Co 17	5.5-38 micron	868648	867750	2-Port	320	120	100	261/80	100	18	6.0 in
SM 73SFNS	73 WC/Co 17	5.5-38 micron	868648	867750	3-Port	350	120	100	258/70	50	45	6.0 in
SM 73FNS-1	73 WC/Co 17	11-53 micron	868648	867750	3-Port	280	100	80	260/60	70	30	6.0 in
HC 526.350	73 WC/Co 17	11-53 micron	868648	867750	3-Port	320	120	100	262/80	100	18	6.0 in
SM 5847	86 WC/Co 10/Cr 4	10-35 micron	868648	841151	2-Port	400	120	80	267/80	80	24	6.0 in
HC 558.059	86 WC/Co 10/Cr 4	5-30 micron	868648	841151	2-Port	400	100	80	263/80	80	22	6.0 in
HC 558.059	86 WC/Co 10/Cr 4	5-30 micron	868648	841151	2-Port	340	100	120	254/80	80	24	6.0 in
HC 558.059	86 WC/Co 10/Cr 4	5-30 micron	868648	867750	2-Port	340	100	120	257/95	80	24	5.25 in
HC 558.074	86 WC/Co 10/Cr 4	15-45 micron	868648	841151	2-Port	380	120	120	280/95	100	20	6.0 in
LA 3386-DJ	86 WC/Co 10/Cr 4	11-45 micron	868648	867750	2-Port	350	100	120	267/95	50	24	6.0 in
HC 544.3	83 WC/Ni 17	5.6-44 micron	868648	867750	3-Port	420	120	100	261/45	50	40	6.0 in

## 100 HE Disclaimer and Coating Parameter Legend

Coating parameters contained in this manual should be considered starting points. The parameters published in this manual were developed under laboratory conditions. Field results may vary.

Progressive Technologies, Inc. is constantly striving to improve coating characteristics and properties through parameter and 100 HE hardware development. **Contact your Sales Engineer or the Application Manager at PTI for the latest developments and parameter that best fits your requirements.** A complete coating report will be supplied upon request.

The Two Port and Three Port External attachments are interchangeable for all coatings listed as 2-Port or 3-Port injection in the Parameter Guide. In most cases the Three Port Injection shows slight improvement in density and deposition efficiency over the Two Port injection method.

### Material Selection Guide

- \*Sulzer Metco, Inc. (SM)
- \*Sulzer Metco, Inc. (Amdry)
- \*HC Starck, Inc. (HC)
- \*Saint-Gobain, LLC. (SG)
- \*Praxair Surface Technologies, Inc. (PX)
- \*Powder Alloy Corporation (PAC)
- \*Deloro Stellite, Inc. (Stellite)
- \*Carpenter Alloys, Inc. (Carp)
- \*Hoganas International, Inc. (Hog)
- \*Wall Colmonoy, Inc. (WC)
- \*Liquid Metals, Inc. (Armacor)
- \*Nano Steel Corporation (Nano)
- \*Montreal Carbide, Ltd. (MC)
- \*Lineage Alloys, Inc. (LA)
- \*Atlantic Minerals Corporation. (Hochrhein).

**\*Materials outlined in the Parameter Guidelines are registered trade marks of the aforementioned companies.**