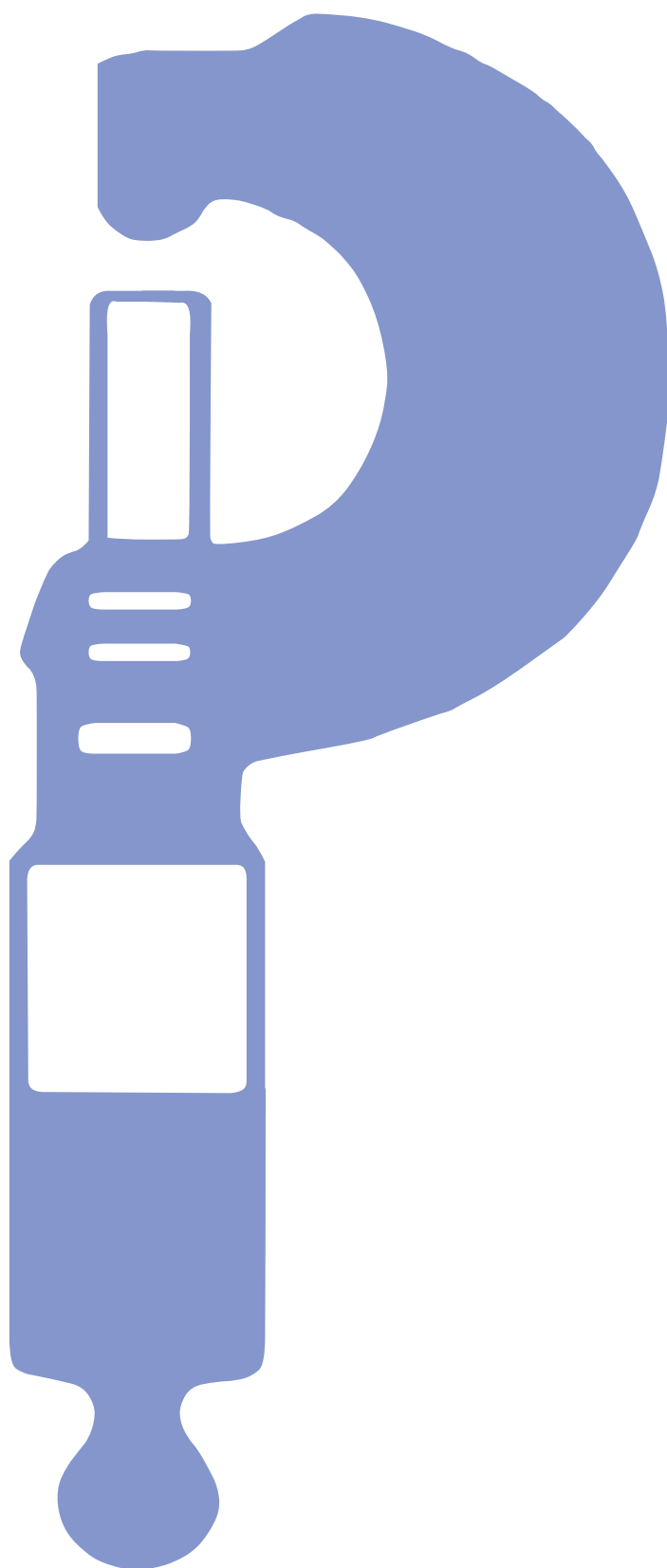




Precision Glassblowing of Colorado

has been manufacturing ICP/ICP-MS, general scientific, and custom glassware for over 20 years. Founded in 1982 by master glassblower Ken Petrie, Precision has grown to a staff of 15 glassblowers with a combined professional glassblowing experience of almost 200 years.

Honesty, integrity, and great customer service are the foundations of our company. Since our inception, we have developed a reputation for quality products and quick turnaround time. The reputation lives on in every new product we make.



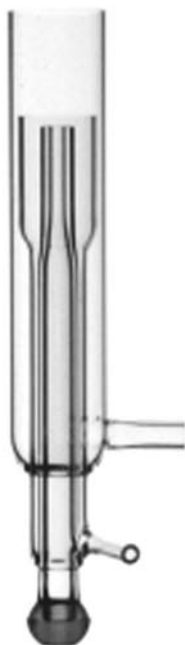
At Precision we understand when your instrument is down it costs you money so we offer same-day shipping on most orders received before 3:00 PM and strive to maintain stock at all times on commonly ordered parts. Beyond just manufacturing replacement glassware, Precision is very much involved with the R&D of other items associated with ICP and ICP-MS such as our sub-boiling point still for acid purification. To further serve the scientific community we offer a full line of peristaltic pump tubing, ICP-MS cones, disposable, metal-free autosampler vials, and disposable, metal-free centrifuge tubes.

To learn more about us or if you have any questions regarding our products please contact us by phone at 303-693-7329, find us on the web at www.precisionglassblowing.com, or send us E-mail at info@precisionglassblowing.com. We will be happy to speak with you.

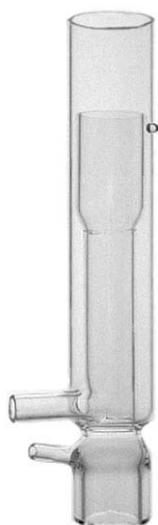
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**900-05 - One Piece
Torch, 2.5mm Injector
(HP 4500) G1820-65028**



**900-09 - Demountable
Torch, Inert (Agilent
7500) G1833-65422**

Agilent (Hewlett Packard) 4500 & 7500

Torches & Accessories

900-05	One Piece Torch, 2.5mm Injector (HP 4500)	G1820-65028
900-06	One Piece Torch, 2.5mm Injector (Agilent 7500)	G1833-65423
900-07	One Piece Torch, 1.5mm Injector (Agilent 7500)	G1833-65424
900-08	Demountable Torch, Inert (HP 4500)	G1820-65035
900-09	Demountable Torch, Inert (Agilent 7500)	G1833-65422
900-20	Alumina Injector	
900-20Q	Quartz Injector	
900-24	Quartz Bonnet (HP 4500)	G1820-65026
900-25	Quartz Bonnet (Agilent 7500)	G1833-65421
900-30	PTFE Injector Holder	G1820-65015

Spray Chambers & Accessories

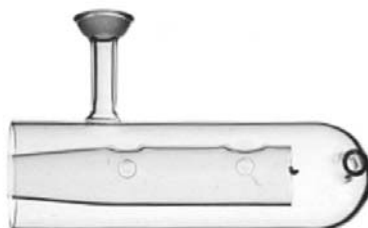
900-10	Scott Spray Chamber, Inner/Outer Tube Flush, Drain & Exit 180°	
900-11	Scott Spray Chamber, Inner/Outer Tube Flush, Drain & Exit 90° (HP 4500, Agilent 7500)	G1820-65336
900-12	Scott Spray Chamber, Inner/Outer Tube Flush, Drain & Exit 180°, Quartz	
900-13	Scott Spray Chamber, Inner/Outer Tube Flush, Drain & Exit 90°, Quartz (HP 4500, Agilent 7500)	G1820-65337
900-14	Scott Spray Chamber, Inner Tube Extended, Drain & Exit 90°, Quartz	G1820-65339
900-16	Cyclonic Spray Chamber	
900-16Q	Cyclonic Spray Chamber, Quartz	
900-32	Quartz Socket Adapter	
900-36	Quartz Ball Adapter	
900-38	Ball & Socket Adapter, Quartz (HP4500)	G1820-80237
900-39	Ball & Socket Adapter, Quartz (Agilent 7500)	G1833-65426

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min	
500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	
500-77	A-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	G1820-65030
500-77Q	A-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min, Quartz	G1820-61138
500-93	Crossflow Nebulizer, High-Solids	G1820-65033
500-94	Crossflow Nebulizer, High Flow	G1833-80301
520-30	PTFE End Cap for use with Open End Spray Chamber	G1820-65121

HP & Agilent Type 2-Stop Pump Tubing

PT-2160P	White-White, 0.040" (1.02mm), PVC, 12/pk	G1820-65215
PT-2020P	Orange-Red, .0075" (.19mm), PVC, 12/pk	G1820-65220
PT-2160SI	White-White, 0.040" (1.02mm), Silicone, 6/pk	G1820-65217
PT-2220SA	Yellow-Blue, 0.06" (1.52mm), Santoprene, 12/pk	G1820-65216



**900-13 - Scott Spray Chamber,
Inner/Outer Tube Flush, Drain & Exit
90°, Quartz (HP 4500, Agilent 7500)
G1820-65337**



**500-77Q - A-Type Concentric
Nebulizer, 1 lpm Ar, 30psi, 3mL/min,
Quartz
G1820-61138**

ARL 3500 Maxi

Torches & Accessories

100-05	Maxi Torch	139009-0003
100-05W	Maxi Torch, Wear Metals Outer Shield	
100-06	Maxi Torch, 20mm Outer Shield	
100-08	Torch, ICPQ	137000-0000
100-09	Torch, Nitrogen, 3" Port, 28/15 Ball Joint	173127-0000
120-40	Torch, HF/CR Resistant Body	173131-0000
120-44	PTFE Insert for HF Torch	
120-45	PTFE Insert, Adjustable for HF Torch	
100-21	Torch Extension	
100-22	Torch Extension with Optical Port	
100-25	Torch Bonnet	
100-27	Torch Bonnet, Induction Coil M/S	173251-0000
100-28	Argon Snout Tube	170631-0000
120-42	Alumina Injector	1200079
120-55	O-ring for Torch, PTFE Coated Viton	

Spray Chambers & Accessories

100-12	Conical Spray Chamber for Concentric Nebulizer	173142-0000
100-14	Conical Spray Chamber for MDSN	
100-16	Conical Spray Chamber, Open End with Impact Bead	139008-0000
100-18	Conical Spray Chamber, Open End with Drain	
110-55	Cyclonic Spray Chamber, 10mm Drain	
110-55J	Cyclonic Spray Chamber, Water-Cooled, 10mm Drain	
120-30	ARL Maxi PTFE Spray Chamber	
120-51	PTFE Insert, allows 100-14 to use Concentric Nebulizer	
120-56	O-ring for Spray Chamber, PTFE Coated Viton	

Nebulizers

500-77	A-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	914319-000P/M
510-50	Babington MDSN, HF Resistant	173259-0000
510-10S	Noordermeer V-Groove MDSN Nebulizer, 1 lpm Ar	

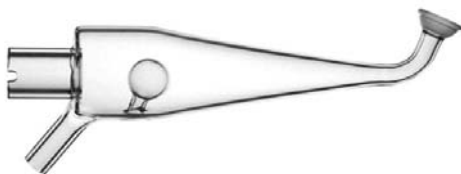
ARL Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.

ICP & ICP/MS Consumables



100-05 - Maxi Torch
139009-0003



100-14 - Conical Spray Chamber for MDSN



510-10S - Noordermeer V-Groove MDSN Nebulizer, 1 lpm Ar



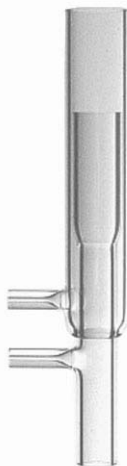
100-25 - Torch Bonnet



510-50 - Babington MDSN, HF Resistant
173259-0000



**110-30 - Mini Torch,
1.5mm Injector
173463-0000**



**110-31 - Mini HF/CR
Torch Body
173473-0000**

ARL 3400/3500 Accuris Mini

Torches & Accessories

110-30	Mini Torch, 1.5mm Injector	173463-0000
110-30/1.0	Mini Torch, 1.0mm Injector	
110-31	Mini HF/CR Torch Body	173473-0000
110-32	Mini Nitrogen Torch	170692-0000
110-50	Mini High-Solids Torch	
110-35	Torch Bonnet	173252-0000
110-42	Torch Mount	144860
110-48	Injector Assembly	144857
110-54	Argon Snout, Nitrogen	170693-0000
120-55	O-ring for Torch, PTFE Coated Viton	

Spray Chambers & Accessories

110-33	Conical Spray Chamber, Mini for Concentric Nebulizer	173142-0002
110-33Q	Conical Spray Chamber, Mini for Concentric Neb., Quartz	
110-34	Conical Spray Chamber for Babington MDSN	173142-0003
110-36	Conical Spray Chamber, Water-Cooled for Concentric Neb.	173142-0004
110-55	Cyclonic Spray Chamber, 10mm Drain	
110-55J	Cyclonic Spray Chamber, Water-Cooled, 10mm Drain	
110-55QJ	Cyclonic Spray Chamber, Water-Cooled, 10mm Drain, Quartz	
110-60	ARL Mini HF System	
120-51	PTFE Insert, allows 110-34 to use Concentric Nebulizer	
120-56	O-ring for Spray Chamber, PTFE Coated Viton	

Nebulizers

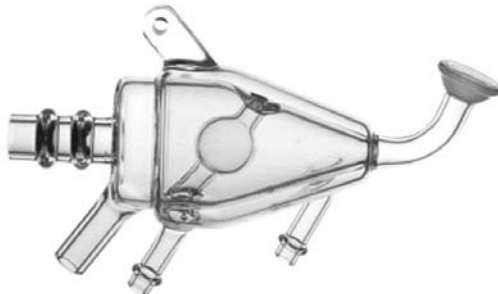
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	915375-000P/M
510-10	Noordermeer V-Groove MDSN Nebulizer	915817-0000
510-50	Babington MDSN, HF Resistant	173259-0000

ARL Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.



**110-55J - Cyclonic Spray Chamber,
Water-Cooled, 10mm Drain**



**110-36 - Spray Chamber, Water-Cooled for
Concentric Nebulizer 173142-0004**

ARL Maxim 1 & 3

Torches & Accessories

110-38	Maxim Torch	S111403
110-45	Maxim CR Torch	S213787
120-55	O-ring for Torch, PTFE Coated Viton	

Spray Chambers & Accessories

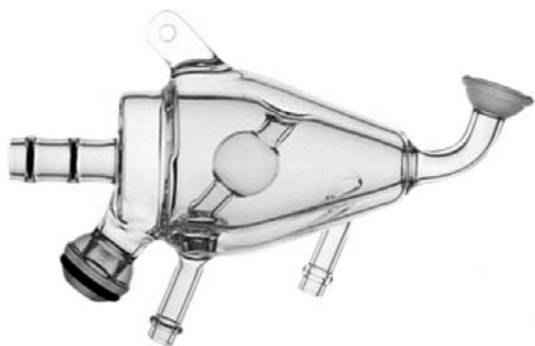
110-39	Spray Chamber, Water-Cooled for Concentric Nebulizer	S702174
110-40	Drain Trap	S702232
110-41	Spray Chamber for Concentric Nebulizer	S702171
110-41Q	Spray Chamber for Concentric Nebulizer, Quartz	
120-56	O-ring for Spray Chamber, PTFE Coated Viton	

Nebulizers

510-10	Noordermeer V-Groove MDSN Nebulizer	915817-0000
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ARL Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.



110-39 - Spray Chamber, Water-Cooled for Concentric Nebulizer S702174



510-10 - Noordermeer V-Groove MDSN Nebulizer 915817-0000

Did you know...

Standard ICP Torch Rebuilding

Most ICP torches may be rebuilt for a minimal price compared to the cost of a new torch. Rebuilding a standard torch involves replacing the entire outer shield (tube) and/or replacing broken side arms. In the event the inner shield (tube) and/or the injector on a fixed torch has become severely cracked or devitrified, the torch is considered non-repairable, as the cost of repair would exceed the price of a new torch. Once the torch has been rebuilt, it passes through the same QC program as our new torches ensuring you get a quality rebuilt torch that will perform like new. Some restrictions apply and certain torches cannot be rebuilt due to their design. For more information please feel free to call us at 303-693-7329 or contact us at info@precisionglassblowing.com.

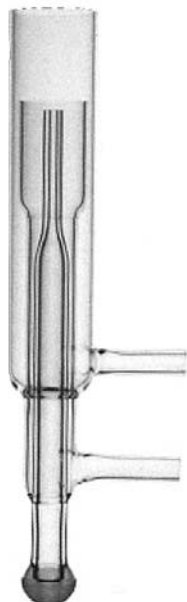
ICP & ICP/MS Consumables



110-38 - Maxim Torch S111403



110-40 - Drain Trap S702232



200-05 - Torch, Plasma Standard, 025515



200-06 - Torch, Low-Flow, 075542

Baird 27 MHz

Torches & Accessories

200-05	Torch, Plasma Standard	025515
220-55	Demountable Torch Body	069987
220-50	Alumina Injector, 4.8"	075132
220-51	Alumina Injector, 5.6"	075144
220-52	Alumina Injector, 7.7"	075145
220-53	PTFE Insert, Fixed	
220-54	PTFE Insert, Adjustable	

Baird Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.

Baird 2000 & 2070

Torches & Accessories

200-06	Torch, Low-Flow	075542
200-10	Demountable Torch Body, Low-Flow	075145
200-21	Torch Extension	
200-25	Torch Bonnet	025492
200-30	Window Tube	077611
200-36	Extension, Ball & Socket	062607
220-50	Alumina Injector, 4.8"	075132
220-51	Alumina Injector, 5.6"	075144
220-52	Alumina Injector, 7.7"	075145
220-53	PTFE Insert, Fixed	
220-54	PTFE Insert, Adjustable	

Spray Chambers & Accessories

200-12	Scott Spray Chamber, Open End	025492
200-14	Scott Spray Chamber for Concentric Nebulizer	
200-15	Scott Spray Chamber, Water-Cooled	

Nebulizers

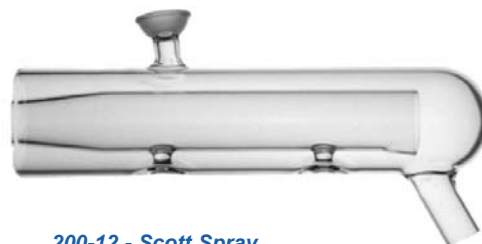
500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min
500-92	Crossflow Nebulizer
510-10	Noordermeer V-Groove MDSN Nebulizer
510-50	Babington MDSN, HF Resistant

Baird Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.



500-92 - Crossflow Nebulizer



200-12 - Scott Spray Chamber, Open End 025492

Baird PST

Torches & Accessories

200-06	Torch, Low-Flow	075542
200-10	Demountable Torch, Low-Flow	075145
200-21	Torch Extension	
200-25	Torch Bonnet	025492
200-30	Window Tube	077611
200-32	PST Purge Window	077200
200-36	Extension, Ball & Socket	062607
220-50	Alumina Injector, 4.8"	075132
220-51	Alumina Injector, 5.6"	075144
220-52	Alumina Injector, 7.7"	075145
220-53	PTFE Insert, Fixed	
220-54	PTFE Insert, Adjustable	

Spray Chambers & Accessories

200-12	Scott Spray Chamber, Open End	025492
200-14	Scott Spray Chamber for Concentric Nebulizer	
200-15	Scott Spray Chamber, Water-Cooled	

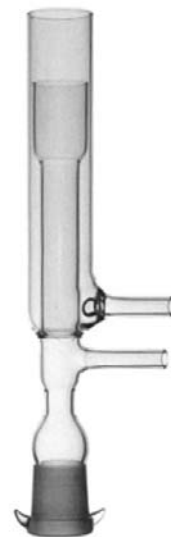
Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min
500-92	Crossflow Nebulizer
510-10	Noordermeer V-Groove MDSN Nebulizer
510-50	Babington MDSN, HF Resistant

Baird Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.

ICP & ICP/MS Consumables



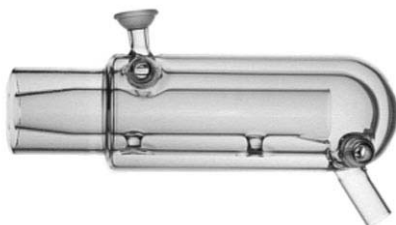
200-10 - Demountable Torch, Low-Flow
075145



200-25 - Torch Bonnet
025492



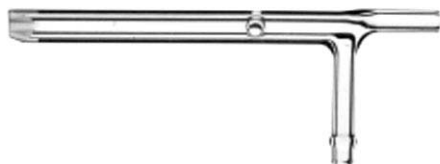
200-30 - Window Tube
077611



200-15 - Scott Spray Chamber, Water-Cooled



200-14 - Scott Spray Chamber for Concentric Nebulizer



510-10 - Noordermeer V-Groove MDSN Nebulizer



500-70 - C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min



200-06 - Torch, Low-Flow, 075542



210-10 - AFS/ICP Torch & Tip, 676458

Baird PSQ and PSX

Torches & Accessories

200-06	Torch, Low-Flow (PSQ and New PSX)	075542
200-07	Plasma PSX Low-Flow Torch (Old PSX)	069972
200-08	Plasma Low-Flow Torch (Old PSX)	666011
200-09	PSX Labtest Low-Flow Torch	075128
200-10	Demountable Torch, Low-Flow (PSQ and New PSX)	075145
200-11	PSX Low-Flow HF/CR Torch	075129
200-21	Torch Extension	
200-25	Torch Bonnet	025491
200-30	Window Tube	077611
200-33	Entrance Tube, Plasma Labtest	
200-36	Extension, Ball & Socket	062607
200-36Q	Quartz Extension, Ball & Socket	
220-50	Alumina Injector, 4.8"	075132
220-51	Alumina Injector, 5.6"	075144
220-52	Alumina Injector, 7.7"	075145
220-53	PTFE Insert, Fixed	
220-54	PTFE Insert, Adjustable	

Spray Chambers & Accessories

200-12	Scott Spray Chamber, Open End	025492
200-14	Scott Spray Chamber for Concentric Nebulizer	
200-15	Scott Spray Chamber, Water-Cooled	

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min
500-92	Crossflow Nebulizer
510-10	Noordermeer V-Groove MDSN Nebulizer
510-50	Babington MDSN, HF Resistant

Baird Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.

Baird AFS-2000

Torches & Accessories

210-10	AFS/ICP Torch & Tip	676458
210-11	AFS/ICP Tip Replacements	676459

Baird Type Pump Tubing

See our complete list of sizes and materials on pages 34, 35.



510-50 - Babington MDSN, HF Resistant



510-10 - Noordermeer V-Groove MDSN Nebulizer

Finnigan Element TS/Sola

Torches & Accessories

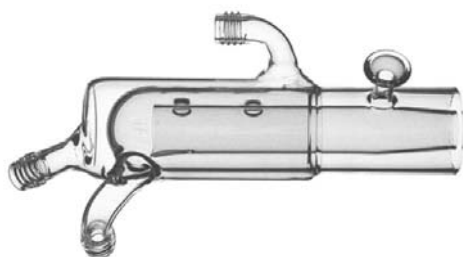
850-05	Standard Torch, TS Sola	
850-08	Demountable Torch, TS Sola	
850-09	Quartz Injector, TS Sola	
850-10	Torch & Injector, TS Sola	
850-11	Alumina Injector, TS Sola	
850-06	Standard Torch, Element	
850-12	Demountable Torch, Element	1091250
850-25	Quartz Bonnet for Demountable Torch, Element	
850-26	Quartz Bonnet for Demountable Torch, Element, Long	
852-10	Quartz Injector, Element	1122800

Spray Chambers & Accessories

850-15	Scott Spray Chamber, Pyrex, Water-Cooled, TS Sola	
850-16	Scott Spray Chamber, Quartz, Water-Cooled, TS Sola	
850-17	Scott Spray Chamber, Pyrex, Water-Cooled, Element	
850-18	Scott Spray Chamber, Quartz, Water-Cooled, Element	
850-19	Finnigan Neptune Spray Chamber	1127121
850-31	Ball & Socket Elbow, Pyrex	
850-32	Ball & Socket Elbow, Quartz	

Finnigan Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk
PT-2020P	Orange-Red, .0075" (.19mm), PVC, 12/pk
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk
PT-2130V	Black-Black, 0.030" (.76mm), Viton, 12/pk



850-18 - Scott Spray Chamber, Quartz, Water-Cooled, Element



850-32 - Ball & Socket Elbow, Quartz



852-10 - Quartz Injector, Element 1122800

ICP & ICP/MS Consumables



850-10 - Torch & Injector, TS Sola



850-12 - Demountable Torch, Element, 1091250



150-05 - Torch, One Piece with Ball Joint
49.010.100



150-15 - Cyclonic Spray Chamber, 4mm Drain
31.030.809



160-63 - Sheath Gas, Glass,
21.356.040

JY/Instruments SA

Torches & Accessories

150-05	Torch, One Piece with Ball Joint	49.010.100
160-40	Demountable Torch Assembly, Complete	21.356.110
160-45	Demountable Torch, Body Only	
160-50	Outer Quartz Tube, 71mm, Radial	31.023.722
160-51	Outer Quartz Tube, 82.5mm, Radial	
160-70	Outer Quartz Tube, Axial	31.031.099
160-52	Inner Quartz Tube	31.023.723
160-46	O-ring Kit for Torch Body	
160-53	PTFE Centering Ring	31.023.724
160-55	PTFE Insert	31.021.730
160-58	Alumina Injector	31.021.589
160-59	Quartz Injector	
160-60	Quartz Injector, 3.0mm	
160-61	Alumina Injector and Teflon Insert	21.356.130
160-63	Sheath Gas, Glass	21.356.040
160-63S	Sheath Gas, 12/5 Socket	
160-64	Sheath Gas, PEEK	20.925.160

Spray Chambers & Accessories

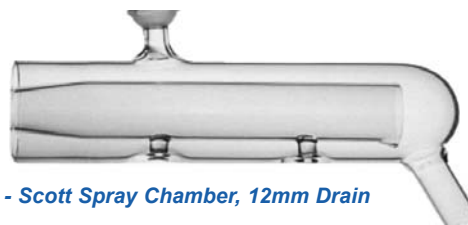
150-12	Scott Spray Chamber, 12mm Drain	
150-12Q	Scott Spray Chamber, 12mm Drain, Quartz	
150-13	Cyclonic Spray Chamber, Axial	
150-14	Scott Spray Chamber, Ground Joint Drain	31.026.996
150-14Q	Scott Spray Chamber, Ground Joint Drain, Quartz	
150-15	Cyclonic Spray Chamber, 4mm Drain	31.031.279
150-15B	Cyclonic Spray Chamber, 4mm Drain, Baffled	31.030.809
150-16	Scott Spray Chamber, 12mm Drain for Concentric Nebulizer	
150-17	Cyclonic Spray Chamber, 12mm Drain	
150-17C	Cyclonic Spray Chamber, Ground Joint Drain	
150-21	Torch Extension	
150-25	Torch Bonnet	49.010.101
160-65	U-Drain Trap	31.026.997

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min	47.929.006
500-70P	C-Type Concentric Nebulizer, 1 lpm Ar, 50psi, 1mL/min	47.929.001
500-71	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 2mL/min	47.929.002
500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	47.929.003
500-73P	C-Type Concentric Nebulizer, 1 lpm Ar, 50psi, 0.5mL/min	47.929.004
500-92	Crossflow Nebulizer	47.929.008

JY Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	46.791.022
PT-2160P	White-White, 0.040" (1.02mm), PVC, 12/pk	46.791.024
PT-2200P	Gray-Gray, 0.050" (1.30mm), PVC, 12/pk	46.791.018
PT-2250P	Green-Green, 0.073" (1.85mm), PVC, 12/pk	46.791.016
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	46.791.010
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	46.791.012
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	LK1160497080



150-12 - Scott Spray Chamber, 12mm Drain

PerkinElmer Plasma 1000, 2000

Torches & Accessories

310-03	Torch Tube, Type II	N058-0528
310-03W	Torch Tube, Type II, Wear Metals	N068-1690
310-24	Quartz Bonnet	N058-2235
310-35	Injector Support Adapter with O-rings	N058-2248
310-36	O-ring Kit for Injector Support Adapter	N058-0539
320-33	Quartz Injector, 1.2mm	N068-1631
320-34	Quartz Injector, 1.6mm	0047-3292
320-66	Purge Extension Window	N058-1497

Spray Chambers & Accessories

300-16	Scott Spray Chamber
300-19	Cyclonic Spray Chamber
300-19J	Cyclonic Spray Chamber, Water-Cooled

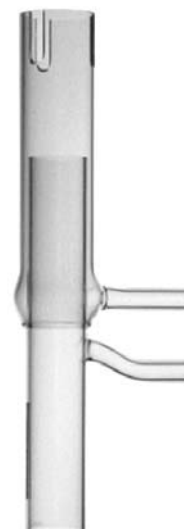
Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	0047-3552
PT-2180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	N069-1595

ICP & ICP/MS Consumables



310-03 - Torch Tube, Type II, N058-0528



300-19 - Cyclonic Spray Chamber



310-35 - Injector Support Adapter with O-rings, N058-2248

PerkinElmer Plasma II

Torches & Accessories

310-03	Torch Tube, Type II	N058-0528
310-09	Torch Tube, Type I, Slotted	N058-0376
310-24	Quartz Bonnet	N058-2235
310-35	Injector Support Adapter with O-rings	N058-2248
310-36	O-ring Kit for Injector Support Adapter	N058-0539
320-30	Quartz Injector, 1.2mm, Type I	
320-31	Quartz Injector, 1.6mm, Type I	N058-0449
320-33	Quartz Injector, 1.2mm	N068-1631
320-34	Quartz Injector, 1.6mm	0047-3292
320-66	Purge Extension Window	N058-1497

Spray Chambers & Accessories

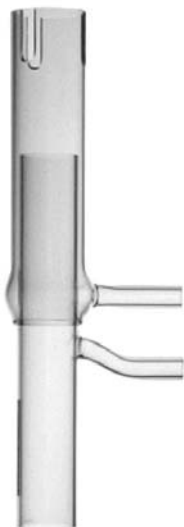
300-16	Scott Spray Chamber
300-19	Cyclonic Spray Chamber
300-19J	Cyclonic Spray Chamber, Water-Cooled

Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	0047-3552
PT-2180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	N069-1595



**310-03 - Torch Tube,
Type II N058-0528**



**310-35 - Injector
Support Adapter with
O-rings N058-2248**



**510-26 - Cyclonic
Spray Chamber, 12/5
Socket Top, 4mm
Drain**

PerkinElmer Plasma 40 & 400

Torches & Accessories

310-03	Torch Tube, Type II	N058-0528
310-03W	Torch Tube, Type II, Wear Metals	N068-1690
310-09	Torch Tube, Type I, Slotted (P40)	N058-0376
310-35	Injector Support Adapter with O-rings	N058-2248
310-36	O-ring Kit for Injector Support Adapter	N058-0539
320-33	Quartz Injector, 1.2mm	N068-1631
320-34	Quartz Injector, 1.6mm	0047-3292
320-60	Purge Extension	N068-1234

Spray Chambers & Accessories

300-16	Scott Spray Chamber
300-19	Cyclonic Spray Chamber
300-19J	Cyclonic Spray Chamber, Water-Cooled
300-19Q	Cyclonic Spray Chamber, Quartz

Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376

PerkinElmer ICP 5000, 5500, 5500B, 6000 & 6500

Torches & Accessories

300-05	Torch, One Piece with Ball Joint	0047-2048
310-07	Torch Tube, Type I	N058-0233
310-03	Torch Tube, Type II	N058-0528
300-21	Torch Extension	0047-3052
300-22	Torch Extension with Optical Port	
300-23	Torch Extension, Slotted	0047-3560
300-25	Torch Bonnet	0047-2033
320-30	Quartz Injector, 1.2mm, Type I	
320-31	Quartz Injector, 1.6mm, Type I	N058-0449
320-32	Quartz Injector, 2.0mm, Type I	
320-33	Quartz Injector, 1.2mm	N068-1631
320-34	Quartz Injector, 1.6mm	0047-3292
320-62	Purge Tube	0047-3187
320-64	Purge Tube for Slotted Extension	0047-3561

Spray Chambers & Accessories

300-12	Scott Spray Chamber	0041-2047
300-14	Scott Spray Chamber for Concentric Nebulizer	
510-26	Cyclonic Spray Chamber, 12/5 Socket Top, 4mm Drain	
510-26J	Cyclonic Spray Chamber, Water-Cooled	

Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376

PerkinElmer Optima 3000 Series Radial

Torches & Accessories

310-03W	Torch Tube, Type II, Wear Metals	N068-1690
310-04	Torch Body, Optima, Radial	N069-0568
310-04W	Torch Body, Optima, Radial, Wear Metals	
310-05	Torch Bonnet, Flat Edge (Optima pre-9/94)	N069-5295
310-13	Torch Bonnet, Flat Edge (Optima post 9/94)	N069-5456
320-33	Quartz Injector, 1.2mm	N068-1631
320-43	Quartz Injector, 1.6mm	N069-5448
320-40	Quartz Injector, 2.0mm	N069-5441
320-51	Alumina Injector, 0.85mm	N058-2186
320-52	Alumina Injector, 1.5mm	N058-2185
320-53	Alumina Injector, 2.0mm	N058-2184
320-66	Purge Extension Window	N058-1497

Spray Chambers & Accessories

300-15	Scott Spray Chamber, Type II, Angled Top
300-16	Scott Spray Chamber, Type II
300-19	Cyclonic Spray Chamber, Optima

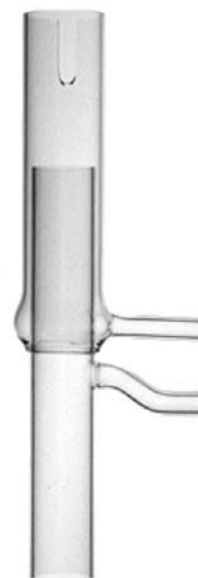
Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	0047-3552
PT-2180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	N069-1595

ICP & ICP/MS Consumables



310-04 - Torch Body,
Optima, Radial
N069-0568



300-18DV - Cyclonic
Spray Chamber
N812-2188



310-15 - Torch Bonnet
N069-1664

PerkinElmer Optima 3000 Series XL & SC(X)

Torches & Accessories

310-11	Torch Body, Optima XL	N069-5379
310-11W	Torch Body, Optima XL, Wear Metals	
310-15	Torch Bonnet	N069-1664
310-37	Injector Support Adapter with O-rings for Optima XL/DV	N069-5400
310-39	Injector Support Adapter with O-rings for Optima XL/DV	N069-0780
320-46	Quartz Injector, 1.2mm	N069-5460
320-44	Quartz Injector, 1.6mm	N069-5449
320-41	Quartz Injector, 2.0mm	N069-5442
320-50	Alumina Injector, 2.0mm	N069-5362
320-65	Purge Viewing Window for Optima XL	0999-2731

Spray Chambers & Accessories

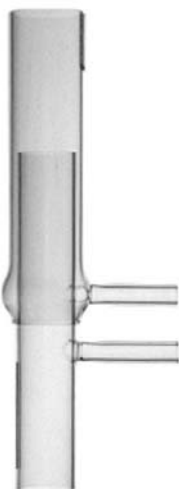
300-18DV	Cyclonic Spray Chamber	N812-2188
310-38	O-ring Kit - Optima XL/DV	N069-0769

Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375



**310-14 - Torch Body,
Optima DV, 1 Slot
N069-1662**



**310-15 - Torch Bonnet
N069-1664**



**310-12 - Torch Body,
Optima DV, 2 Slot**

PerkinElmer 3000 Series DV

Torches & Accessories

310-14	Torch Body, Optima DV, 1 Slot	N069-1662
310-14W	Torch Body, Optima DV, 1 Slot, Wear Metals	
310-14/3SL	Torch Body, Optima DV, 3 Slot	
310-12	Torch Body, Optima DV, 2 Slot	
310-12W	Torch Body, Optima DV, 2 Slot, Wear Metals	
310-15	Torch Bonnet	N069-1664
310-37	Injector Support Adapter with O-rings for Optima XL/DV	N069-5400
310-39	Injector Support Adapter with O-rings for Optima XL/DV	N069-0780
320-48	Quartz Injector, 0.8mm	N069-5461
320-46	Quartz Injector, 1.2mm	N069-5460
320-44	Quartz Injector, 1.6mm	N069-5449
320-41	Quartz Injector, 2.0mm	N069-5442
320-50	Alumina Injector, 2.0mm	N069-5362
320-67	Axial Purge Window	B006-6549
320-68	Purge Tube Window, Axial	N069-1678
320-69	Purge Tube Window, Radial	N069-1689
320-73	Purge Tube Window, Radial, Short	N069-0672
		N069-1646

Spray Chambers & Accessories

300-18DV	Cyclonic Spray Chamber	N812-2188
300-18DVJ	Cyclonic Spray Chamber, Water-Cooled	
300-18DVQ	Cyclonic Spray Chamber, Quartz	
310-38	O-ring Kit - Optima XL/DV	N069-0769

Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	0047-3552
PT-2180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	N069-1595



**300-18DV - Cyclonic
Spray Chamber
N812-2188**



**310-39 - Injector Support Adapter
with O-rings for Optima XL/DV
N069-0780**

PerkinElmer Optima 2000/4000/5000DV Series & 4300V

Torches & Accessories

310-16	Torch Body, Optima 2000/4000/5000DV, 1 Slot	N077-0338
310-16W	Torch Body, Optima 2000/4000/5000DV, Wear Metals	
310-17	Torch Body, Optima 4300V	N077-1500
310-18	Torch Body, Optima 2000/4000/5000DV, Short Version	N077-0344
310-19	Torch Body, Optima 2000/4000/5000DV, No Slot	N077-0343
310-20	Copper Foil for Torch Body Optima 2000/4000/5000DV	N077-5297
310-25	Torch Bonnet	N077-5289
310-43	O-ring Kit for Optima 2000/4000/5000DV Torch	N077-0437
320-78	Quartz Injector, 0.8mm	N077-5225
320-77	Quartz Injector, 1.2mm	N077-5226
320-76	Quartz Injector, 1.6mm	N077-5223
320-74	Quartz Injector, 2.0mm	N077-5014
320-75	Quartz Injector, 3.0mm	N077-5224
310-40	Alumina Injector, 0.8mm	N077-5227
310-41	Alumina Injector, 1.2mm	N077-5228
310-42	Alumina Injector, 2.0mm	N077-5177
320-54	Alumina Injector, 1.2mm, Optima 4300V	N077-1531
320-66	Purge Extension Window, Optima 4300V	N058-1497
320-65	Axial Purge Window, Optima 2000DV	0999-2731
320-71	Radial Purge Window, Optima 2000DV	B081-0377
320-67	Axial Purge Window, Optima 4000/5000DV	N077-1116
320-80	Radial Purge Window, Optima 4000/5000DV	N077-0322

Spray Chambers & Accessories

300-28	Nebulizer Adapter for Cyclonic Spray Chamber	
300-29	Cyclonic Spray Chamber, no Baffle with Nebulizer Adapter	N077-6052
300-30	Cyclonic Spray Chamber, Baffled with Nebulizer Adapter	N077-6053
300-30Q	Cyclonic Spray Chamber, Baffled, Quartz with Nebulizer Adapter	
300-31	Cyclonic Spray Chamber, 4mm Baffle with Nebulizer Adapter	N077-6090
300-32	Cyclonic Spray Chamber, Baffled, Optima 4300V	N077-1501

Nebulizers

500-71	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 2mL/min	0047-2022
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574

PerkinElmer® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	0047-3552
PT-2180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	N069-1595

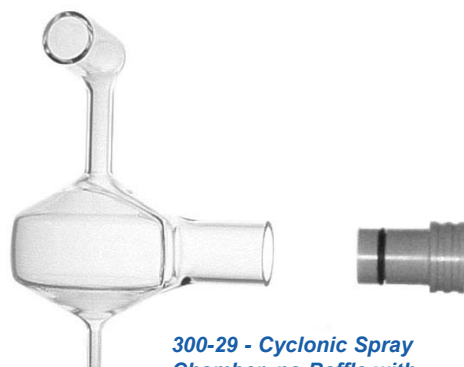
ICP & ICP/MS Consumables



**310-16 - Torch Body,
Optima 2000/4000/5000
DV, 1 Slot
N077-0338**



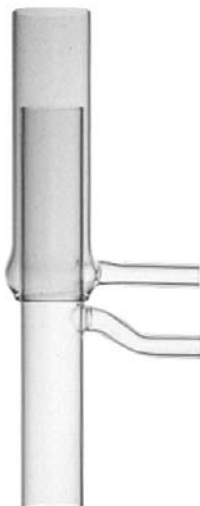
**310-17 - Torch Body,
Optima 4300V
N077-1500**



**300-29 - Cyclonic Spray
Chamber, no Baffle with
Nebulizer Adapter, N077-6052**



**300-32 - Cyclonic Spray Chamber,
Baffled, Optima 4300V
N077-1501**



**400-10 - Torch Body,
Elan, N812-2006**



**400-30 - Injector, 6100DRC,
2.0mm, WE02-3948 and 400-37 -
Injector Support/Torch Base-
DRC, WE02-3951**

PerkinElmer/SCIEX ELAN 250 & 500

Torches & Accessories

400-05	Short Form Torch (135mm overall length)	N810-2001
400-07	Long Form Torch (151mm overall length)	N810-2006
400-09	Long Form Torch (150mm overall length)	
320-33	Quartz Injector, 1.2mm	N068-1631
320-34	Quartz Injector, 1.6mm	0047-3292
320-35	Quartz Injector, 2.0mm	N812-5029
400-25	Torch Bonnet	

PerkinElmer/SCIEX ELAN 5000/6X00/9000/DRC II

Torches & Accessories

400-10	Torch Body, Elan	N812-2006
320-33	Quartz Injector, 1.2mm	N068-1631
320-34	Quartz Injector, 1.6mm	0047-3292
320-35	Quartz Injector, 2.0mm	N812-5029
320-51	Alumina Injector, 0.85mm	N812-6039
320-52	Alumina Injector, 1.5mm	N812-6040
320-53	Alumina Injector, 2.0mm	N812-6041
400-31	Quartz Injector, 0.85mm, DRC	WE02-7030
400-32	Quartz Injector, 1.5mm, DRC	WE02-7005
400-30	Quartz Injector, 2.0mm, DRC	WE02-3948
400-35	Injector Support/Torch Base	N812-0116
400-37	Injector Support/Torch Base, DRC	WE02-3951

Spray Chambers & Accessories

300-19MS	Cyclonic Spray Chamber	N812-2188
300-19MSJ	Cyclonic Spray Chamber, Water-Cooled	
300-19MSQ	Cyclonic Spray Chamber, Quartz	
300-19MSQJ	Cyclonic Spray Chamber, Water-Cooled, Quartz	
400-20	Cyclonic Spray Chamber, Quartz, DRC	WE02-5221
400-20J	Cyclonic Spray Chamber, Jacketed, Quartz, DRC	
400-36	Sciex O-ring Adapter Kit	N812-0100
400-38	Sciex O-ring Adapter Kit, DRC	
400-12	Scott Spray Chamber	
400-13	Scott Spray Chamber, Quartz	
400-14	Scott Spray Chamber, Water-Cooled	WE01-3829
400-16	Scott Spray Chamber, Water-Cooled, Quartz	

Nebulizers

500-72	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min	N810-2011
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	N068-1574
500-77Q	A-Type Concentric Nebulizer, 1 lpm, 30psi, 3mL/min, Quartz	WE02-4371
500-70QQDAC	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min, Quartz, Quick Disconnect, Argon Connect	

PerkinElmer® Sciex Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	0990-8587
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	N068-0375
PT-2300P	Black-White, 0.125" (3.18mm), PVC, 12/pk	N812-2012
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	0047-3550
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	N068-0376
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk	0047-3552
PT-2290SA	Violet-White, 0.110" (2.79mm), Santoprene, 12/pk	N812-2252

Spectro Analytical Instruments

Torches & Accessories

750-07	Torch, Spectroflame, 1.0mm	48205001
750-05	Torch, Spectroflame, 1.8mm, Standard	
750-05F	Torch, Spectroflame, 1.8mm, Standard with Fittings	75060596
750-08	Torch, Spectroflame, 2.5mm	
750-06	Demountable Torch, Spectroflame	48206002
750-09N	Demountable Torch, Nitrogen	
750-41	EOP Flared End Torch, 1.8mm	48105052A
750-41F	EOP Flared End Torch, 1.8mm with Fittings	75160592
750-40	EOP Flared End Torch, 2.5mm	48105052
750-40F	EOP Flared End Torch, 2.5mm with Fittings	75160526
750-42	Demountable EOP Torch	48206007
750-44	Demountable EOP Flared End Torch	
750-43	Torch Body for Semi-Demountable Torch, PTFE	
750-47	EOP Fixed Sheath Gas System Torch, 1.8 mm	
750-47F	EOP Fixed Sheath Gas System Torch, 1.8 mm with Fittings	75160549
750-48	EOP Fixed Sheath Gas System Torch, 1.8 mm	
750-48F	EOP Fixed Sheath Gas System Torch, 1.8 mm with Fittings	75160537
750-49	SOP Fixed Sheath Gas System Torch, 3.2 mm	
750-49F	SOP Fixed Sheath Gas System Torch, 3.2 mm with Fittings	75260533
750-21	Quartz Injector, 1.5mm	48105008
750-22	Quartz Injector, 1.8mm	48105010
750-23	Quartz Injector, 2.5mm	48105009
750-46	Spectro Injector 2.5	48105058
750-55	Gas Adapter	

Spray Chambers & Accessories

750-10	Conical Spray Chamber, Slurry, Open End	
750-12	Conical Spray Chamber, Vertical Exit, Open End	48105003
750-13	Scott Spray Chamber, Double Pass, 90° Exit	48105051
750-14	Scott Spray Chamber, Double Pass, Large	48105006
750-15	Cyclonic Spray Chamber, 13mm Drain	
750-16	Cyclonic Spray Chamber, MLN, 13mm Drain	
750-17	Elbow Adapter, EOP Torch to Spray Chamber	48105062
750-18	Elbow Adapter, EOP Torch to Slurry Spray Chamber	48105002
750-30	Spectro Drain Pressure Lock	

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min	76060510
500-92S	Crossflow Nebulizer, 34mm	75060502
510-20S	Modified Lichte MDSN Nebulizer, 1 lpm Ar	48205036
520-30S	PTFE End Cap for use with 34mm Open End Spray Chamber	75060522
520-32S	O-ring for 500-92S	
750-93	O-ring for Crossflow Nebulizer (OEM Replacement)	

Spectro Type 2-Stop Pump Tubing

PT-2080P	Orange-Green, 015" (.38mm), PVC, 12/pk	47201037
PT-2120P	Orange-White, 0.025" (.64mm), PVC, 12/pk	47101001
PT-2140P	Orange-Orange, 0.035" (.89mm), PVC, 12/pk	47101003
PT-2150P	White-Black, 0.037" (.95mm), PVC, 12/pk	47101004
PT-2200P	Gray-Gray, 0.050" (1.30mm), PVC, 12/pk	47501010
PT-2220P	Yellow-Blue, 0.06" (1.52mm), PVC, 12/pk	47101006
PT-2230P	Blue-Blue, 0.065" (1.65mm), PVC, 12/pk	47101014
PT-2240P	Blue-Green, (1.75mm), PVC, 12/pk	47101005
PT-2080SV	Orange-Green, 015" (.38mm), Solva, 12/pk	47501016
PT-2140SV	Orange-Orange, 0.035" (.89mm), Solva, 12/pk	47501018

Spectro Type 3-Stop Pump Tubing

PT-3140P	Orange-Orange, 0.035" (.89mm), PVC, 12/pk	47101010
PT-3150P	White-Black, 0.037" (.95mm), PVC, 12/pk	47101009

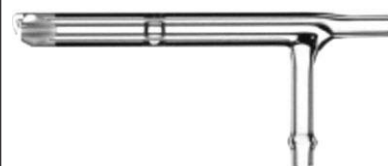
ICP & ICP/MS Consumables



750-40 - EOP Flared End Torch, 2.5mm
48105052



750-12 - Small Upward Conical Spray Chamber
48105003



510-20S - Modified Lichte Nebulizer (MLN), 1 lpm Ar, 48205036



250-08 - Torch



250-25 - Torch Bonnet
190400-75



500-92 - Crossflow Nebulizer
126989-00

TJA 2000-2400 Series

Torches & Accessories

250-08	Torch	
250-25	Torch Bonnet	190400-75

Spray Chambers & Accessories

120-56	O-ring for Spray Chamber, PTFE Coated Viton	
250-16	Scott Spray Chamber, Standard	127947-00
250-30	Aerosol Baffle for 250-16	003952-00
285-01	Rinse Station 1 Port, 12mm	
285-02	Rinse Station 2 Port, 12mm	
285-03	Rinse Station 2 Port, 23mm	
510-26	Cyclonic Spray Chamber, 12/5 Socket Top, 4mm Drain	

Nebulizers

500-92	Crossflow Nebulizer	126989-00
520-36	O-ring Kit for 500-92	133202-50
520-38	Argon Inlet Fittings for 500-92	

TJA® Type 3-Stop Pump Tubing

PT-3020P	Orange-Red, .0075" (.19mm), PVC, 12/pk	
PT-3080P	Orange-Green, .015" (.38mm), PVC, 12/pk	130177-06
PT-3140P	Orange-Orange, 0.035" (.89mm), PVC, 12/pk	130177-00
PT-3180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	130177-01
PT-3140SI	Orange-Orange, 0.035" (.89mm), Silicone, 6/pk	130177-02
PT-3180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	130177-03
PT-3140SV	Orange-Orange, 0.035" (.89mm), Solva, 12/pk	131731-02
PT-3180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	78532
PT-3120SV	Yellow-Yellow, 0.056" (1.42mm), Solva, 12/pk	78530
PT-3230SV	Blue-Blue, 0.065" (1.65mm), Solva, 12/pk	131731-00
PT-3260SV	Purple-Purple, 0.080" (2.06 mm), Solva, 12/pk	131731-01
PT-3140V	Orange-Orange, 0.035" (.89mm), Viton, 6/pk	130177-04
PT-3180V	Red-Red, 0.045" (1.14mm), Viton, 6/pk	130177-05
PT-3210V	Yellow-Yellow, 0.056" (1.42mm), Viton, 12/pk	
ISMK-101	Internal Standard Mixing Kit, 5/pk, This product allows for simultaneous introduction of sample and internal standard.	136708-00



285-01 - Rinse Station 1
Port, 12mm



285-02 - Rinse Station 2
Port, 12mm



285-03 - Rinse Station 2
Port, 23mm

TJA 975, 9000, 61 & 1100

Torches & Accessories

250-05	Demountable Torch with Removable 1.0mm Tip	190400-54
250-05-A	Demountable Torch with 1 Extra Removable 1.0mm Tip	
250-05-B	Demountable Torch with 2 Extra Removable 1.0mm Tips	
250-05-C	Demountable Torch with 3 Extra Removable 1.0mm Tips	
250-05W	Demountable Torch with Removable 1.0mm Tip, Wear Metals	
250-06	Demountable Torch with Removable 1.25mm Tip	
250-06-A	Demountable Torch with 1 Extra Removable 1.25mm Tip	
250-06-B	Demountable Torch with 2 Extra Removable 1.25mm Tips	
250-06W	Demountable Torch with Removable 1.25mm Tip, Wear Metals	
250-07	Demountable Torch with Removable 1.5mm Tip	
250-07-A	Demountable Torch with 1 Extra Removable 1.5mm Tip	
250-07-B	Demountable Torch with 2 Extra Removable 1.5mm Tips	
250-09	Demountable Torch with Removable 1.7mm Tip	
250-21	Torch Extension	
250-22	Torch Extension with Optical Port	
250-25	Torch Bonnet	190400-75
260-55	Demountable Torch with Removable Tip, High Solids	
260-62	TJA Standard Low Flow Torch	
260-81	Alumina Injector Tube 1.5mm	136436-02
260-82	HF/CR Torch Body for Alumina/Sapphire Injector	
260-85	PTFE Injector Holder	

Spray Chambers & Accessories

250-12	Scott Spray Chamber	190400-65
250-18	Scott Spray Chamber, Curved Drain	
250-20	Scott Spray Chamber, Open Ends, Water-Cooled	
250-20R	O-ring for Scott Spray Chamber, Water-Cooled	
250-30	Aerosol Baffle for 250-12 & 250-18	003952-00
285-01	Rinse Station 1 Port, 12mm	
285-02	Rinse Station 2 Port, 12mm	
285-03	Rinse Station 2 Port, 23mm	

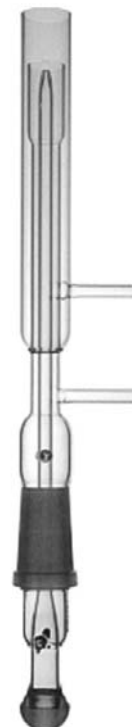
Nebulizers

500-92	Crossflow Nebulizer	126989-00
520-36	O-ring Kit for 500-92	133202-50
520-38	Argon Inlet Fittings for 500-92	

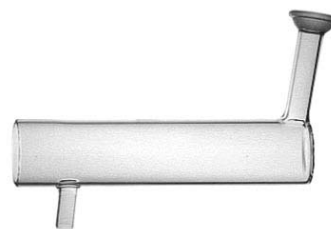
TJA® Type 3-Stop Pump Tubing

PT-3020P	Orange-Red, .0075" (.19mm), PVC, 12/pk	
PT-3080P	Orange-Green, .015" (.38mm), PVC, 12/pk	130177-06
PT-3140P	Orange-Orange, 0.035" (.89mm), PVC, 12/pk	130177-00
PT-3180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	130177-01
PT-3140SI	Orange-Orange, 0.035" (.89mm), Silicone, 6/pk	130177-02
PT-3180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	130177-03
PT-3140SV	Orange-Orange, 0.035" (.89mm), Solva, 12/pk	131731-02
PT-3180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	78532
PT-3210SV	Yellow-Yellow, 0.056" (1.42mm), Solva, 12/pk	78530
PT-3230SV	Blue-Blue, 0.065" (1.65mm), Solva, 12/pk	131731-00
PT-3260SV	Purple-Purple, 0.080" (2.06 mm), Solva, 12/pk	131731-01
PT-3140V	Orange-Orange, 0.035" (.89mm), Viton, 6/pk	130177-04
PT-3180V	Red-Red, 0.045" (1.14mm), Viton, 6/pk	130177-05
PT-3210V	Yellow-Yellow, 0.056" (1.42mm), Viton, 12/pk	
ISMK-101	Internal Standard Mixing Kit, 5/pk, This product allows for simultaneous introduction of sample and internal standard.	136708-00

ICP & ICP/MS Consumables



250-05 - Demountable Torch with Removable 1.0mm Tip, 190400-54



250-12 - Scott Spray Chamber, 190400-65



**275-07 - Ceramic Base
Torch, High Flow with
1.5mm Injector
126432-01**

Did you know...

Ceramic base torches for TJA instruments may be rebuilt multiple times at a very moderate price. Available with or without a new injector, rebuilt torches receive new precision bore quartz inner and outer tubes and new argon fittings. Furthermore, our rebuilt torches are subjected to the same QC program as our new torches. So before you throw away your next broken ceramic base torch, consider having us rebuild it. After all, it can only save you money.

TJA 61E Polyscan, Atomscan 16, 25, Advantage Radial, IRIS & POEMS

Torches & Accessories

275-06	Ceramic Base Torch, High/Low Flow with 1.5mm Injector	126432-02
275-06W	Ceramic Base Torch, High/Low Flow, 1.5mm Inj., Wear Metals	
275-06W/O	Ceramic Base Torch, High/Low Flow without Injector	126440-02
275-07	Ceramic Base Torch, High Flow with 1.5mm Injector	126432-01
275-07HF	Ceramic Base Torch, High Flow with 1.5mm Alumina Injector	127179-01
275-07W/O	Ceramic Base Torch, High Flow without Injector	126440-01
275-08	Ceramic Base Torch, High Flow with 1.0mm Injector, Organics	125124-01
275-08W/O	Ceramic Base Torch, High Flow without Injector	126440-01
275-09	Ceramic Base Torch, Slotted with 1.5mm Injector	126432-04
275-09W/O	Ceramic Base Torch, Slotted without Injector	126440-06
250-40	Quartz Injector, 1.0mm	125407-01
250-41	Quartz Injector, 1.5mm	125407-00
250-42	Quartz Injector, 2.0mm	136502-01
250-43	Quartz Injector, 2.4mm	136502-02
254-45	O-ring for Injector Tube	125847-00
260-83	Alumina Injector, 1.5mm	136436-01
260-84	Alumina Injector, 1.0mm	
275-20	TJA PTFE Adapter, Torch	
275-25	Anti-arc Cap	085207-00
275-26	Anti-arc Cap, Flat Edge	085207-01
275-35	Argon Fittings for Ceramic Base Torches	

Spray Chambers & Accessories

250-30	Aerosol Baffle for 250-19	003952-00
275-14	Cyclonic Spray Chamber, Radial, Pump	139663-00
275-18	Cyclonic Spray Chamber, Radial, Pump	140542-00
275-19	Cyclonic Spray Chamber, 10mm Drain	136105-00
275-19J	Cyclonic Spray Chamber, Water-Cooled, 10mm Drain	
275-21	Conical Spray Chamber	139219-00
275-53	Conical Spray Chamber, Water-Cooled	139123-00
285-01	Rinse Station 1 Port, 12mm	
285-02	Rinse Station 2 Port, 12mm	
285-03	Rinse Station 2 Port, 23mm	

Nebulizers

500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	134365-00
500-92	Crossflow Nebulizer	126989-00
510-10	Noordermeer V-Groove MDSN Nebulizer	140094-00
520-30	PTFE End Cap for use with 35mm Open End Spray Chambers	
520-36	O-ring Kit for 500-92	133202-50
520-38	Argon Inlet Fittings for 500-92	

TJA® Type 3-Stop Pump Tubing

PT-3020P	Orange-Red-Orange, .0075" (.19mm), PVC, 12/pk	
PT-3080P	Orange-Green-Orange, .015" (.38mm), PVC, 12/pk	130177-06
PT-3140P	Orange-Orange, 0.035" (.89mm), PVC, 12/pk	130177-00
PT-3180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk	130177-01
PT-3140SI	Orange-Orange, 0.035" (.89mm), Silicone, 6/pk	130177-02
PT-3180SI	Red-Red, 0.045" (1.14mm), Silicone, 6/pk	130177-03
PT-3140SV	Orange-Orange, 0.035" (.89mm), Solva, 12/pk	131731-02
PT-3180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk	78532
PT-3210SV	Yellow-Yellow, 0.056" (1.42mm), Solva, 12/pk	78530
PT-3230SV	Blue-Blue, 0.065" (1.65mm), Solva, 12/pk	131731-00
PT-3260SV	Purple-Purple, 0.080" (2.06 mm), Solva, 12/pk	131731-01
PT-3140V	Orange-Orange, 0.035" (.89mm), Viton, 6/pk	130177-04
PT-3180V	Red-Red, 0.045" (1.14mm), Viton, 6/pk	130177-05
PT-3210V	Yellow-Yellow, 0.056" (1.42mm), Viton, 12/pk	
ISMK-101	Internal Standard Mixing Kit, 5/pk, This product allows for simultaneous introduction of sample and internal standard.	136708-00

TJA Trace Advantage Axial, Trace Scan & IRIS AP

Torches & Accessories

275-10	Ceramic Base Torch, Trace with 1.5mm Injector	126432-03
275-10W/O	Ceramic Base Torch, Trace without Injector	126440-03
275-10HF	Ceramic Base Torch, Trace with 1.5mm Alumina Injector	138566-03
275-10DV	Ceramic Base Torch, DV with 1.5mm Injector	
275-10DVKIT	Ceramic Base Torch, DV, 1.5mm Injector, Optic Sleeve, Seal	138562-00
275-10DVW/O	Ceramic Base Torch, DV without Injector	126440-05
250-23	Optic Sleeve for DV Torch	138563-00
250-40	Quartz Injector, 1.0mm	125407-01
250-41	Quartz Injector, 1.5mm	125407-00
250-42	Quartz Injector, 2.0mm	136502-01
250-43	Quartz Injector, 2.4mm	136502-02
260-83	Alumina Injector, 1.5mm	136436-01
260-84	Alumina Injector, 1.0mm	
275-20	PTFE Adapter, Torch to Cyclonic Spray Chamber	

Spray Chambers & Accessories

275-13	Cyclonic Spray Chamber, Axial, Pump	139662-00
275-15	Cyclonic Spray Chamber, Gravity Drain, Trace	134620-00
275-15J	Cyclonic Spray Chamber, Water-Cooled, Gravity Drain, Trace	
275-16	Cyclonic Spray Chamber, Axial, Gravity Drain	136120-00
250-19	Spray Chamber, Open End	130089-00
285-01	Rinse Station 1 Port, 12mm	
285-02	Rinse Station 2 Port, 12mm	
285-03	Rinse Station 2 Port, 23mm	

Nebulizers

500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	134365-00
500-92	Crossflow Nebulizer	126989-00
510-10	Noordermeer V-Groove MDSN Nebulizer	140094-00
520-30	PTFE End Cap for use with 35mm Open End Spray Chambers	
520-36	O-ring Kit for 500-92	133202-50
520-38	Argon Inlet Fittings for 500-92	

TJA® Type 3-Stop Pump Tubing

See opposite page for complete list of TJA® Type Pump tubing.

ICP & ICP/MS Consumables



275-10DV - Ceramic Base Torch, DV with 1.5mm Injector



275-15 - Cyclonic Spray Chamber, Gravity Drain, Trace 134620-00

Determining the Correct Replacement TJA Ceramic Base Torch and Injector

Follow the charts below to identify which torch and injector you have and the correct replacement part number from Precision Glassblowing.

Ceramic Base Torches

TJA Part #	Rings on Outer Tube of Torch	Rings on Injector (Center Tube)	Precision Part #
126432-02	1 Red Ring, Approx. 63mm Long Outer Tube	1.5mm Quartz Injector, 1 Red Ring	275-06
126432-01	2 Red Rings, Approx. 63mm Long Outer Tube	1.5mm Quartz Injector, 1 Red Ring	275-07
127179-01	2 Red Rings, Approx. 63mm Long Outer Tube	1.5mm Alumina Injector, No Ring	275-07HF
125124-01	2 Red Rings, Approx. 63mm Long Outer Tube	1.0mm Injector, 2 Red Rings	275-08
126432-03	2 Red Rings, Approx. 136mm Long Outer Tube	1.5mm Quartz Injector, 1 Red Ring	275-10
138562-00	2 Red Rings, Hole for Radial Viewing, Approx. 136mm Long Outer Tube	1.5mm Quartz Injector, 1 Red Ring	275-10DV

Injectors

TJA Part #	Rings on Injector (Center Tube)	Precision Part #
125407-01	Quartz, 1.0mm bore, 2 Red Rings	250-40
125407-00	Quartz, 1.5mm bore, 1 Red Ring	250-41
136502-01	Quartz, 2.0mm bore, 1 Blue Ring	250-42
136502-02	Quartz, 2.4mm bore, 2 Blue Rings	250-43
N/A	Alumina, 1.0mm bore, No Rings	260-84
136463-01	Alumina, 1.5mm bore, No Rings	260-83



**800-05 - Low Flow
Torch, One Piece,
Radial, 20-100696-90**



**800-12 - Low Flow
Torch, One Piece,
Axial, 90° Bend
20-100904-00**



**800-21 - Cyclonic Spray
Chamber, 8mm Top,
4mm Drain
20-100817-00**

Varian Liberty Series & Vista

Torches & Accessories, Radial

800-05	Low Flow Torch, One Piece, Radial	20-100696-90
800-05B	Low Flow Torch, One Piece with Ball Joint, Radial	20-100696-90B
800-08	Extended for Nitrogen Determination	20-100764-00
800-10	Torch, Demountable, Body Only, Radial	20-100729-00
800-25	Torch Bonnet	20-100707-00
800-41	Quartz Injector, 1.8mm	20-100730-00
800-42	Quartz Injector, 0.8mm	20-100775-00
800-45	Alumina Injector, 1.8mm	24-100675-00
800-46	Alumina Injector, 2.5mm	
800-48	PTFE Injector Holder	99-100573-00
800-50	Demountable Torch, Complete Kit for Radial (800-10, -45, -48)	99-100568-00

Torches & Accessories, Axial

800-12	Low Flow Torch, One Piece, Axial, 90° Bend	20-100904-00
800-13	High Solids Torch, One Piece, Axial, 90° Bend	20-100948-00
800-14	Low Flow Torch, One Piece, Axial	20-100812-00
800-15	Torch, Demountable, Body Only, Axial	20-100834-00
800-41	Quartz Injector, 1.8mm	20-100730-00
800-42	Quartz Injector, 0.8mm	20-100775-00
800-45	Alumina Injector, 1.8mm	24-100675-00
800-46	Alumina Injector, 2.5mm	
800-48	PTFE Injector Holder	99-100573-00
800-49	Demountable Torch, Complete Kit for Axial (800-15, -45, -48)	99-100847-00

Spray Chambers & Accessories

800-21	Cyclonic Spray Chamber, 8mm Top, 4mm Drain	20-100817-00
800-17	Sturman-Masters Spray Chamber, Water-Cooled	99-100704-00

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min	20-100765-00
500-80	K-Type Concentric Nebulizer, 0.7 lpm Ar, 30psi, 3mL/min	20-100695-00
500-85	K-Type, High Flow Concentric Nebulizer	20-100816-00
510-10	Noordermeer V-Groove MDSN Nebulizer	
800-55	High Solids V-groove Nebulizer, 0.7 lpm Ar, 35psi	99-100574-00

Varian® Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	37-100272-00
PT-2160P	White-White, 0.040" (1.02mm), PVC, 12/pk	37-100344-00
PT-2200P	Gray-Gray, 0.050" (1.30mm), PVC, 12/pk	37-100345-00
PT-2230P	Blue-Blue, 0.065" (1.65mm), PVC, 12/pk	37-100346-00
PT-2270P	Purple-Black, 0.090" (2.29mm), PVC, 12/pk	37-100273-00
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk	37-100348-00
PT-2160SV	White-White, 0.040" (1.02mm), Solva, 12/pk	37-100350-00
PT-2200SV	Gray-Gray, 0.050" (1.30mm), Solva, 12/pk	37-100352-00
PT-2130SA	Black-Black, 0.030" (.76mm), Santoprene, 12/pk	37-100441-00
PT-2160SA	White-White, 0.040" (1.02mm), Santoprene, 12/pk	37-100442-00
PT-2200SA	Gray-Gray, 0.050" (1.30mm), Santoprene, 12/pk	37-100443-00
PT-2230SA	Blue-Blue, 0.065" (1.65mm), Santoprene, 12/pk	37-100444-00
PT-2100V	Orange-Yellow, 0.020" (.51mm), Viton, 12/pk	37-100435-00
PT-2130V	Black-Black, 0.030" (.76mm), Viton, 12/pk	37-100436-00
PT-2160V	White-White, 0.040" (1.02mm), Viton, 12/pk	37-100437-00
PT-2200V	Gray-Gray, 0.050" (1.30mm), Viton, 12/pk	37-100438-00
PT-2230V	Blue-Blue, 0.065" (1.65mm), Viton, 12/pk	37-100439-00

UltraMass (Varian)

Torches & Accessories

800-06	Torch, One Piece, Low Flow	20-100783-00
800-11	Torch, Demountable, Body Only	20-100793-00
800-41	Quartz Injector, 1.8mm	20-100730-00
800-42	Quartz Injector, 0.8mm	20-100775-00
800-45	Alumina Injector, 1.8mm	24-100675-00
800-46	Alumina Injector, 2.5mm	
800-48	PTFE Injector Holder	99-100573-00
800-51	Demountable Torch, Complete (800-11, -45, -48)	99-100717-00

Spray Chambers & Accessories

510-26	Cyclonic Spray Chamber, 12/5 Socket Top, 4mm Drain	
800-21	Cyclonic Spray Chamber, 8mm Top, 4mm Drain	20-100817-00

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min	20-100765-00
500-85	K-Type, High Flow Concentric Nebulizer	20-100816-00

Varian ICP-MS Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk	37-100272-00
PT-2160P	White-White, 0.040" (1.02mm), PVC, 12/pk	37-100344-00
PT-2200P	Gray-Gray, 0.050" (1.30mm), PVC, 12/pk	37-100345-00
PT-2230P	Blue-Blue, 0.065" (1.65mm), PVC, 12/pk	37-100346-00
PT-2270P	Purple-Black, 0.090" (2.29mm), PVC, 12/pk	37-100273-00



**500-70 - C-Type Concentric Nebulizer,
1 lpm Ar, 30psi, 1mL/min, 20-100765-00**



**500-85 - K-Type, High Flow Concentric
Nebulizer, 20-100816-00**

ICP & ICP/MS Consumables



**800-06 - Torch, One
Piece, Low Flow
20-100783-00**



**800-21 - Cyclonic
Spray Chamber, 8mm
Top, 4mm Drain
20-100817-00**



**450-05 - Torch, 1.5mm
3201192**



**450-13 - Conical Spray
Chamber with Impact
Bead, Quartz, 3600170**



**450-28 - Torch Bonnet,
72mm, 3204703**

VG PlasmaQuad 1-3 & Genesis

Torches & Accessories

450-05	Torch, 1.5mm	3201192
450-06	Torch, 2.0mm	3201732
450-08	Torch Body, Demountable	1200080
450-09	Quartz Injector	
450-10	Torch Body, Demountable with Quartz Injector	
450-11	Alumina Injector	1200079
450-12	Torch Body, Corrosion Resistant	3203095
450-21	Torch Extension	
450-25	Torch Bonnet	
450-26	Torch Bonnet Cap	1200274
450-27	RF Insulator Shield	3203025
450-28	Torch Bonnet, 72mm	3204703
450-29	Torch Shield	3203789

Spray Chambers & Accessories

450-13	Conical Spray Chamber with Impact Bead, Quartz	3600170
450-14	Conical Spray Chamber with Impact Bead for Concentric Neb.	
450-15	Scott Spray Chamber, Water-Cooled, Pyrex	
450-16	Scott Spray Chamber, Water-Cooled, Quartz	3200841
450-17	Conical Spray Chamber, Water-Cooled for Maxim	3203739
450-22	Conical Spray Chamber, Water-Cooled, Pyrex	3204313
450-22Q	Conical Spray Chamber, Water-Cooled, Quartz	
450-30	Elbow for use with 450-13, Quartz	3600169
450-31	Elbow, Ball & Socket, Pyrex	
450-32	Elbow, Ball & Socket, Quartz	3200727

Nebulizers

500-70	C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 1mL/min	1040894
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Accessories

450-18	Clamp, Stainless Steel, #12	1201261
450-19	Clamp, Stainless Steel, #18	1202081
450-36	UV Laser Sample Cell	3007383
450-40	Probe UV Laser Sample Cell	3201104
450-42	Micro Probe UV Laser Sample Cell	
450-43	Quartz Sleeve	3202287
450-44	Quartz Tube	3201759
450-45	Quartz Sleeve, #2	3200176
450-46	Quartz Sleeve, Silica	3201070
450-49	Quartz Socket Tube Adapter	3200004
450-51	Glass Probe	1041167

VG Type 2-Stop Pump Tubing

PT-2130P	Black-Black, 0.030" (.76mm), PVC, 12/pk
PT-2180P	Red-Red, 0.045" (1.14mm), PVC, 12/pk
PT-2130SV	Black-Black, 0.030" (.76mm), Solva, 12/pk
PT-2180SV	Red-Red, 0.045" (1.14mm), Solva, 12/pk
PT-2130SI	Black-Black, 0.030" (.76mm), Silicone, 6/pk
PT-2020P	Orange-Red, .0075" (.19mm), PVC, 12/pk
PT-2130V	Black-Black, 0.030" (.76mm), Viton, 12/pk

Specialty ICP Items

Torches & Accessories

550-05	1 Piece Torch, Beveled End, 1.0 Injector	318-0016
550-06	1 Piece Torch, Beveled End, 1.5 Injector	
550-20	1 Piece Torch with Ball Joint, Aqueous	120-3748
550-20F	1 Piece Torch with Ball Joint, Aqueous with Fittings	120-00336-1
550-22	1 Piece Torch with Ball Joint, Organics	120-3749
550-22F	1 Piece Torch with Ball Joint, Organics with Fittings	120-00336-2
550-22W	1 Piece Torch with Ball Joint, Organics, Wear Metals	
550-43	Demountable Torch	318-0001
550-50	Aqueous Torch, Axial, 190mm Long	318-00062
550-64	Aqueous Torch, Axial	120-00200-1
550-64F	Aqueous Torch, Axial with Fittings	120-00309-1
550-65	Aqueous Torch, Axial, Dual View	318-00065
550-65F	Aqueous Torch, Axial, Dual View with Fittings	120-00309-2
550-69	Demountable Torch, Axial, Aqueous	318-00069
550-70	Demountable Torch, Dual View, Aqueous	318-00070
550-76	1 Piece Torch, Axial, 1.5 Injector	318-00076
550-45	Quartz Injector	318-0004

Spray Chambers & Accessories

550-25	Spray Chamber, Scott, Radial	120-3751
550-25J	Spray Chamber, Scott, Radial, Jacketed	
550-27	Cyclonic Spray Chamber, Radial, Hildebrand Grid	
550-37	Cyclonic Spray Chamber, Radial, Concentric	
550-55	Spray Chamber, Scott, Axial	120-00201-1
550-57	Cyclonic Spray Chamber, Axial, Concentric	
550-58	Cyclonic Spray Chamber, Axial, Hildebrand Grid	
550-60	Quartz Purge Window	
550-66	Purge Tube, Axial, Quartz	318-00066
550-67	Purge Tube, V2, Dual View	318-00067
550-68	Purge Tube, Radial	318-00068

Specialty 2-Stop Pump Tubing

PT-2140P	Orange, 0.020", PVC, 12/pk	309-3551
PT-2130P	Black, 0.030", PVC, 12/pk	309-3552
PT-2180P	Red, 0.045", PVC, 12/pk	309-3538

ICP & ICP/MS Consumables



550-20 - 1 Piece Torch with Ball Joint, Aqueous, 120-3748



510-26T - Cyclonic Spray Chamber, PTFE

Spray Chambers

Spray Chambers & Accessories

510-26	Cyclonic Spray Chamber, 12/5 Socket, 4mm Drain	
510-26J	Cyclonic Spray Chamber, 12/5 Socket, 4mm Drain, Jacketed	
510-26NB	Cyclonic Spray Chamber, 12/5 Socket, 4mm Drain, No Baffle	
510-26Q	Cyclonic Spray Chamber, 12/5 Socket, 4mm Drain, Quartz	
510-26QJ	Cyclonic Spray Chamber, 12/5 Socket, 4mm Drain, Quartz, Jacketed	
510-26T	Cyclonic Spray Chamber, PTFE	
510-26U	Cyclonic Spray Chamber, Ultem	
510-27	Cyclonic Spray Chamber for Modified Lichte	
510-27J	Cyclonic Spray Chamber for Modified Lichte, Jacketed	
510-27Q	Cyclonic Spray Chamber for Modified Lichte, Quartz	
510-30	Mini Cyclonic Spray Chamber	

Nebulizers

About our Nebulizers

Precision Glassblowing of Colorado offers the widest range of nebulizers available anywhere including exclusive rights to the world renowned Noordermeer V-groove and the patented Modified Lichte. Other companies may offer similar nebulizers but there are no substitutes for the originals. Furthermore with an ICP on site, every nebulizer is tested as part of our stringent Quality Assurance/Quality Control program.

Concentric Nebulizers

In the mid-1970's, the glass concentric nebulizer was introduced to the world and was shown to be a major improvement over nebulizers available at the time. For nearly 20 years, the common concentric nebulizer has remained virtually unchanged and is available most anywhere. Precision Glassblowing of Colorado has been offering Pyrex and quartz concentric nebulizers since 1987 but we have spent nearly 10 years developing a revolutionary design for optimal sample transport in our glass concentric nebulizers. The new design offers not only great performance but also unparalleled consistency and stability. Manufactured by our master glassblowers, we can offer most any combination of standard Argon flow, PSI, and sample flow rate and with our new "QD" and "AC" fittings for sample and argon connections, it takes just moments to replace an old nebulizer. So, the next time you are looking for a concentric nebulizer, discover what the top instrument manufacturers have known for years.

Choosing the Right Nebulizer

Depending on what types of analyses you are performing and the various matrices, choosing the right nebulizer can be the difference between good results and great results. The chart on the opposite page gives a brief overview of the various nebulizers available from Precision Glassblowing. If you cannot find what you are looking for feel free to give us a call and someone from our knowledgeable staff will be more than happy to work with you and answer any questions you may have.

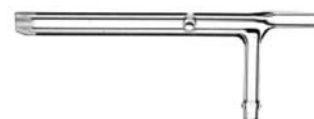
Nebulizers

ICP & ICP/MS Consumables

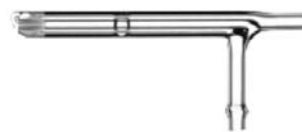
Nebulizer Type	Material/Chemical Resistance	Application	Sensitivity
Crossflow <i>pg. 29</i>	PVDF fluorinated polymer; Good chemical resistance for most acids and organic solvents	For use with Scott style spray chambers; High stability; Great high-solids capability	Moderate sensitivity due to wide range of droplet size
Noordermeer V-Groove <i>pg. 29</i>	Quartz or Pyrex; Good for most acids and organic solvents; Not recommended for HF	For use with Scott style and cyclonic spray chambers; Great high-solids capability; Same principle as Babington	Moderate to high sensitivity for a high-solids nebulizer; Better efficiency compared to Babington V-groove
Modified Lichte <i>pg. 29</i>	Quartz or Pyrex; Good for most acids and organic solvents; Not recommended for HF	For use with Modified Lichte spray chamber; Unique patented design; Great high-solids capability	Great sensitivity; Patented design with impingement bead to further atomize aerosol resulting in uniform droplet size
Glass Concentric <i>pg. 28</i>	Quartz or Pyrex; Good for most acids and organic solvents; Not recommended for HF	For use with Scott style and cyclonic spray chambers; Not recommended for high-solids applications	Great sensitivity due to uniform droplet size inherent in the concentric design
PFA Concentric <i>pg. 30</i>	PFA perfluoro polymer; Good for all acids and common organic solvents; Highly recommended for HF applications	For use with Scott style and cyclonic spray chambers; Great for samples with high dissolved solids; Not intended for high suspended solids	Great sensitivity due to uniform droplet size inherent in the concentric design
Burgener Mira Mist & Ari Mist <i>pg. 31</i>	Teflon; can be used for any liquid. PEEK; Good chemical resistance for most acids and organic solvents.	For use with Scott style and cyclonic spray chambers; Great high-solids capability.	Great Sensitivity; enhanced parallel path design improves upon original Babington V-groove.



500-92 - Crossflow Nebulizer



510-10 - Noordermeer V-Groove MDSN Nebulizer



510-20S - Modified Lichte MDSN Nebulizer, 1 lpm Ar



500-72 - C-Type Concentric Nebulizer, 1 lpm Ar, 30psi, 3mL/min



PFA Concentric Nebulizer



TMM 3500 - Teflon Mira Mist



500-70 - 30psi, 1mL/min



**500-72QD - 30psi, 3mL/min,
Quick Disconnect**



**500-80QDAC - 30psi, 3mL/min,
Quick Disconnect, Argon
Connect**



**500-QD - Quick Disconnect for
Nebulizer, Teflon with PFA
Capillary Tubing**



**500-AC - Argon Connect for
Concentric Nebulizers Includes
Insert and Body**

Glass Concentric Nebulizers

Concentric nebulizers sample uptake rates are as follows:

Sample flow rate (mL/min)	Accepted range (mL/min)
Micro	0.1-0.4
1.0	0.5-1.4
2.0	1.5-2.4
3.0	2.5-3.4
Argon Pressure (psi)	Accepted range (psi)
30	28-38
50	45-55

Aerosalt - High Solids, 0.7 lpm Ar

500-65QD 30 psi, 2 mL/min, Quick Disconnect

500-65QDAC 30 psi, 2 mL/min, Quick Disconnect, Argon Connect

C-Type, 1.0 lpm Ar

500-70 30psi, 1mL/min

500-70M 30psi, Microflow (0.1-0.4 mL/min)

500-70MQD 30psi, Microflow (0.1-0.4 mL/min), Quick Disconnect

500-70P 50psi, 1mL/min

500-70Q 30psi, 1mL/min, Quartz

500-70QD 30psi, 1mL/min, Quick Disconnect

500-70QDAC 30psi, 1mL/min, Quick Disconnect, Argon Connect

500-70QP 50psi, 1mL/min, Quartz

500-70QQD 30psi, 1mL/min, Quartz Quick Disconnect

500-70QQDAC 30psi, 1mL/min, Quartz Quick Disconnect, Argon Connect

500-71 30psi, 2mL/min

500-71P 50psi, 2mL/min

500-71Q 30psi, 2mL/min, Quartz

500-71QD 30psi, 2mL/min, Quick Disconnect

500-72 30psi, 3mL/min

500-72P 50psi, 3mL/min

500-72Q 30psi, 3mL/min, Quartz

500-72QD 30psi, 3mL/min, Quick Disconnect

500-72QQD 30psi, 3mL/min, Quartz Quick Disconnect

A-Type, 1.0 lpm, Ar

500-75 30psi, 1mL/min

500-75P 50psi, 1mL/min

500-75Q 30psi, 1mL/min, Quartz

500-76 30psi, 2mL/min

500-76P 50psi, 2mL/min

500-76Q 30psi, 2mL/min, Quartz

500-77 30psi, 3mL/min

500-77P 50psi, 3mL/min

500-77Q 3mL/min, Quartz

500-77QD 30psi, 3mL/min, Quick Disconnect

K-Type, 0.7 lpm Ar

500-80 30psi, 3mL/min

500-80Q 30psi, 3mL/min, Quartz

500-80QD 30psi, 3mL/min Quick Disconnect

500-80QDAC 30psi, 3mL/min Quick Disconnect, Argon Connect

500-80QQD 30psi, 3mL/min, Quartz Quick Disconnect

500-81 30psi, 1mL/min

500-81QD 30psi, 1mL/min, Quick Disconnect

500-81QDAC 30psi, 1mL/min, Quick Disconnect, Argon Connect

500-82 30psi, 2mL/min

500-82QD 30psi, 2mL/min Quick Disconnect

500-82QDAC 30psi, 2mL/min Quick Disconnect, Argon Connect

500-85 High Flow Concentric Nebulizer

500-AC Argon Connect for Concentric Nebulizers Includes Insert and Body

500-QD Quick Disconnect for Nebulizer, Teflon with PFA Capillary Tubing

Crossflow Nebulizers

500-92	Crossflow Nebulizer
500-92S	Crossflow Nebulizer, 34mm
500-93	Crossflow Nebulizer, High-Solids
500-94	High Flow Crossflow Nebulizer

V- Groove Nebulizers

Babington V-Groove

510-50	Babington MDSN, HF Resistant
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Noordermeer V-Groove Nebulizers

510-10	Noordermeer V-Groove MDSN Nebulizer
510-10QD	Noordermeer V-Groove MDSN Nebulizer, Quick Disconnect
510-10Q	Noordermeer V-Groove MDSN Nebulizer, Quartz
510-10S	Noordermeer V-Groove MDSN Nebulizer, 1 lpm Ar

Modified Lichte Nebulizers

510-20	Modified Lichte MDSN Nebulizer
510-20QD	Modified Lichte MDSN Nebulizer, Quick Disconnect
510-20Q	Modified Lichte MDSN Nebulizer, Quartz
510-20S	Modified Lichte MDSN Nebulizer, 1 lpm Ar

Nebulizer Accessories

520-30	PTFE End Cap for use with 35mm Open End Spray Chambers
520-30S	PTFE End Cap for use with 34mm Open End Spray Chambers
520-40	PTFE End Cap, 35mm for use with Babington
520-40S	PTFE End Cap, 34mm for use with Babington
510-51	O-ring for Babington MDSN Nebulizer
520-31	O-ring for Concentric Nebulizer Inlet
520-32	O-ring, 35mm for 520-30 and 520-40
520-32S	O-ring, 34mm for 520-30S and 520-40S
520-36	O-ring, 35mm for 500-92, 2 per pack
520-36S	O-ring, 34mm for 500-92S, 2 per pack
520-37	Sample Tube, PTFE for Crossflow Nebulizer
520-38	Argon Inlet Fittings for Crossflow
510-52	Tubing and Collet for Babington MDSN Nebulizer
510-53	Argon Tube for Babington MDSN Nebulizer

ICP & ICP/MS Consumables



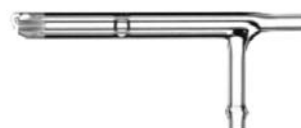
500-92 - Crossflow Nebulizer



510-50 - Babington MDSN, HF Resistant



510-10 - Noordermeer V-Groove MDSN Nebulizer



510-20S - Modified Lichte MDSN Nebulizer, 1 lpm Ar



520-30 - PTFE End Cap for use with 35mm Open End Spray Chambers

2-Stop Pump Tubing

<i>Description</i>	<i>I.D.(mm)</i>	<i>PVC 12/pk</i>	<i>Solva 12/pk</i>	<i>Silicone 6/pk</i>	<i>Santoprene 12/pk</i>	<i>Viton 12/pk</i>
Orange/Black	0.13	PT-2010P	PT-2010SV	PT-2010SI	N/A	N/A
Orange/Red	0.19	PT-2020P	PT-2020SV	N/A	N/A	N/A
Orange/Blue	0.25	PT-2030P	PT-2030SV	PT-2030SI	PT-2030SA	N/A
Red/Blue	0.31	PT-2050P	N/A	N/A	N/A	N/A
Orange/Green	0.38	PT-2080P	PT-2080SV	N/A	PT-2080SA	N/A
Green/Yellow	0.51	N/A	N/A	N/A	N/A	N/A
Orange/Yellow	0.51	PT-2100P	PT-2100SV	N/A	PT-2100SA	PT-2100V
White/Yellow	0.57	N/A	N/A	N/A	N/A	N/A
Orange/White	0.64	PT-2120P	PT-2120SV	PT-2120SI	PT-2120SA	PT-2120V
Black/Black	0.76	PT-2130P	PT-2130SV	PT-2130SI	PT-2130SA	PT-2130V
Orange/Orange	0.89	PT-2140P	PT-2140SV	PT-2140SI	PT-2140SA	PT-2140V
White/Black	0.95	N/A	N/A	N/A	N/A	N/A
White/White	1.02	PT-2160P	PT-2160SV	PT-2160SI	PT-2160SA	PT-2160V
White/Red	1.09	N/A	N/A	N/A	N/A	N/A
Red/Red	1.14	PT-2180P	PT-2180SV	PT-2180SI	PT-2180SA	PT-2180V
Red/Grey	1.22	N/A	N/A	N/A	N/A	N/A
Grey/Grey	1.30	PT-2200P	PT-2200SV	PT-2200SI	PT-2200SA	PT-2200V
Yellow/Yellow	1.42	PT-2210P	PT-2210SV	PT-2210SI	PT-2210SA	PT-2210V
Yellow/Blue	1.52	PT-2220P	PT-2220SV	PT-2220SI	PT-2220SA	PT-2220V
Blue/Blue	1.65	PT-2230P	PT-2230SV	PT-2230SI	PT-2230SA	PT-2230V
Blue/Green	1.75	N/A	N/A	N/A	N/A	N/A
Green/Green	1.85	PT-2250P	PT-2250SV	PT-2250SI	PT-2250SA	PT-2250V
Purple/Purple	2.06	PT-2260P	PT-2260SV	PT-2260SI	PT-2260SA	PT-2260V
Purple/Black	2.29	PT-2270P	PT-2270SV	PT-2270SI	PT-2270SA	PT-2270V
Purple/Orange	2.54	PT-2280P	PT-2280SV	PT-2280SI	PT-2280SA	PT-2280V
Purple/White	2.79	PT-2290P	PT-2290SV	PT-2290SI	PT-2290SA	PT-2290V
Black/White	3.18	PT-2300P	N/A	N/A	N/A	N/A

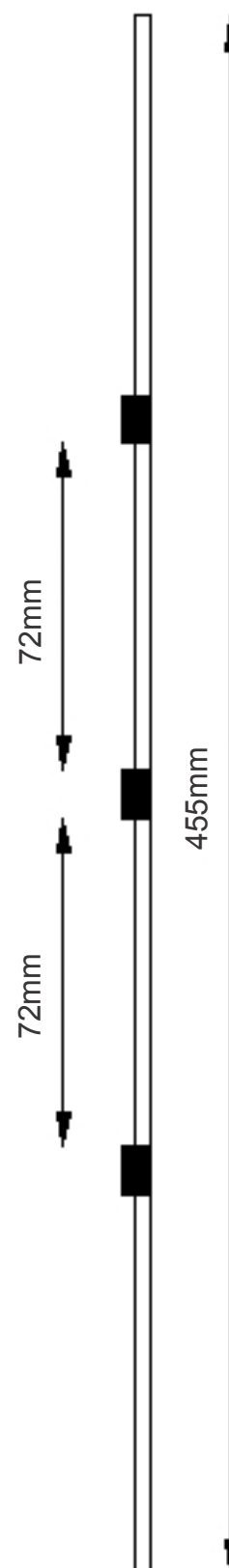
455mm

152mm

3-Stop Pump Tubing

ICP & ICP/MS Consumables

Description	I.D.(mm)	PVC 12/pk	Solva 12/pk	Silicone 6/pk	Santoprene 12/pk	Viton 12/pk
Orange/Black	0.13	N/A	N/A	N/A	N/A	N/A
Orange/Red	0.19	PT-3020P	N/A	N/A	N/A	N/A
Orange/Blue	0.25	PT-3030P	PT-3030SV	N/A	PT-3030SA	N/A
Red/Blue	0.31	N/A	N/A	N/A	N/A	N/A
Orange/Green	0.38	PT-3080P	PT-3080SV	N/A	PT-3080SA	N/A
Green/Yellow	0.51	PT-3090P	N/A	N/A	N/A	N/A
Orange/Yellow	0.51	PT-3100P	PT-3100SV	N/A	PT-3100SA	PT-3100V
White/Yellow	0.57	PT-3110P	N/A	N/A	N/A	N/A
Orange/White	0.64	PT-3120P	PT-3120SV	PT-3120SI	PT-3120SA	PT-3120V
Black/Black	0.76	PT-3130P	PT-3130SV	PT-3130SI	PT-3130SA	PT-3130V
Orange/Orange	0.89	PT-3140P	PT-3140SV	PT-3140SI	PT-3140SA	PT-3140V
White/Black	0.95	PT-3150P	N/A	N/A	N/A	N/A
White/White	1.02	PT-3160P	PT-3160SV	PT-3160SI	PT-3160SA	PT-3160V
White/Red	1.09	PT-3170P	N/A	N/A	N/A	N/A
Red/Red	1.14	PT-3180P	PT-3180SV	PT-3180SI	PT-3180SA	PT-3180V
Red/Grey	1.22	PT-3190P	N/A	N/A	N/A	N/A
Grey/Grey	1.30	PT-3200P	PT-3200SV	PT-3200SI	PT-3200SA	PT-3200V
Yellow/Yellow	1.42	PT-3210P	PT-3210SV	PT-3210SI	PT-3210SA	PT-3210V
Yellow/Blue	1.52	PT-3220P	PT-3220SV	PT-3220SI	PT-3220SA	PT-3220V
Blue/Blue	1.65	PT-3230P	PT-3230SV	PT-3230SI	PT-3230SA	PT-3230V
Blue/Green	1.75	PT-3240P	N/A	N/A	N/A	N/A
Green/Green	1.85	PT-3250P	PT-3250SV	PT-3250SI	PT-3250SA	PT-3250V
Purple/Purple	2.06	PT-3260P	PT-3260SV	PT-3260SI	PT-3260SA	PT-3260V
Purple/Black	2.29	PT-3270P	PT-3270SV	PT-3270SI	PT-3270SA	PT-3270V
Purple/Orange	2.54	PT-3280P	PT-3280SV	PT-3280SI	PT-3280SA	PT-3280V
Purple/White	2.79	PT-3290P	PT-3290SV	PT-3290SI	PT-3290SA	PT-3290V
Black/White	3.18	PT-3300P	N/A	N/A	N/A	N/A



Sample Tubes & Watch Glasses

We are proud to announce we are now carrying disposable, metal-free test tubes and sample vessels for auto samplers as well as metal-free 15 mL and 50 mL centrifuge tubes. We have most all of the common sizes of sample tubes and vessels available featuring screw cap or flip-top lids, graduations, and a variety of different polymers. Along with the glassware and pump tubing we have always carried, we are working to become a more convenient source for your ICP needs. Not only do we offer competitive pricing on all of our products, but we also back it up with stock and quick turnaround time to fill your orders. So, next time you call feel free to ask about our new consumables line and any other new developments here at Precision Glassblowing.

5010-010	13x100mm Polystyrene Sample Tube, 2000/case
5010-030	16x100mm Polypropylene Sample Tube, 1000/case
5010-050	16x125mm Polypropylene Sample Tube, 1000/case
5010-070	17x100mm Polypropylene Sample Tube, 1000/case
5010-170	2.0 mL Polystyrene Sample Cups, 5000/case
5020-010	15 mL Polypropylene Centrifuge Tubes, 500/case
5020-030	50 mL Polypropylene Centrifuge Tubes, 500/case
5030-010	70 mL Digestion Vial, Flip-Top, Graduated, 400/case
5030-020	Watch Glass, Polypropylene
5030-030	100 mL Digestion Vial, Flip-Top, Graduated, 250/case

AA Consumables

Quartz Cells

Perkin Elmer

1000-55	PerkinElmer Quartz Cell, MHS-10	B009-4415
1000-55W	PerkinElmer Quartz Cell, MHS-10 with Windows	
1000-60	PerkinElmer Quartz Cell, MHS-20	B009-7694
1000-65	PerkinElmer Quartz Cell, MHS-20 with Windows	B009-7693
1000-71	PerkinElmer Quartz Window	B011-5576

Thermo Jarrel Ash

1100-20	TJA Quartz Cell, 120mm Long	85476
1100-25	TJA Quartz Cell, 150mm Long	122910
1100-30	TJA Quartz Cell, T-Shaped	131395

Spectro

1200-10	Spectro Quartz Cell with Fused UV Windows
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Varian

1300-30	Varian Mercury Absorption Cell, VGA-76/77	9910040700
1300-35	Varian Quartz Cell, Hydride Absorption, VGA-76/77	9910040000
1300-40	Varian Gas-Liquid Separator, VGA-76	9910040200
1300-45	Varian Mercury Absorption Cell, M-65	0110255100
1300-50	Varian Quartz Absorption Cell, M-65	0110257690
1300-60	Varian Quartz Atom Concentrator Tube, ACT-80	9910054400
1300-65	Varian Gas-Liquid Separator, VGA-77	9910071100

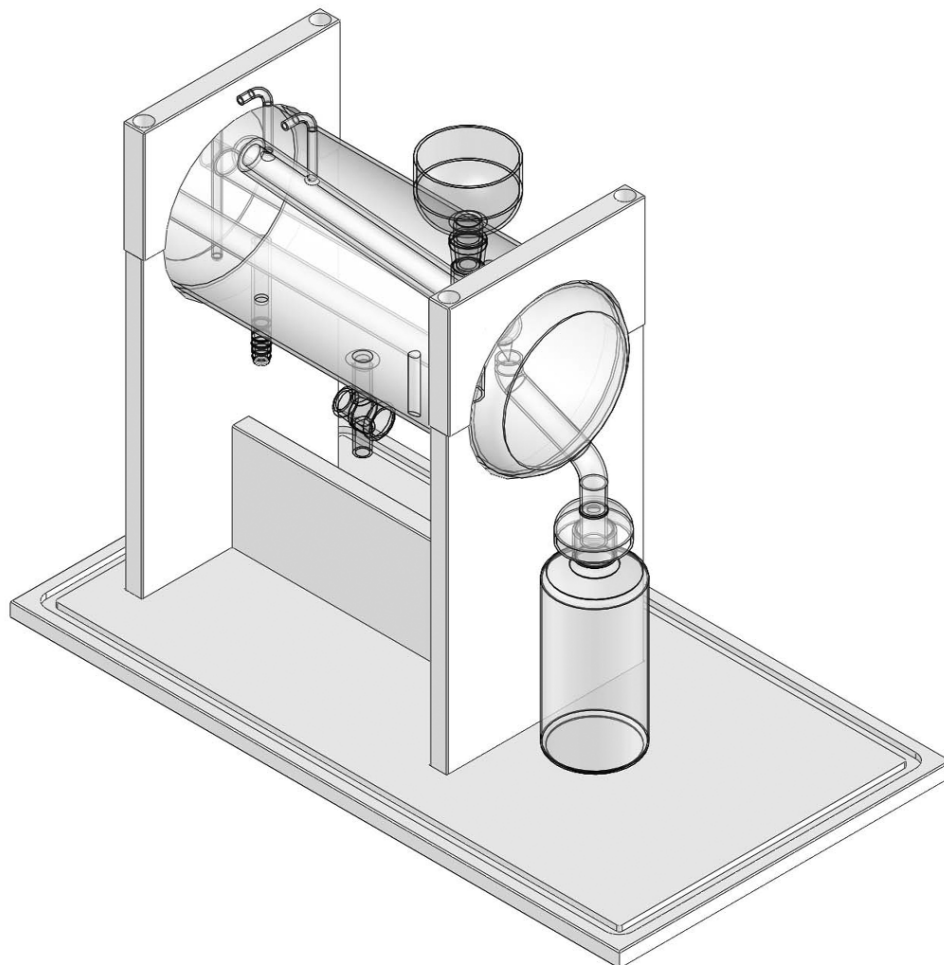
Impact Beads

320-70	PerkinElmer Impact Bead, Small 1/8'	0057-2615
320-72	PerkinElmer Impact Bead, Large 3/16'	

Quartz Sub-Boiling Point Still

**ICP & ICP/MS
Consumables**

New from Precision Glassblowing, the Sub-Boiling Point Still provides a cost effective alternative to buying your own high purity acids.



Specifications

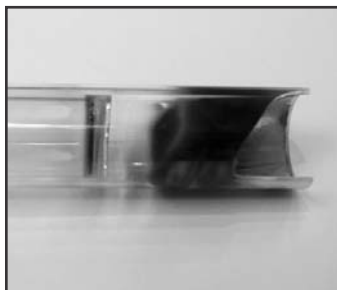
- **1 Liter Capacity**
- **Quartz funnel included for easy filling**
- **12" X 21" base offers stability and compact footprint**
- **Two system options available for your convenience:**
 - **Complete System Includes:**
 - Quartz Still,
 - PVC stand
 - 2 Vycor heating rods
 - Digital controller
 - Two 500 mL inert collection bottles
 - **Basic system Includes:**
 - Quartz Still,
 - PVC stand

We also offer customization to fit your specific laboratory needs.

Contact us at 303-693-7329 or e-mail at info@precisionglassblowing.com for more information.



Torch for standard outer shield repair



Non-repairable due to melted inner shield

Services Available from Precision Glassblowing of Colorado

Standard ICP Torch Rebuilding

Most ICP torches may be rebuilt for a minimal price compared to the cost of a new torch. Rebuilding a standard torch involves replacing the entire outer shield (tube) and/or replacing broken side arms. In the event the inner shield (tube) and/or the injector on a fixed torch has become severely cracked or devitrified, the torch is considered non-repairable, as the cost of repair would exceed the price of a new torch. Once the torch has been rebuilt, it passes through the same QC program as our new torches ensuring you get a quality rebuilt torch that will perform like new. Some restrictions apply and certain torches cannot be rebuilt due to their design. For more information please feel free to call us at 303-693-7329 or contact us at info@precisionglassblowing.com.

Ceramic Base Torch Rebuilding for TJA Instruments

The ceramic base torches for TJA instruments may be rebuilt multiple times at a very moderate price. Available with or without a new injector, rebuilt torches receive new precision i.d./o.d. quartz inner and outer tubes and new argon fittings. As with our standard ICP torches, our rebuilt ceramic base torches are subjected to the same stringent Quality Control program as our new torches. So before you throw away your next broken ceramic base torch, consider having us rebuild it. After all, it can only save you money.

Custom ICP Glassware

If you have an idea or a design for a custom piece of ICP glassware, Precision Glassblowing is the place to call. With CAD capability, we can create a print of your drawing and submit it back to you for approval.

For more information please feel free to call us at 303-693-7329 or contact us at info@precisionglassblowing.com.

Repair Form

Note: By sending these items to Precision Glassblowing, customer states that all items have been cleaned of any substances that may pose a health hazard. Precision Glassblowing reserves the right to refuse service on any items that may pose such a hazard.



14775 East Hinsdale
Centennial, CO 80112
303-693-7329 - Phone
303-699-6815 - Fax
info@precisionglassblowing.com

CUSTOMER: Please complete the following information

Customers Ship to Address:

Customers Bill to Address:

Contact: _____

Phone: _____ Fax: _____

Purchase Order # _____

Credit Card *circle one* **AMX VISA M/C**
_____ Exp ____ / ____

Special Instructions:

☐ Return non-repairable items ☐ Call with quote prior to repair ☐ Rush (\$25 surcharge per piece)

Other: _____

Following to be completed by Precision

REPAIR # _____

DATE ARRIVED _____

CUSTOMER # _____

<u>Qty</u>	<u>Item</u>	<u>Cost (or reason for non-repairable)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Notes

Notes

OEM Cross Reference

OEM P/N	Precision P/N	OEM P/N	Precision P/N	OEM P/N	Precision P/N
Agilent (Hewlett Packard) 4500 & 7500		075542	200-06	N058-0539	310-36
G1820-61138	500-77Q	077200	200-32	N058-1497	320-66
G1820-65015	900-30	077611	200-30	N058-2184	320-53
G1820-65026	900-24	666011	200-08	N058-2185	320-52
G1820-65028	900-05	676458	210-10	N058-2186	320-51
G1820-65030	500-77	678459	210-11	N058-2235	310-24
G1820-65033	500-93			N058-2248	310-35
G1820-65035	900-08	Finnigan		N068-0375	PT-2180P
G1820-65121	520-30	1091250	850-12	N068-0376	PT-2180SV
G1820-65215	PT-2160P	1122800	852-10	N068-1234	320-60
G1820-65216	PT-2220SA	1127121	850-19	N068-1574	500-80
G1820-65217	PT-2160SI			N068-1631	320-33
G1820-65220	PT-2020P	JY		N068-1690	310-03W
G1820-65336	900-11	20.925.160	160-64	N069-0568	310-04
G1820-65337	900-13	21.356.040	160-63	N069-0672	320-73
G1820-65339	900-14	21.356.110	160-40	N069-0769	310-38
G1820-80237	900-38	21.356.130	160-61	N069-0780	310-39
G1833-65421	900-25	31.021.589	160-58	N069-1595	PT-2180SI
G1833-65422	900-09	31.021.730	160-55	N069-1646	320-73
G1833-65423	900-06	31.023.722	160-50	N069-1662	310-14
G1833-65424	900-07	31.023.723	160-52	N069-1664	310-15
G1833-65426	900-39	31.023.724	160-53	N069-1689	320-69
G1833-80301	500-94	31.026.996	150-14	N069-5295	310-05
		31.026.997	160-65	N069-5362	320-50
		31.030.809	150-15	N069-5379	310-11
		31.031.099	160-70	N069-5400	310-37
		31.031.279	150-15NB	N069-5441	320-40
ARL		46.791.010	PT-2130SV	N069-5442	320-41
144857	110-48	46.791.012	PT-2180SV	N069-5448	320-43
144860	110-42	46.791.016	PT-2250P	N069-5449	320-44
1200079	120-42	46.791.018	PT-2200P	N069-5456	310-13
137000-0000	100-08	46.791.022	PT-2130P	N069-5460	320-46
139008-0000	100-16	46.791.024	PT-2160P	N069-5461	320-48
139009-0003	100-05	47.929.001	500-70P	N077-0322	320-80
170631-0000	100-28	47.929.002	500-71	N077-0338	310-16
170692-0000	110-32	47.929.003	500-72	N077-0343	310-19
170693-0000	110-54	47.929.004	500-73P	N077-0344	310-18
173127-0000	100-09	47.929.006	500-70	N077-0437	310-43
173131-0000	120-40	47.929.008	500-92	N077-1116	320-67
173142-0000	100-12	49.010.100	150-05	N077-1500	310-17
173142-0002	110-33	49.010.101	150-25	N077-1501	300-32
173142-0003	110-34			N077-5014	320-74
173142-0004	110-36	PerkinElmer®		N077-5177	310-42
173251-0000	100-27	0041-2047	300-12	N077-5223	320-76
173252-0000	110-35	0047-2022	500-72	N077-5224	320-75
173259-0000	510-50	0047-2033	300-25	N077-5225	320-78
173463-0000	110-30	0047-2048	300-05	N077-5226	320-77
173473-0000	110-31	0047-3052	300-21	N077-5227	310-40
914319-000P/M	500-77	0047-3187	320-62	N077-5228	310-41
915375-000P/M	500-80	0047-3292	320-34	N077-5289	310-25
915817-0000	510-10	0047-3550	PT-2130SV	N077-5297	310-20
S111403	110-38	0047-3552	PT-2130SI	N077-6052	300-29
S213787	110-45	0047-3560	300-23	N077-6053	300-30
S702171	110-41	0047-3561	320-64	N077-6090	300-31
S702174	110-39	0057-2615	320-70	N810-2001	400-05
S702232	110-40	0990-8587	PT-2130P	N810-2006	400-07
		0999-2731	320-65	N810-2011	500-72
BAIRD		B006-6549	320-67	N812-0100	400-36
025491	200-25	B009-4415	1000-55	N812-0116	400-35
025492	200-25	B009-7693	1000-65	N812-0150	300-19MS
025515	200-05	B009-7694	1000-60	N812-2006	400-10
062607	200-36	B011-5576	1000-71	N812-2012	PT-2300P
069972	200-07	N058-0233	310-07	N812-2188	300-18DV, 300-19MS
069987	220-55	N058-0376	310-09	N812-2252	PT-2290SA
075128	200-09	N058-0449	320-31	N812-5029	320-35
075129	200-11	N058-0528	310-03	N812-6039	320-51
075132	220-50				
075144	220-51				
075145	200-10				

OEM Cross Reference



PRECISION
GLASSBLOWING
of Colorado U.S.A

info@precisionglassblowing.com
www.precisionglassblowing.com
www.icpnebulizers.com