

Cryopump Equipment Price List

Prices valid from March 1, 2006



Austin Scientific - a wholly owned subsidiary of Oxford Instruments - is recognized as the value leader in the manufacture and supply of quality cryogenic equipment and services.

Our line of cryopumps, helium compressors, helium lines, and adsorbers is used throughout the vacuum industry, by leading research laboratories and by MRI manufacturers and service groups.

Austin Scientific offers comprehensive refurbishment services for its own equipment as well as for that of most of its competitors. Austin's products and services are available through its global network of agents and dealers.

This price list is not a quotation or guarantee of pricing. Prices are subject to change without notice. Revisions of the 2006 price list will be offered throughout the year with new products and when necessary the discontinuation of products.

More detailed descriptions of these products are listed in our catalogue - Austin Scientific Cryopump Equipment Guide 2004

M600 Helium Compressor Series- Catalogue Page 6

Low voltage M600

91-00001-0LW	M600 Water-cooled compressor	\$8,800
91-00001-0LA	M600 Air-cooled compressor	\$10,175
	200+/- 10% 50 Hz	
	200,230,+/- 10% 60 Hz	

High voltage M600

91-00001-0HW	M600 Water-cooled compressor	\$8,800
91-00001-0HA	M600 Air-cooled compressor	\$10,175
	380,415 +/- 10% 50 Hz	
	480+/-10% 60 Hz	



M600OB - configured to run On-Board Cryopumps

91-00001-LWB	M600OB High Voltage	\$9,200
91-00001-HWB	M600OB High Voltage	\$9,200
	Water-cooled,	
	208/3/60 On-Board compatible	
	Either (3) OB-8/8F, (1) - OB-400	



Multiple Pump / Compressor Configuration Matrix

	M125-W	M125-A	M600-W	M600-A
Austin Scientific - CP8	1	1	3	3
Austin Scientific - CP10			2	2
Austin Scientific - CP16			1	1
Helix - CTI - CT-8 / CT-8OB	1	1	3	3
Helix - CTI - CT-10 / CT10OB			2	2
Helix - CTI - CT400			1	1

Number of Pumps supported per compressor

Model 125 Helium Compressors Catalogue Page 7

Water Cooled

91-00003-0LW	ASC 125W compressor single phase, 200/240 – 50/60	\$4,150.00
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Air Cooled

91-00003-0LA	ASC 125A compressor, single phase 200/240 – 50/60	\$5,150.00
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Pump installation kits.

Standard installation kits for Single, Double or Three pump systems include. 10 Foot Helium Lines, tool kit, drive cables and tees.

10251	Single pump installation kit with 10 foot length helium lines (2), coldhead drive cable (1), tool kit.	\$825.00
10252	Two pump installation kit with 10 foot helium lines (4), coldhead drive cables (2), tees (2), tool kit.	\$1,825.00
10253	Three pump installation kit with 10 foot helium lines (6), coldhead drive cables (3), tees (4), tool kit.	\$2,650.00

Cryo-Plex Pumping Solutions

Cryoplex 8 - Catalogue Page 2

10157 CP-8 ANSI DIODE	\$6,875.00
10164 CP-8 ANSI HVPG	\$6,875.00
10227 CP-8 ISO DIODE	\$6,875.00
10228 CP-8 ISO HVPG	\$6,875.00
10230 CP-8 CF inlet DIODE	\$7,010.00
10231 CP-8 CF inlet HVPG	\$7,010.00
10226 CP-8 UHV DIODE	\$7,260.00
10190 CP-8 UHV HVPG	\$7,260.00



Cryoplex 8 Low Profile - Catalogue Page 2

10216 CP-8LP ANSI DIODE	\$7,260.00
10256 CP-8LP CF inlet DIODE	\$7,260.00
10286 CP-8LP ISO DIODE	\$7,260.00
10219 CP-8LP UHV DIODE	\$7,700.00



Cryoplex 10 - Catalogue Page 2

10249 CP-10 ANSI DIODE	\$8,225.00
10250 CP-10 ANSI HVPG	\$8,225.00
10296 CP-10 CF inlet DIODE	\$8,340.00
10297 CP-10 CF inlet HVPG	\$8,340.00
10307 CP-10 UHV DIODE	\$8,690.00
10308 CP-10 UHV HVPG	\$8,690.00



Cryoplex 16 Catalogue Page 3

10301 CP-16 CVC flange DIODE	\$11,850.00
10302 CP-16 CVC flange HVPG	\$11,850.00
10303 CP-16 ISO DIODE	\$11,850.00
10304 CP-16 ISO HVPG	\$11,850.00



Cryo-Plex Model	CP-8	CP-8LP	CP-10	CP-16
Gas pumping speeds - liters/second				
Water	4,000	4,000	9,000	16,000
Air	1,500	1,500	3,000	5,000
Hydrogen	2,500	2,200	5,000	5,000
Argon	1,200	1,200	2,500	4,200
Gas capacities - Standard Liters				
Hydrogen @ 5x10 ⁻⁶ Torr	18	12	24	15
Argon	1,000	1,000	2,000	2,500
Throughput				
Argon Sccm	700	700	1500	500
Crossover				
Torr-liters	150	150	300	300
Cool down time				
60 Hertz	90 Min	90 Min	60 Min	150 Min
Cryopump measurements				
Height	20.7"	7.03"	23.9	24.0"
Length		22.6"		
LBS	45	42	85	160
Inlet flange	ANSI / ISO / CF			ISO/CVC

Cryoplex Cryocoolers Catalogue Page 4

10235	350 CS cryocooler	\$5,445.00
10295	1020CS cryocooler	\$6,650.00
10343	1050CS cryocooler	\$6,875.00
92-00005-001	350 single stage	\$3,800.00
92-00008-000	1020/1050 single stage	\$5,755.00
	Custom cryocoolers	Quotation



Charcoal Array Kits - Catalogue Page 5

15KCA-8	Charcoal Array kit for CT-8 - OB-8	\$440.00
15KCA-10	Charcoal Array kit for CT-10 - OB-10	\$600.00
15KCA-8F	Charcoal Array kit for CT-8F	\$480.00
15KCA-100	Charcoal Array kit for CT-100	\$390.00
15KCAA-400	Charcoal Array kit for CT/OB-400, CP-16	\$850.00
15KCA-CP8	Charcoal Array kit for ASC model CP-8	\$440.00
15KCA-CP10	Charcoal Array kit for ASC model CP-10	\$600.00
15KCA-CP8LP	Charcoal Array kit for ASC model CP-8LP	\$480.00



Refurbish Service CT-500

\$610.00

Charcoal arrays and condensing arrays refurbish service.
Send in cores for re-charcoal or clean and re-plating.

Adsorbers Catalogue Page 8

Offered for exchange return the used core for a \$ 50.00 credit.

80035	CTI-9600	CTI 8080300K001	\$310.00
80035	CTI-8500/8510	CTI 8080275K001	\$310.00
80035	CTI-8200	CTI 8080255K001	\$310.00
80034	CTI-8300	CTI 8080280K001	\$310.00
80025	CTI-1020	CTI 8080260K001	\$310.00
80035	CTI-SC	CTI 8080255K001	\$310.00
80034	ASC-125W	Austin 125 water	\$310.00
80111	ASC -25A	Austin 125 air	\$310.00
80025	ASC-450	Austin 450 series	\$310.00
80-00005-000	ASC-600	Austin M600 water	\$310.00
80037	Varian 202		\$310.00
80033	APD HC-2/4		\$310.00
80037	Air Products	1L02W/1R02W	\$310.00
80120	Ebara (Varian)	313/323/2.1	\$310.00
80059	Leybold	RW3/RA3	\$310.00
70-00005-000	Leybold	RW4000/6000	\$390.00
70-00005-000	Leybold Coolpak 6000 New		\$830.00
80-00140-000	Leybold Coolpak 6000 Refurbished		\$440.00

Contact your local service center to arrange for a return authorization number



Helium Lines and Fittings

Austin Scientific helium lines and adapters are fabricated from stainless steel and equipped with aeroquip couplings. All assemblies are carefully cleaned, leak checked, decontaminated and charged with 99.999% pure helium. Special configurations are also available.

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Custom & Standard Helium lines. Base price \$ 140 + \$ 12 per linear foot
1/2" lines 1/2" i.d. with 1/2" aeroquip couplings. (any lengths available)

Examples:

HL-10	10 foot length helium line with straight ends	\$260.00
HL-10-90	10 foot length helium line with right angle one end	\$260.00
HL-20	20 foot line with straight ends	\$380.00
HL-20-90	20 foot line with right angle one end	\$380.00
HL-10-3/4-length	3/4" i.d. lines with 1/2" aeroquip couplings add per linear foot	\$140.00 +\$ 16.50

Custom	3/4" aeroquip couplings available by quotation Flexible copper lines avail up to 100'	Quotation
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Aeroquip fittings.

5400-S5-8	Coupling, female	\$28.00
5400-S8-8	Dust plug	\$5.00
5400-S2-8	Coupling, male	\$28.00
5400-S6-8	Dust cap	\$5.00
22008-8	Flat gasket	\$1.00
22546-17	O-ring	\$1.00



Helium fittings.

T-MMF	Helium tee	\$160.00
EL-MF	Helium elbow	\$100.00
80075	3-port manifold	\$220.00
99-00046-000	CT-8 return helium fitting	\$80.00
99-00046-001	CT-8 supply fitting	\$170.00
99-00046-002	CT-10 supply fitting	\$180.00
10134	Maintenance manifold	\$325.00
BU-MM	Helium bulkhead union	\$85.00
10346	Helium charge line	\$220.00
HR 580	Helium regulator assembly	\$310.00



Cryopump power supplies - Catalogue Page 10

10142	Drives one ASC or CTI pump, 115 VAC input	\$640.00
10349	Drives one On-Board pump, 208-230/1/60	\$910.00
10358	Drives one On-Board pump with 8500 drive input 208-230/1/60.	\$910.00

Splitter boxes

10359	Drives three cryos from one output from 450, 8500	\$330.00
10366	Drives three On-Board cryos from one output from 9600	\$330.00



Drive cables

10144-10	Drives one standard cryopump	\$200.00
10350-10	Drives On-Board cryopumps and compressors	\$130.00
10355-10	Drives standard cryopump from On-Board compressor	\$200.00
Custom	Custom lengths up to 100' avail by quotation	

2100 Automatic regeneration controller

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M2100 Automatic regeneration controller - 115 VAC	1,980.00
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Additional Options:

RS232	Interface, factory installed	\$310.00
55057	External relay	\$220.00
TGT-6000-NPT	Gauge tube with NPT thread	\$70.00
TGT-6000-VCR	Gauge tube with VCR fitting	\$160.00
PAV-075-CP	Roughing valve	\$460.00
PGV-1 15	Purge gas valve	\$220.00
PGH-100	Purge gas heater	\$340.00
10348	Dual diode cable	\$140.00
	Extra cable length 2.00 per foot	

Cryopump temperature monitors

M310	\$520.00
Single pump temperature monitor (no set points)	

M320	\$790.00
Single pump monitor with high/low set points	



Cryopump technology continues to evolve with the needs of the semiconductor industry.

Manufacturers reduced the inherent vibration associated with cryopumps first with the Scott-tee drive reducing vibration of the stepper motors and now with smooth running three phase motors.



Upgrade - Helix™ OB-8F

- Optimal performance in semiconductor applications
- Three Phase Motor - Reduces vibration
- Enhanced Array –added capacity for argon and hydrogen

Cryopumps are by far the high vacuum pump of choice when it comes to laying down metals and oxide films in the semiconductor industry. They have up to ten times the pumping speed for water vapor than a turbo molecular pump, water being the main constituent in a vacuum chamber after the initial rough down from atmosphere.

Vibration from cryopumping systems has always been of concern as line widths continue to decrease. Cryopumps continue to be the preferred high vacuum solution with this upgrade substantially reducing vibration and enhancing argon and hydrogen performance.

Austin Scientific Services - Helix™ OB- 8F

Standard repair (returned in configuration received)	\$2,480	2 – 3 Weeks
Exchange pumps are available 1-3 Days		
Three Phase Motor Upgrade	\$1,650	
Enhanced Charcoal Array Upgrade	\$300	

When your OB-8F is ready for rebuild, take it to the next level of performance with a complete rebuild with the three phase motor and enhanced array upgrade for \$ 4,430.

Cryopump & Helium Compressor Services

Why overhaul and not just repair? Repair typically means that the specific problem is identified and corrected. Although this solves your immediate problem other parts may have wear that will fail next. Overhaul means that Austin Scientific will not only diagnosis the specific problem with your pump or compressor but will also disassemble and rebuild completely for firm fixed price and backed by our global warranty.

ASC - Helium Compressor Model	Overhaul Price	Exchange Price
125Air Series	\$ 1,940	\$ 2,330
600 Series	\$ 2,890	\$ 3,470
450Water / 450Air	\$ 2,890	\$ 3,470

ASC Cryopump Model	Overhaul Price	Exchange Price
Cryoplex-8	\$ 1,830	\$ 2,200
Cryoplex-8 Low Profile	\$ 1,830	\$ 2,200
Cryoplex-10	\$ 2,190	\$ 2,630
Cryoplex-16	\$ 2,890	\$ 3,470

ASC - Refridgerator Coldhead Model	Overhaul Price	Exchange Price
M 350 CS Single Stage	\$ 1,830	\$ 2,200
M 350 CS Two Stage	\$ 1,460	\$ 1,760
M 1020 CS Two Stage	\$ 1,700	\$ 2,040
M 1050 CS Two Stage	\$ 1,940	\$ 2,330

CTI Compressors Model	Overhaul Price	Exchange Price
SCW	\$ 1,940	\$ 2,330
8200	\$ 2,050	\$ 2,460
8300	\$ 1,940	\$ 2,330
1020R/RW	\$ 2,890	\$ 3,470
8500/8510	\$ 2,890	\$ 3,470

CTI Cryopumps Model	Overhaul Price	Exchange Price
Cryotorr® - 100	\$ 1,700	\$ 2,040
Cryotorr® - 8	\$ 1,830	\$ 2,200
Cryotorr® - 10	\$ 2,190	\$ 2,630
Cryotorr® - 400	\$ 2,890	\$ 3,470
Cryotorr® - 500	\$ 3,330	\$ 4,000
On-Board - 8	\$ 2,480	\$ 2,980
On-Board - 10	\$ 2,840	\$ 3,410
On-Board 400	\$ 3,550	\$ 4,260

Exchange Products – Refurbished pumps, compressors that are offered in a like new condition. We take trade in products and completely re-manufacture these items to original manufactures specifications and then hold them in stock for immediate delivery. We offer a credit for your defective product towards a replacement that has been carefully and expertly restored. These products receive a full warranty from Austin Scientific.

Overhaul – Customer property returned to Austin Scientific for full re-manufacture to original manufacture specifications. Austin Scientific typically quotes a fixed fee which can include round trip shipping. These products receive a full warranty from Austin Scientific.

Repair – Customer property returned to Austin Scientific to diagnosis a specific failure. Austin Scientific typically charges a diagnosis or evaluation charge and advises a detailed quotation prior to repairing your product. For a quotation on any compressor or cryopump regardless of original manufacture contact one of our service centers.

Trade In Credit – Austin Scientific offers a credit for your old Cryopump and Helium compressors towards either a new or remanufactured replacement.