



MILLENNIUM™ STEAM-FIRED CHILLER YPC-ST-14SC THRU YPC-ST-22G

SUGGESTED MASTER LIST PRICES

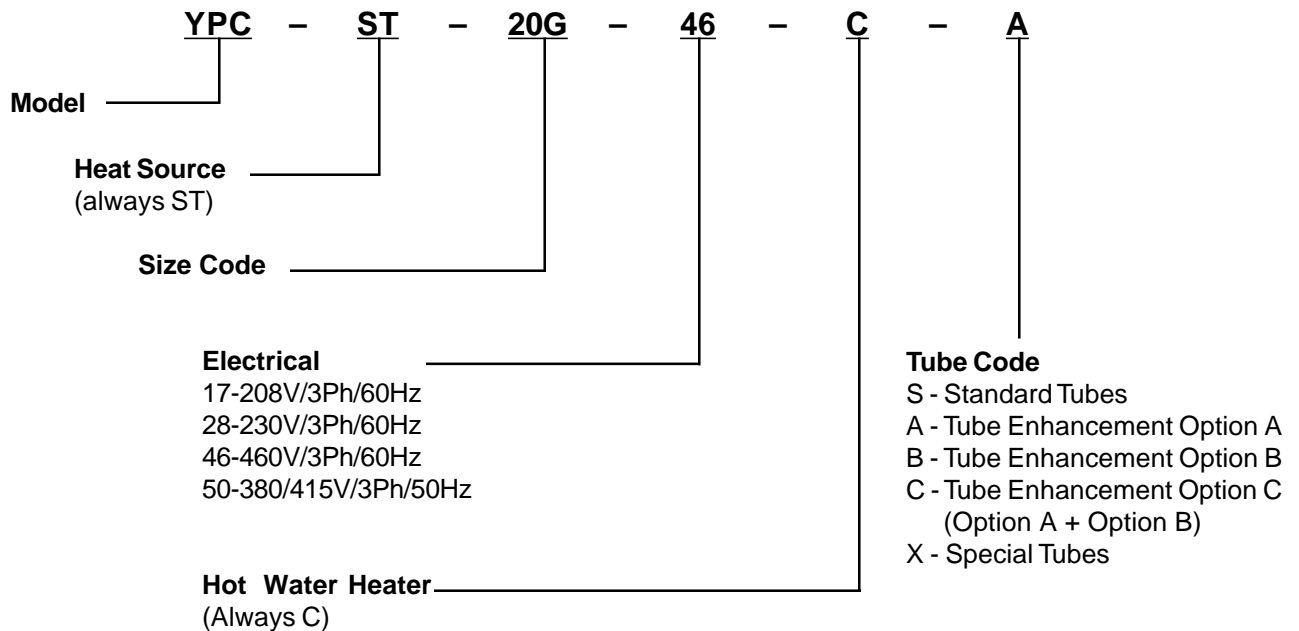
Supersedes: 155.19-P1 (1095)

Form 155.19-P1 (297)

*Prices effective on all orders received after January 31, 1997.
Prices F.O.B. point of shipment, with freight allowed via lowest common carrier to first destination in Continental U.S. (but not Alaska or Hawaii), or to nearest port of out selection for export shipments.*

NOMENCLATURE

The model number denotes the following characteristics of the unit:



The following line items **must** be included when calculating the Master Price List for a Millennium Steam Chiller

ITEM	PRICING TABLE
Base Unit MLP	1.1
LiBr MLP	1.1

Optional line items can be added to the above and are detailed in the following tables:

ITEM	PRICING TABLE
Millennium Unit Options	2.1 thru 2.7

All Millennium Chillers must be sold with TCA. Consult current TCA pricing pages.

I. BASE UNIT & LiBr MLP

Refer to Engineering Guides (Form 155.19-EG2P and -EG3) for complete, detailed mechanical specifications.

A. BASE UNIT MLP

1. Base Unit MLP includes:

- Factory Assembled Chiller consists of:
 - First Stage Generator
 - Main Shell(NOTE: All units ship in 1 piece as standard.)
- Steam Control Valve
- Solenoid Drain Valve on Condensate Cooler Outlet
- Octyl Alcohol Charge
- Purge Pump (shipped loose for installation by customer)
- Smart Purge: Automatic purging system.
- Water Circuit (150 PSIG Working Pressure)
 - Compact Water Boxes (not hinged)
- Stubout Nozzles with Vitaulic Grooves
- Millennium Control Center
- Power Panel (including non-fused disconnect switch)
- Isolation Valves for Solution & Refrigeration Pumps
- Chilled Water Flow Switch (UL listed)
- Rupture Disk
- Mercury Manometer
- For Models YPC-ST-14SC-19S: Crossover Pipe from Absorber to Condenser (shipped loose)

2. Base Unit MLP does not include:

- TCA and First Year PM (Price from Start-Up and Warranty Policy)
- Steam Shutoff Valve (by customer)
- Installation of Steam Control Valve (by customer)
- Thermal Insulation (by customer)
- ANSI Flanges (Price from Table 2.3)
- Condenser Water Flow Switches (Price from Table 2.2)
- Installation of Flow Switches (by customer)
- Factory Performance Test (Price from Table 2.1)
- For Models YPC-ST-19GL-22G: Crossover Pipe from Absorber to Condenser (by customer)
- Customer specific quality control documentation (consult marketing)
- Outdoor Storage Preparation

B. LiBr MLP includes:

- LiBr Charge (pre-inhibited)
- NOTE: Models YPC-ST-14SC-19S, and 19GL ship pre-charged as standard. Models YPC-ST-20G thru 22G balanced charge in separate drums.

TABLE 1.1 – BASE UNIT & LIBR

MODEL NO. YPC-ST	BASE UNIT MLP	LiBr MLP
14SC	\$ 295,000.	\$ 22,785.
16SL	393,910.	34,476.
17S	406,310.	34,476.
18S	456,240.	41,967.
19S	534,175.	47,065.
19GL	761,356.	108,154.
20G	945,850.	122,820.
21G	1,073,000.	139,868.
22G	1,205,667.	189,804.

II. MILLENNIUM UNIT OPTIONS

A. TUBE ENHANCEMENT OPTIONS (G UNITS ONLY):

Tube Enhancement Options A and B permit enhanced surface tubes to be supplied in lieu of standard surface tubes in the absorber and/or evaporator bundles for improved unit performance. Adds external finning to Absorber and/or evaporator tubes (varies by model); all tubes are smooth bore.

B. SHIPPING OPTIONS:

Ship with Separate Charge Option permits units which would ship pre-charged as standard (i.e. Models YPC-ST-19GL and smaller) to ship with balanced factory charge in separate drums. This option should only be used in situations where the rigging weight of a pre-charged unit presents difficulties in handling.

For units orders with Outdoor Storage, the separate charge price add does not need to be included, but TCA pricing must reflect days for units shipped with separate charge.

G Models Only: Two-piece Shipment Option permits units which would ship as one piece as standard (i.e. all Steam Models) to ship in two pieces. Two-Piece Shipment pricing includes Ship with Separate Charge premiums.

C. SPARE PUMP SET OPTION:

Spare Pump Set Option permits a spare set of solution and refrigerant pumps to ship loose with unit. This option pricing shall only apply when spare pump set is ordered with Millennium unit. All replacement solution and refrigerant pumps shall be ordered through Baltimore Parts Distribution Center. (See Table 2.1).

TABLE 2.1 – UNIT OPTIONS

MODEL NO. YPC-ST	TUBE OPTION A MLP	TUBE OPTION B MLP	SHIP WITH SEPARATE CHARGE MLP	SPARE PUMP SET MLP	FACTORY PERFORMANCE TEST	CUSTOMER WITNESS FACTORY TEST MLP
14SC	N/A	N/A	\$2,667.	\$28,213.	\$10,000.	\$15,000.
16SL	N/A	N/A	3,550.	36,822.	10,000	15,000.
17S	N/A	N/A	3,550.	36,822.	10,000.	15,000.
18S	N/A	N/A	3,550.	36,822.	10,000.	15,000.
19S	N/A	N/A	3,550.	36,822.	10,000.	15,000.
19GL	\$7,478.	\$4,072.	3,333.	47,573.	10,000.	15,000.
20G	15,323.	5,153.	N/A	47,573.	10,000.	15,000.
21G	17,610.	6,313.	N/A	41,743.	10,000.	15,000.
22G	20,903.	7,007.	N/A	42,233.	10,000.	15,000.

D. WATER FLOW SWITCHES:

Chilled Water Flow Switch is included in Base Unit MLP. Flow switches for condenser water are **required for unit installation** and **must** be provided, either by YORK or by customer.

Water Flow Switch Option permits a paddle type, vapor-proof enclosed SPDT switch to ship loose with unit for field installation by customer.

E. FACTORY PERFORMANCE TEST / CUSTOMER WITNESS OF FACTORY TEST OPTION:

Factory Performance Test Option provides a full load performance test and a signed report of capacity and performance. (NOTE: Full load single point test. Additional part load points or special testing requirements will be addressed by marketing on a project specific basis.)

Customer Witness of Factory Test Option permits a customer witnessed Factory Performance Test of a given chiller at design full load conditions. The time of the test will be dictated by the manufacturing schedule and will be confirmed by the factory within 48 hours of when it will take place. Consult marketing for pricing on any special testing requirements other than standard. (See Table 2.1)

TABLE 2.2 – WATER FLOW SWITCHES

MCDONNELL & MILLER MODEL NO.	MAX. DWP PSIG	CONN. M.P.T. INCHES	MLP ADD
FS8V	150	1	\$123.
FS7V	300	1-1/4	\$347.

F. ANSI FLANGES:

Flanges Option permits a pair of 150 lb. ANSI-RF, round slip-on, welding flanges to be factory welded on to inlet and outlet nozzles of a specific water circuit heat exchanger (i.e. absorber, condenser, or evaporator). Flanges are forged carbon steel with 1/16-inch raised face and conform to those listed in ANSI B16.5. Prices **DO NOT** include companion flanges, nuts, bolts, or gaskets. (See Table 2.3)

TABLE 2.3 – ANSI FLANGE OPTIONS

MODEL YPC-ST	NOZZLE SIZE – INCHES						
	EVAPORATOR			ABSORBER			CONDENSER
	PASSES			PASSES			PASSES
	2	3	4	1	2	3	1
14SC	6	6	4	6	6	4	(NOTE 1)
16SL	8	6	6	12	10	8	(NOTE 1)
17S	8	6	6	12	10	8	(NOTE 1)
18S	8	6	6	12	10	8	(NOTE 1)
19S	8	6	6	12	10	8	(NOTE 1)
19GL	8	6	N/A	12	N/A	N/A	(NOTE 1)
20G	10	8	N/A	12	N/A	N/A	(NOTE 1)
21G	10	8	N/A	14	N/A	N/A	(NOTE 1)
22G	10	8	N/A	16	N/A	N/A	(NOTE 1)

NOTE: 1. Condenser is always one pass with nozzle size equivalent with absorber nozzle size.

FLANGES – PRICING

NOZZLE SIZE INCHES	4	6	8	10	12	14	16
MLP PER PAIR	\$500.	\$600.	\$700.	\$1,000.	\$1,300.	\$1,500.	\$2,100.

G. MARINE WATER BOXES

Marine Water Box Option permits marine water boxes to be furnished on a specified water circuit heat exchanger (i.e. absorber, condenser, or evaporator) in lieu of standard compact water boxes. Marine water boxes are fabricated steel construction and are suitable for 150 psig DWP (and are pressure tested at 225 psig). Odd pass arrangements (i.e. 1-pass, 3-pass, and 5-pass) will have a marine box, in lieu of compact box, at each end of the specified water circuit. Even pass arrangements (i.e. 2-pass and 4-pass) will have a marine box on the nozzle end only. Non-nozzle end on an even pass water circuit will be a standard compact water box. Marine water box has a removable, bolted-on cover plate. In addition, the entire box is bolted onto the tube sheet for easy removal and direct access. Water connections are stubout nozzles with Victaulic grooves. ANSI Flanges are optional.

NOTE: Marine Water Boxes are available only for water circuits rated for 150 psig DWP. For 300 psig DWP applications, only compact water box options are available. (See Table 2.4)

TABLE 2.4 – MARINE WATER BOXES

MODEL YPC-ST	EVAPORATOR		ABSORBER		CONDENSER ODD PASS MLP
	EVEN PASS MLP	ODD PASS MLP	EVEN PASS MLP	ODD PASS MLP	
14SC	\$ 2,755.	\$ 6,840.	\$ 9,500.	\$ 6,650.	0.*
16SL	4,415.	7,230.	4,415.	4,815.	\$ 4,815.
17S	4,415.	7,230.	4,415.	4,815.	4,815.
18S	4,415.	7,230.	4,415.	4,815.	4,815.
19S	4,415.	7,230.	4,415.	4,815.	4,815.
19GL	4,180.	6,840.	N/A	9,215.	9,215.
20G	6,650.	9,500.	N/A	13,300.	13,300.
21G	6,650.	9,500.	N/A	13,300.	13,300.
22G	6,650.	9,500.	N/A	15,200.	15,200.

* Model 14SC uses one waterbox for both the absorber and condenser. If absorber marine boxes are priced, condenser marine water boxes are included.

H. 300 PSIG COMPACT WATER BOXES:

300 PSIG DWP Compact Water Box Option permits compact water boxes rated at 300 psig DWP (tested to 450 psig DWP) to be furnished for a specified water circuit in lieu of the standard 150 psig DWP compact water box. (See Table 2.5)

TABLE 2.5 – 300 PSIG WATER BOXES

MODEL NO. YPC-DF, ST	EVAPORATOR ONLY MLP	ABSORBER + CONDENSER ONLY MLP	EVAPORATOR + ABSORBER + CONDENSER MLP
14SC	\$ 7,336.	\$ 8,558.	\$ 12,226.
16SL	8,950.	10,445.	14,920.
17S	8,950.	10,445.	14,920.
18S	8,950.	10,445.	14,920.
19S	8,950.	10,445.	14,920.
19GL	8,892.	10,374.	14,820.
20G	9,781.	11,411.	16,302.
21G	10,596.	12,362.	17,659.
22G	11,468.	13,379.	19,113.

I. OPTIONAL TUBES:

Optional Tubes permits non-standard tube thickness and materials to be furnished in lieu of standard for the absorber, condenser, and evaporator bundles. Prices shown are **in addition** to other tube enhancement options (i.e. Tube Enhancement Options A & B) (See Table 2.6 for Standard Unit and Table 2.6.1 for Options A and B)

TABLE 2.6 – SPECIAL TUBE PREMIUM VS. STANDARD UNIT

SPECIAL TUBE MLP'S

EVAPORATOR – STANDARD SPECIFICATION UNIT				
CHILLER MODEL	0.028"CU PREMIUM VS. STD (\$)	0.028" CUNI PREMIUM VS. STD (\$)	0.035" CU PREMIUM VS. STD (\$)	0.035" CUNI PREMIUM VS. STD (\$)
14SC	\$ 677.	\$ 9,654.	\$ 2,606.	\$ 12,335.
16SL	N/A	2,239.	2,493.	5,122.
17S	N/A	2,239.	2,493.	5,122.
18S	N/A	2,689.	2,995.	6,153.
19S	N/A	3,140.	3,497.	7,184.
19GL	1,173.	6,813.	7,388.	13,618.
20G	1,495.	8,684.	9,418.	17,359.
21G	1,382.	10,641.	11,540.	21,272.
22G	2,085.	12,107.	13,131.	24,174.

ABSORBER – STANDARD SPECIFICATION UNIT				
CHILLER MODEL	0.028"CU PREMIUM VS. STD (\$)	0.028" CUNI PREMIUM VS. STD (\$)	0.035" CU PREMIUM VS. STD (\$)	0.035" CUNI PREMIUM VS. STD (\$)
14SC	\$ 611.	\$ 6,535.	\$ 2,313.	\$ 8,708.
16SL	N/A	327.	3,165.	3,492.
17S	N/A	327.	3,165.	3,492.
18S	N/A	393.	3,801.	4,195.
19S	N/A	459.	4,438.	4,897.
19GL	1,912.	2,424.	6,485.	8,951.
20G	2,614.	3,315.	8,866.	7,087.
21G	3,005.	3,810.	10,190.	11,136.
22G	3,793.	4,808.	12,863.	14,056.

CONDENSER – STANDARD SPECIFICATION UNIT				
CHILLER MODEL	0.028"CU PREMIUM VS. STD (\$)	0.028" CUNI PREMIUM VS. STD (\$)	0.035" CU PREMIUM VS. STD (\$)	0.035" CUNI PREMIUM VS. STD (\$)
14SC	\$ 206.	\$ 1,368.	\$ 760.	\$ 2,141.
16SL	N/A	471.	998.	1,386.
17S	N/A	471.	998.	1,386.
18S	N/A	566.	1,198.	1,665.
19S	N/A	661.	1,399.	1,943.
19GL	N/A	691.	1,453.	2,002.
20G	N/A	977.	2,055.	2,832.
21G	N/A	1,143.	2,409.	3,319.
22G	N/A	1,834.	3,860.	5,321.

TABLE 2.6 – SPECIAL TUBE PREMIUM VS. OPTIONS A & B UNITS (G MODEL ONLY)

SPECIAL TUBE MLP'S

EVAPORATOR - OPTION A UNIT				EVAPORATOR - OPTION B UNIT			
0.028" CU PREMIUM VS. OPT. A (\$)	0.028" CUNI PREMIUM VS. OPT A (\$)	0.035" CU PREMIUM VS. OPT A (4)	0.035" CUNI PREMIUM VS. OPT A (\$)	0.028" CU PREMIUM VS. OPT B (\$)	0.028" CUNI PREMIUM VS. OPT B (\$)	0.035" CU PREMIUM VS. OPT B (\$)	0.035" CUNI PREMIUM VS. OPT B (\$)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
\$1,173.	\$6,813.	\$7,388.	\$13,619.	\$16,563.	\$26,176.	\$22,786.	\$33,143.
1,495.	8,684.	9,418.	17,359.	21,114.	33,355.	29,045.	42,247.
1,832.	10,641.	11,540.	21,272.	25,958.	40,873.	35,592.	51,769.
2,085.	12,018.	13,130.	24,203.	29,437.	46,504.	40,495.	58,900.

ABSORBER - OPTION A UNIT				ABSORBER - OPTION B UNIT			
0.028" CU PREMIUM VS. OPT. A (\$)	0.028" CUNI PREMIUM VS. OPT A (\$)	0.035" CU PREMIUM VS. OPT A (4)	0.035" CUNI PREMIUM VS. OPT A (\$)	0.028" CU PREMIUM VS. OPT B (\$)	0.028" CUNI PREMIUM VS. OPT B (\$)	0.035" CU PREMIUM VS. OPT B (\$)	0.035" CUNI PREMIUM VS. OPT B (\$)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
\$894.	\$5,191.	\$5,630.	\$10,378.	\$1,192.	\$2,424.	\$6,485.	\$8,951.
1,223.	7,097.	7,697.	14,187.	2,614.	3,315.	8,866.	7,087.
1,405.	8,157.	8,847.	16,307.	3,005.	3,810.	10,190.	11,136.
1,773.	10,297.	11,167.	20,582.	3,793.	4,808.	12,863.	14,056.

CONDENSER - OPTION A UNIT				CONDENSER - OPTION B UNIT			
0.028" CU PREMIUM VS. OPT. A (\$)	0.028" CUNI PREMIUM VS. OPT A (\$)	0.035" CU PREMIUM VS. OPT A (4)	0.035" CUNI PREMIUM VS. OPT A (\$)	0.028" CU PREMIUM VS. OPT B (\$)	0.028" CUNI PREMIUM VS. OPT B (\$)	0.035" CU PREMIUM VS. OPT B (\$)	0.035" CUNI PREMIUM VS. OPT B (\$)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	\$691.	\$1,453.	\$2,002.	N/A	\$691.	\$1,453.	\$2,002.
N/A	977.	2,055.	2,832.	N/A	977.	2,055.	2,832.
N/A	1,143.	2,409.	3,319.	N/A	1,143.	2,409.	3,319.
N/A	1,834.	3,860.	5,321.	N/A	1,834.	3,860.	5,321.

J. REMOTE INTERFACE OPTION BOARDS

Remote Interface Option Boards permit the use of either 4-20mA, 0-10V, or discrete contact closure remote reset signals to be accepted by the Millennium Control Center in lieu of the standard 1-11 sec. Pulse Width Modulated reset signals. Remote reset signals are used to reset leaving chilled or hot water temperatures over a 0-20°F range.

The option boards, rack, and mounting hardware are shipped loose for field installation in the Millennium Control Center. (See Table 2.7)

TABLE 2.7 – REMOTE INTERFACE OPTION BOARDS

<p>OPTION CARDS AVAILABLE:</p> <p>1. ALTERNATE REMOTE STEAM LIMIT SIGNAL (4-20mA DC, 0-10V DC, CONTACT CLOSURE)</p> <p>2. ALTERNATE REMOTE TEMPERATURE RESET SIGNAL (4-20 mA DC, 0-10V DC, CONTACT CLOSURE)</p>	<table border="1"> <thead> <tr> <th colspan="2">OPTION</th> </tr> <tr> <th>CARD NO. ('S)</th> <th>MLP</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1 OR 2</td> <td style="text-align: center;">\$900.</td> </tr> <tr> <td style="text-align: center;">1 AND 2</td> <td style="text-align: center;">\$1,100.</td> </tr> </tbody> </table>	OPTION		CARD NO. ('S)	MLP	1 OR 2	\$900.	1 AND 2	\$1,100.
OPTION									
CARD NO. ('S)	MLP								
1 OR 2	\$900.								
1 AND 2	\$1,100.								

K. OUTDOOR STORAGE

Outdoor Storage permits the storage of the chiller below the normally allowed minimum temperature of 35°F. A factory test or customer witness factory test (Table 2.1) may not be included when ordering optional Outdoor Storage.

The unit will be shipped with separate charge and will have capped nozzles. The separate charge price add (Table 2.1) does not need to be included, but TCA pricing must reflect days for units shipped with separate charge. Each tube bundle, in addition to being capped at each end, will be charged with nitrogen and include a pressure gauge for verifying the charge pressure.

TABLE 2.8 – OUTDOOR STORAGE

ALL MODELS	\$0. MLP
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L. TUV

The first stage generator will be built to TUV pressure vessel code. TUV is the standard for pressure vessel code in Germany. If TUV is ordered the generator will not be stamped for ASME. This option may affect the lead-time for delivery; please contact customer service for details.

M. CE

When CE is ordered the power panel, micropanel, and unit wiring will meet CE requirements. CE is a European compliance for electrical components and wiring. CE may only be ordered for 380V chillers. CE is not available for any G style models.

TABLE 2.9 – CODE COMPLIANCE OPTIONS

MODEL	CE MLP	TUV MLP
14SC	\$ 7,988.	\$ 3,000.
16SL	8,865.	3,000.
17S	8,865.	3,000.
18S	9,906.	3,000.
19S	9,606.	3,000.
19GL	N/A	3,000.
20G	N/A	3,000.
21G	N/A	3,000.
22G	N/A	3,000.

