

JOB:

REPRESENTATIVE:

UNIT TAG:

SUBMITTED BY:

DATE:

ENGINEER:

APPROVED BY:

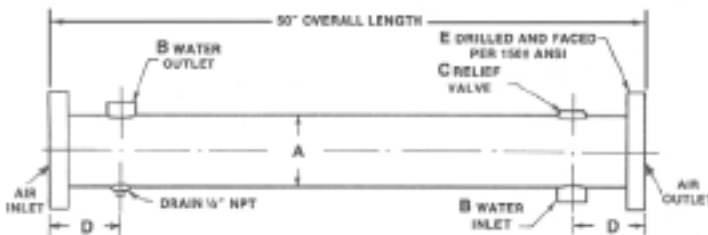
DATE:

CONTRACTOR:



ACFR Compressed Air Aftercoolers

Fixed Tube Sheet Type



DESCRIPTION

B & G type Compressed Air Aftercoolers are of the fixed tubesheet, shell and tube type. Tubes are easily cleaned on the inside. Tube ends are expanded into both tube sheets. Baffles are stamped to close tolerances, minimizing slippage of water between the baffles and shell wall.

MODEL NO.	Dimensions in Inches (mm)					SURFACE Area Sq. Ft (Sq. M)	WT Lbs. (Kg)
	A	B NPT	C NPT	D	E FLG		
ACFR-316	3-1/2 (89)	3/4	1/2 (13)	3-3/4 (95)	3 (76)	4.2 (.39)	63 (28.6)
ACFR-324	3-1/2 (89)	3/4	1/2	3-3/4 (95)	3 (76)	6.4 (.39)	66 (29.9)
ACFR-332	3-1/2 (89)	3/4	1/2	3-3/4 (95)	3 (76)	8-1/2 (.79)	69 (31.3)
ACFR-449	4-1/2 (114)	3/4	1/2	3-3/4 (95)	4 (102)	13.0 (1.20)	97 (44)
ACFR-668	6-5/8 (168)	3/4	3/4	4 (102)	6 (152)	18.0 (1.67)	149 (67.6)
ACFR-696	6-5/8 (168)	3/4	3/4	4 (102)	6 (152)	25.4 (2.35)	154 (69.9)
ACFR-6121	6-5/8 (168)	3/4	3/4	4 (102)	6 (152)	32.1 (2.98)	158 (71.7)
ACFR-8151	8-5/8 (219)	1	3/4	4 (102)	8 (203)	40.0 (3.72)	227 (103)
ACFR-8185	8-5/8 (219)	1	3/4	4 (102)	8 (203)	49.0 (4.55)	231 (104.8)
ACFR-8216	8-5/8 (219)	1	3/4	4 (102)	8 (203)	57.2 (5.31)	235 (106.6)
ACFR-10276	10-3/4 (273)	1-1/4	3/4	4-3/4 (121)	10 (254)	73.1 (6.79)	339 (153.8)
ACFR-10333	10-3/4 (273)	1-1/4	3/4	4-3/4 (121)	10 (254)	88.2 (8.19)	349 (158.3)
ACFR-10389	10-3/4 (273)	1-1/4	3/4	4-3/4 (121)	10 (254)	103.1 (93.09)	364 (165.1)

Dimensions are subject to change. If exact dimensions are needed for layout, write for certified prints.

FREE AIR CAPACITIES IN SCFM (CMH)														
MODEL NUMBER	SINGLE STAGE 80-125 PSIG		TWO STAGE 80- 125 PSIG		SINGLE STAGE 70 PSIG		SINGLE STAGE 60 PSIG		SINGLE STAGE 50 PSIG		SINGLE STAGE 40 PSIG		SINGLE STAGE 30 PSIG	
	10 °F*	15 °F*	10 °F*	15 °F*	10 °F*	15 °F*	10 °F*	15 °F*	10 °F*	15 °F*	10 °F*	15 °F*	10 °F*	15 °F*
A316-316	73	80	86	92	68	73	64	68	60	64	56	60	53	56
ACFR-324	120	132	140	150	122	128	116	122	110	116	103	110	96	103
ACFR-332	163	180	190	208	155	163	145	155	137	145	128	137	119	128
ACFR-449	264	270	283	310	223	244	220	223	207	220	195	207	183	195
ACFR-668	345	375	375	425	325	339	305	325	287	305	270	287	252	270
ACFR-696	470	520	546	595	446	470	420	446	344	420	370	394	345	370
ACFR-6121	585	650	684	750	550	585	520	550	486	520	455	486	422	455
ACFR-8151	745	875	865	950	700	745	660	700	620	660	580	620	536	580
ACFR-8185	900	1000	1050	1150	850	900	800	850	750	800	700	750	650	700
ACFR-8216	1060	1175	1240	1350	1000	1060	940	1000	880	940	820	880	746	820
ACFR-10276	1350	1500	1580	1730	1280	1350	1200	1280	1130	1200	1050	1130	974	1050
ACFR-10333	1620	1800	1900	2070	1540	1620	1440	1540	1350	1440	1260	1350	1170	1260
ACFR-10389	1900	2100	2200	2420	1800	1890	1680	1800	1570	1680	1470	1570	1370	1470

Ratings based on 70 °F Inlet water. Water Flow 1-1/2 GPM Per 100 SCFM (170 CMH) for single Stage Operation.

Water Flow 1 GPM Per 100 SCFM (170 CMH) for Two Stage Operation.

Maximum Pressure Drop: Air Side 1 PSI, Water Side 1 PSI.

* T Air Leaving - t Water Entering, T Inlet Air = 300 °F

TYPICAL SPECIFICATIONS

Furnish and install as shown on plans and with manufacturers recommendations, Aftercoolers according to the following specifications:

1. Capacity

- To cool _____ SCFM compressed air to within 15 °F entering cooling water at _____ GPM.
- Maximum air pressure drop 1 psi.
- Maximum water pressure drop 1 psi.
- Maximum Shell Diameter _____ inches.
- Maximum length 50 inches.
- Minimum tube surface _____ sq. feet.

2. Type

Shell and tube, straight tube - fixed tubesheet.
Compressed air in tubes, water in shell.

3. Materials

- Tubesheets - Steel
- Baffles - Steel
- Tubes - Cooper 1/4 OD; Wall - 27 BWG
- Shell Steel Pipe

4. Construction*

A Manufacturers' Data Report for Pressure Vessels, Form No. U-1 as required by the provisions of ASME Code Rules is furnished with each unit upon request. This form is signed by an authorized inspector, holding a National Board Commission, and who is employed by an authorized inspection agency, certifying that construction conforms to the latest ASME Code for pressure vessel. The ASME "U" symbol is stamped on each vessel. In addition, each unit is registered with the National Board of Boiler and Pressure Vessel Inspectors.

5. Manufacturer

Aftercoolers shall be as manufactured by Bell & Gossett Factory No. _____, Model No. _____ or approved equal.

*Compliance with this part of specification will insure acceptance of the vessel by any state of local jurisdiction in the United States.

CAUTION: Cooling water should be circulating through the shellside before hot compressed air enters the tube side of the Aftercooler.

Bell & Gossett

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