

# **American Industrial Heat Transfer Inc.**

**Manufacturers of Quality Heat Exchangers**

**ABR SERIES**



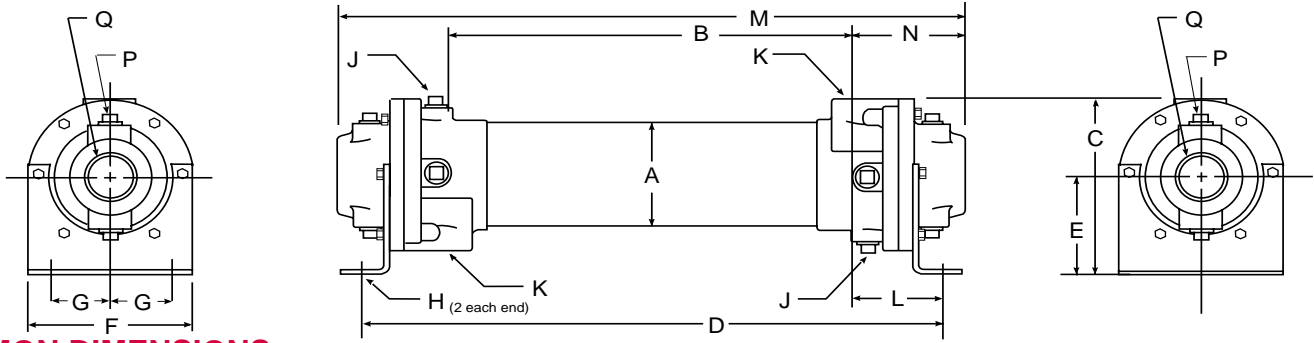
## **FIXED TUBE BUNDLE / WATER COOLED AFTER COOLERS**

**FOR COMPRESSED AIR AND GAS APPLICATIONS**

- Copper, 90/10 Copper/Nickel, Carbon Steel, Or Stainless Steel Tubing.
- Optional Brass Bonnets Or SAE Straight Thread Connections.
- Operating Pressure For Tubes 150 PSI.
- Operating Pressure For Shell 250 PSI.
- Operating Temperatures Of 350° F.
- Can Be Customized To Fit Your Needs.
- Visit Our Web site at [www.aihti.com](http://www.aihti.com)

# STANDARD MODELS

## Dimensions and Weights:



### COMMON DIMENSIONS

Model	A	B	C	D	E	F	G	H	J NPT	K NPT	L	M	N	P NPT	Q NPT	Weights (lbs.)	Model						
ABR-403-A4-SP	2.13	25.62	3.50	29.06	1.94	2.62	0.88	0.41 DIA.	—	0.50	1.72	33.36	3.87	—	1.50	13	ABR-403-A4-SP						
ABR-404-A4-SP	2.13	34.62	3.50	38.06	1.94	2.62	0.88										ABR-404-A4-SP						
ABR-405-B4-SP	2.13	43.62	3.50	47.06	1.94	2.62	0.88										ABR-405-B4-SP						
ABR-705-B4-SP	3.66	43.00	6.25	48.38	3.62	5.25	1.50	0.44x	(2) 0.38	1.00	2.89	50.40	3.70	—	2.50	40	ABR-705-B4-SP						
ABR-1006-B6-SP	5.13	51.50	7.38	57.62	4.00	6.75	2.00	1.00	1.50	3.06	59.60	4.05	3.00				80	ABR-1006-B6-SP					
ABR-1206-C6-SP	6.13	50.50	8.81	57.38	4.75	7.50	2.50	0.44x	2.00	3.44	60.25	4.88	3.00				130	ABR-1206-C6-SP					
ABR-1207-C6-SP	6.13	59.60	8.81	66.38	4.75	7.50	2.50	.88	(6) 0.38	2.00	3.44	69.25	4.88	(4) 0.50	3.00	150	ABR-1207-C6-SP						
ABR-1606-C6-SP	8.00	49.60	12.13	58.38	6.50	8.62	3.50	0.44x									3.00	4.39	62.62	6.52	5.00	259	ABR-1606-C6-SP
ABR-1607-D6-SP	8.00	58.60	12.13	67.38	6.50	8.62	3.50	1.00									3.00	4.39	71.62	6.52	5.00	270	ABR-1607-D6-SP
ABR-1608-D6-SP	8.00	67.60	12.13	76.38	6.50	8.62	3.50			3.00	4.39	80.62	6.52		5.00	315	ABR-1608-D6-SP						

NOTE: We reserve the right to make reasonable design changes without notice.

### CAPACITY SELECTION CHART

MODEL	2-Stage 250 °F Inlet Air		Rotary 200 °F Inlet Air	
	SCFM Capacity In Tubes	ΔP, PSI, In Rated Capacity	SCFM Capacity In Tubes	ΔP, PSI, In Rated Capacity
ABR-403-A4-SP	45	0.15	56	0.15
ABR-404-A4-SP	85	0.35	115	0.65
ABR-405-B4-SP	155	1.25	200	2.01
ABR-705-B4-SP	315	1.10	435	1.65
ABR-1006-B6-SP	445	0.35	650	0.55
ABR-1206-C6-SP	645	0.35	950	0.65
ABR-1207-C6-SP	1245	1.15	1680	1.95
ABR-1606-C6-SP	1605	0.60	2270	0.95
ABR-1607-D6-SP	2105	1.10	3075	1.75
ABR-1608-D6-SP	2810	1.65	3165	2.10

ZINC ANODE available as an option.

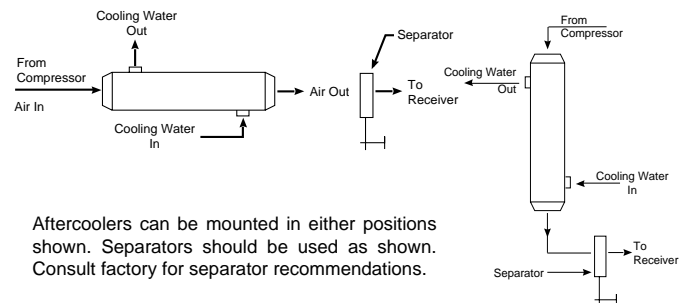
### EXAMPLE

A two stage compressor with a 340 SCFM air delivery at 100psi and a 250° F discharge temperature. Two psi is the maximum allowable pressure loss. Rate of water flow, to be determined.

### SELECTION

To find a solution, select ABR-1006-B6-SP from the 2-stage column in the above chart. It has a capacity of 445 SCFM. Next, identify the value for ΔP by reading the sub-column within the 2-stage column. The information in that column should be ΔP= 0.35 psi. Data for water flow is 340 SCFM x .035 = 11.9 gpm.

### PIPING HOOK-UP DIAGRAMS



Aftercoolers can be mounted in either positions shown. Separators should be used as shown. Consult factory for separator recommendations.

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