



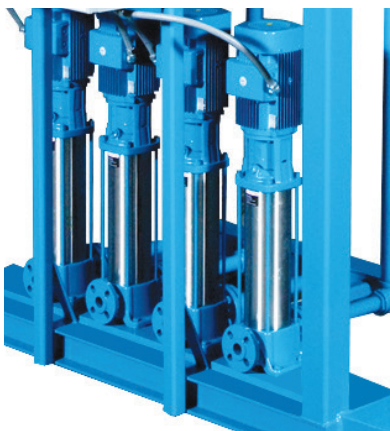
# A3

## .03 Atmospheric Deaerating Feedwater Heaters

### FEATURES

- 99% OXYGEN REMOVAL prevents boiler system corrosion and costly retubing
- UNRESTRICTED VENTING assures quick release of liberated gasses and NO BACKPRESSURE for gravity returns
- ATMOSPHERIC DESIGN requires no safety valves or annual inspection
- ELECTRONIC INSTRUMENTATION for modulating level control includes a HART compatible differential pressure transmitter, PID controller, and motorized control valve
- ULTRA SENSITIVE steam regulator provides uniform reliable heating at all loads
- NO PRESSURE DECAY reduces the chance for pump cavitation
- STAINLESS STEEL construction of all internal heating surfaces
- DURATHERM LINING is field renewable and increases the overall system lifespan
- CUSTOM ENGINEERED PACKAGED SYSTEM with low net positive suction head (NPSH) pumps and high quality components insures reliable service and single source responsibility
- HIGH TEMPERATURE returns are used for heating
- LOW PRESSURE returns can flow by gravity back to the deaerator or can be pumped through the makeup nozzle

The A3, single-stage atmospheric deaerating heater offers uniform heating, while removing up to 99% of the oxygen in the make-up water.



**A3 Deaerating Feedwater Heaters include factory installed pumps and factory installed suction piping. suction piping includes standard shut-off valve and flexible connector.**

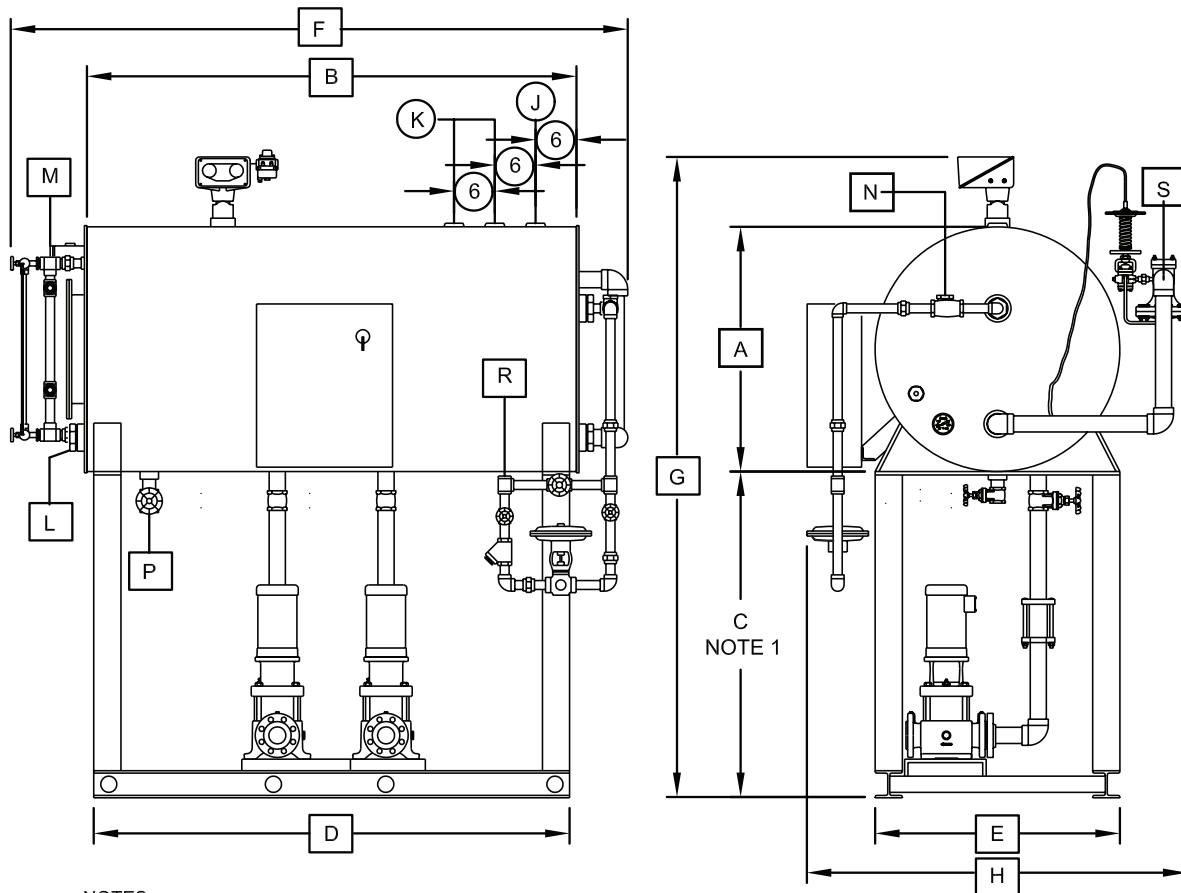
### ADDITIONAL OPTIONS

- Pumping discharge piping
- Pump staging
- Combination motor starters

### Atlantic Feedwater Systems

offers a complete line of atmospheric and pressurized deaerators ranging in size from 3,400 lbs/hr to 100,000 lbs/hr. These systems provide oxygen removal from .03 cc/liter to .005 cc/liter per ABMA testing procedures. Packaged systems from AFS insures that you have all components necessary for operation.

# A3 .03 Atmospheric Deaerating Feedwater Heaters



- NOTES:
1. STANDARD STAND HEIGHT "C" IS ADJUSTED TO ACCOMMODATE SPECIFIC PUMP REQUIREMENTS
  2. WEIGHTS DO NOT INCLUDE PUMPS OR AUXILIARY EQUIPMENT

| CAPACITIES & STANDARD DIMENSIONS TABLE |                                     |              |               |               |               |               |               |               |               |               |               |               |
|--|-------------------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| MODEL No.                              | 1A3                                 | 2A3          | 3A3           | 4A3           | 5A3           | 6A3           | 8A3           | 10A3          | 12A3          | 15A3          | 18A3          | 21A3          |
| <b>RATING IN LBS/HR</b>                | <b>3,450</b>                        | <b>6,900</b> | <b>10,350</b> | <b>13,800</b> | <b>17,250</b> | <b>20,700</b> | <b>27,600</b> | <b>34,500</b> | <b>41,400</b> | <b>51,750</b> | <b>62,100</b> | <b>72,450</b> |
| (A) VESSEL OD                          | 24                                  | 30           | 30            | 36            | 36            | 42            | 48            | 48            | 48            | 54            | 60            | 60            |
| (B) SHELL LENGTH                       | 48                                  | 60           | 83            | 84            | 96            | 84            | 84            | 96            | 120           | 120           | 120           | 144           |
| (C) STAND LENGTH                       | 48                                  | 48           | 48            | 48            | 48            | 48            | 48            | 48            | 48            | 48            | 48            | 48            |
| (D) STAND HEIGHT                       | 48                                  | 56           | 80            | 80            | 92            | 80            | 80            | 92            | 116           | 116           | 116           | 140           |
| (E) STAND WIDTH                        | 44                                  | 30           | 30            | 36            | 35            | 42            | 48            | 48            | 48            | 54            | 60            | 60            |
| (F) OVERALL LENGTH: APPROX             | 72                                  | 84           | 108           | 108           | 120           | 108           | 108           | 120           | 132           | 132           | 132           | 156           |
| (G) OVERALL HEIGHT: APPROX             | 84                                  | 90           | 90            | 96            | 96            | 102           | 108           | 108           | 108           | 114           | 120           | 120           |
| (H) OVERALL WIDTH: APPROX              | 40                                  | 46           | 46            | 52            | 52            | 58            | 64            | 64            | 64            | 70            | 76            | 76            |
| (J) VENT                               | 4                                   | 4            | 4             | 4             | 4             | 4             | 6             | 6             | 6             | 6             | 6             | 6             |
| (K) GRAVITY RETURNS (QTY)              | 2 (2)                               | 2 (2)        | 2 (2)         | 2 (2)         | 3 (2)         | 3 (2)         | 3 (2)         | 3 (2)         | 3 (2)         | 3 (2)         | 3 (2)         | 4 (2)         |
| (L) HIGH PRESSURE RETURNS              | 2                                   | 2            | 2             | 2             | 2             | 2             | 3             | 3             | 3             | 3             | 3             | 3             |
| (M) OVERFLOW                           | 2                                   | 2            | 2             | 2             | 2             | 2             | 3             | 3             | 3             | 3             | 3             | 3             |
| (N) PUMPED RETURNS                     | 2                                   | 2            | 2             | 2             | 2             | 2             | 2             | 2             | 3             | 3             | 3             | 3             |
| (P) DRAIN                              | 1                                   | 1            | 1-1/2         | 1-1/2         | 1-1/2         | 1-1/2         | 2             | 2             | 2             | 2             | 2             | 2             |
| (R) MAKEUP INLET                       | Sized as Required by Job Conditions |              |               |               |               |               |               |               |               |               |               |               |
| (P) STEAM INLET                        |                                     |              |               |               |               |               |               |               |               |               |               |               |
| CAPACITY TO OVERFLOW                   | 110                                 | 195          | 270           | 390           | 445           | 525           | 690           | 780           | 770           | 1,230         | 1,570         | 1,835         |
| MINUTES STORAGE                        | 14.0                                | 13.9         | 13.0          | 13.9          | 12.7          | 12.6          | 12.5          | 11.3          | 11.8          | 11.8          | 12.6          | 12.6          |
| SHIPPING WT(LBS)                       | 700                                 | 1,000        | 1,225         | 1,400         | 1,560         | 1,985         | 2,300         | 2,545         | 2,985         | 3,910         | 4,245         | 4,850         |
| OPERATING WT(LBS)                      | 1,100                               | 1,770        | 2,300         | 2,945         | 3,325         | 4,090         | 5,045         | 5,685         | 6,910         | 8,880         | 10,375        | 12,210        |
| FLOODED WT (LBS)                       | 1,490                               | 2,540        | 3,370         | 4,490         | 5,090         | 6,190         | 7,790         | 8,820         | 10,830        | 13,840        | 16,500        | 19,560        |

Notes: System Includes 48" stand \*Includes 12" for panel \*\*Inlet "K" includes makeup and returns \*\*\*Not including boiler feed pumps & panel  
All dimensions in inches