



# Jet Spray

.005 cc/Liter Pressurized Deaerator



Pressurized and Atmospheric Deaerators

## Spray Type Deaerator Pressurized .005 cc/liter

COUNTER FLOW TRAY design provides guaranteed removal of all dissolved oxygen in excess of .005 cc/liter from 5% to 100% of deaerator capacity.

[industrialsteam.com](http://industrialsteam.com)

# Jet Spray Deaerator

## Pressurized .005 cc/liter

### When to use

|                                     |     |
|-------------------------------------|-----|
| 100% Makeup<br>0% condensate        | Yes |
| 30% Makeup<br>70% condensate        |     |
| High Pressure<br>condensate returns |     |
| 100% Turndown                       |     |
| Load Swings                         |     |

\*Requires surge tank



### FEATURES

**UNIQUE JET SPRAY** scrubber design guarantees removal of all dissolved oxygen in excess of .005 cc/liter (7 ppb).

#### **ELECTRONIC INSTRUMENTATION FOR MODULATING LEVEL CONTROL**

includes a HART compatible differential pressure transmitter, PID controller, and motorized control valve.

**MULTIPLE CONFIGURATIONS:** vertical or horizontal vessels provide maximum flexibility using minimum footprint.

**ONLY STAINLESS STEEL** components come in contact with undeaerated water. Spray nozzle, scrubbing section and internal vent condenser are all stainless steel.

A.S.M.E. Code and National Board stamped receivers at 50 psi is standard. Standard vessel options include stress relieving, non-destructive testing and full vacuum.

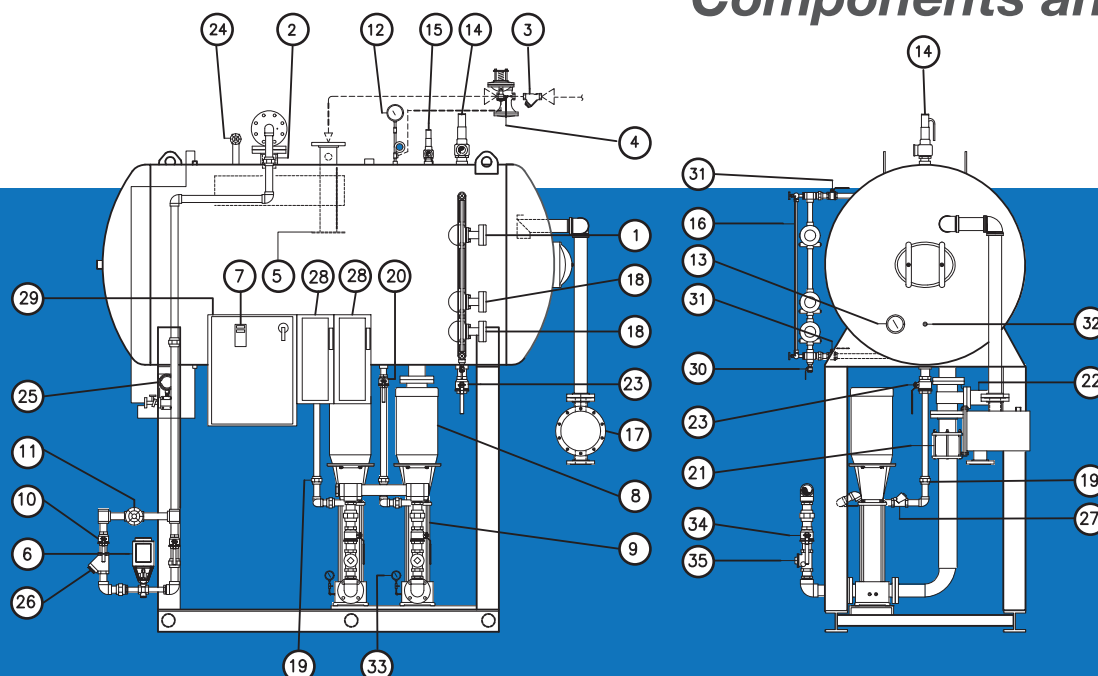
#### **CUSTOM ENGINEERED PACKAGED SYSTEM**

includes boiler feedwater pumps and quality components to insure reliable service.

#### **Testing Requirements**

This system requires steady state conditions per the ABMA testing procedure.

# Components and Sizing



- |                                  |                                                              |                                      |
|----------------------------------|--------------------------------------------------------------|--------------------------------------|
| 1 High Water Alarm Switch        | 13 Temperature Gauge w/thermowell (50 DEGREE - 500 DEGREE F) | 24 Vent Gate Valve                   |
| 2 Make-up Nozzle                 | 14 Safety Relief Valve (Set at 50#)                          | 25 Level Transmitter                 |
| 3 Y-Strainer                     | 15 Sentinel Relief Valve (Set at 20#)                        | 26 Make-up Y-Strainer                |
| 4 Pressure Control Valve         | 16 Sight Glass Assembly                                      | 27 Recirculation Check Valve         |
| 5 Steam Nozzle                   | 17 Overflow Trap                                             | 28 Starter                           |
| 6 Make-up Control Valve          | 18 Low Water Alarm & Cut Off Switch                          | 29 Control Panel (NEMA 1)            |
| 7 Level Controller               | 19 Recirculation Orifice Union                               | 30 Water Column Drain Ball Valve     |
| 8 Boiler Feed Pump Motor         | 20 Recirculation Ball Valve                                  | 31 Water Column Isolation Ball Valve |
| 9 Boiler Feed Pump               | 21 Suction Coupling                                          | 32 Chemical Feed Quill               |
| 10 Make-up Ball Valve            | 22 Suction Gate Valve                                        | 33 Discharge Pressure Gauge (0-400#) |
| 11 Make-up Globe Valve           | 23 Drain Ball Valve                                          | 34 Discharge Ball Valve              |
| 12 Pressure Gauge (0-15#) w/cock |                                                              | 35 Discharge Check Valve             |

| MODEL NUMBER | RATED CAPACITY |       | RECEIVER SIZE TANK<br>Diameter x Overall Length | SYSTEM CAP. TO OVERFLOW |      | APPROX OVERALL DIMENSIONS, in. |     |     | APPROX WEIGHT, lbs |           |         |
|--------------|----------------|-------|-------------------------------------------------|-------------------------|------|--------------------------------|-----|-----|--------------------|-----------|---------|
|              | LBS/HR         | HP    |                                                 | GALS                    | MIN. | HEIGHT*                        | L   | W** | SHIPPING           | OPERATING | FLOODED |
| 1JS5         | 3,450          | 100   | 36" x 5' 5"                                     | 155                     | 21   | 92                             | 65  | 48  | 1400               | 2700      | 3500    |
| 2JS5         | 6,900          | 200   | 36" x 5' 5"                                     | 155                     | 11.1 | 92                             | 65  | 48  | 1400               | 2700      | 3500    |
| 3JS5         | 10,350         | 300   | 48" x 5' 10"                                    | 285                     | 13.9 | 102                            | 65  | 60  | 2000               | 4400      | 6000    |
| 4JS5         | 13,800         | 400   | 48" x 5' 10"                                    | 285                     | 10.3 | 102                            | 65  | 60  | 2000               | 4400      | 6000    |
| 6JS5         | 20,700         | 600   | 48" x 7' 10"                                    | 413                     | 10   | 102                            | 94  | 60  | 24000              | 5500      | 7560    |
| 8JS5         | 27,600         | 800   | 54" x 9' 11"                                    | 697                     | 12.6 | 108                            | 119 | 66  | 3100               | 8400      | 11800   |
| 10JS5        | 34,500         | 1,000 | 54" x 9' 11"                                    | 697                     | 10.1 | 108                            | 119 | 66  | 3100               | 8400      | 11800   |
| 12JS5        | 41,400         | 1,200 | 60" x 10' 4"                                    | 866                     | 10.4 | 112                            | 124 | 72  | 3600               | 10800     | 15000   |
| 15JS5        | 51,750         | 1,500 | 60" x 12' 4"                                    | 1060                    | 10.3 | 112                            | 148 | 72  | 3850               | 12650     | 17650   |
| 18JS5        | 62,100         | 1,800 | 60" x 14' 4"                                    | 1254                    | 10.1 | 112                            | 172 | 72  | 4100               | 14500     | 20300   |
| 21JS5        | 72,450         | 2,100 | 66" x 14' 4"                                    | 1450                    | 10   | 112                            | 172 | 78  | 4800               | 16800     | 24500   |
| 24JS5        | 82,800         | 2,400 | 66" x 16' 4"                                    | 1658                    | 10.1 | 118                            | 196 | 78  | 5300               | 19200     | 27900   |
| 30JS5        | 100,000        | 3,000 | 72" x 16' 4"                                    | 2010                    | 10   | 124                            | 199 | 84  | 6000               | 22500     | 29600   |
| 36JS5        | 125,000        | 3,600 | 72" x 18' 7"                                    | 2518                    | 10.1 | 124                            | 223 | 84  | 6550               | 25200     | 33100   |
| 45JS5        | 150,000        | 4,500 | 84" x 16' 11"                                   | 2990                    | 10   | 136                            | 203 | 96  | 8100               | 32300     | 41000   |
| 60JS5        | 200,000        | 6,000 | 84" x 18' 11"                                   | 4000                    | 10   | 136                            | 227 | 96  | 9000               | 40600     | 51400   |
| 75JS5        | 250,000        | 7,500 | 96" x 19' 3"                                    | 5046                    | 10.1 | 148                            | 231 | 108 | 10200              | 52200     | 66000   |
| 90JS5        | 300,000        | 9,000 | 96" x 23' 3"                                    | 6170                    | 10.3 | 148                            | 279 | 108 | 12100              | 63600     | 80500   |

• Consult Factory for systems over 300,000 lbs./hr. • Weights do not include pumps or optional equipment \* Includes 48" Stand \*\* Includes Control Panel



## *Additional Industrial Products*



Tray Type  
Pressurized .005 cc/liter  
Pressurized Deaerators



Spray Flow II  
.005 cc/Liter Atmospheric  
Recycling Deaerators



Steam Flow  
.005 cc/Liter Pressurized  
Recycling Deaerators



Blowdown Heat  
Recovery Systems,  
Blowdown Separators

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Have questions or need help specifying this equipment? Email: [engineering@industrialsteam.com](mailto:engineering@industrialsteam.com)

Need help with an existing system or parts? Email: [techsupport@industrialsteam.com](mailto:techsupport@industrialsteam.com)

Looking for a local representative? Email: [sales@industrialsteam.com](mailto:sales@industrialsteam.com)

Literature available for download at [industrialsteam.com](http://industrialsteam.com)

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