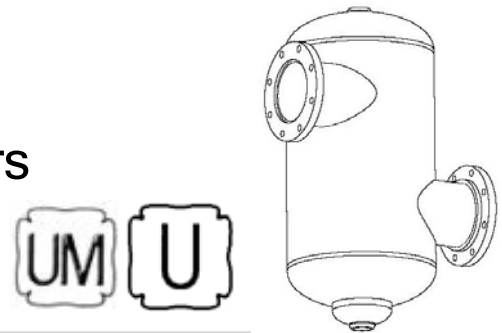


Job Name: _____		
Job No.: _____	JWC Representative: _____	
Tag No.: _____	Submitted By: _____	Date: _____
Engineer: _____	Approved By: _____	Date: _____
Contractor: _____	Order No.: _____	Date: _____

## JDSR Series

### ASME Tangential Air/Dirt Separators Full Flow Design w/ Sediment Removal Bowl



#### APPLICATION

- JDSR Series air/dirt separators are designed with tangential openings to enhance the air separation efficiency. The vortex action allows the heavier air-free water to move to the vessel wall area while forcing the separated air into the center where it is vented out of the top of the separator.
- Water exits the vessel through the outlet nozzle connection near the bottom, free of air bubbles, protecting the system from the problems associated with trapped system air.
- The sediment removal bowl on the bottom provides a collection area or sump where heavier particulate can accumulate and be easily removed.
- The optional vertical air collector tube is designed to enhance the air separation performance.

#### DESIGN PRESSURE AND TEMPERATURE

- Maximum design pressure:  
JDSR-20-401 to 409: 150 PSI (1035 kPa)  
JDSR-20-410 to 414: 125 PSI (862 kPa)
- 175, 200, 250, 300 PSI available upon request
- Maximum design temperature: 375° F (191° C)

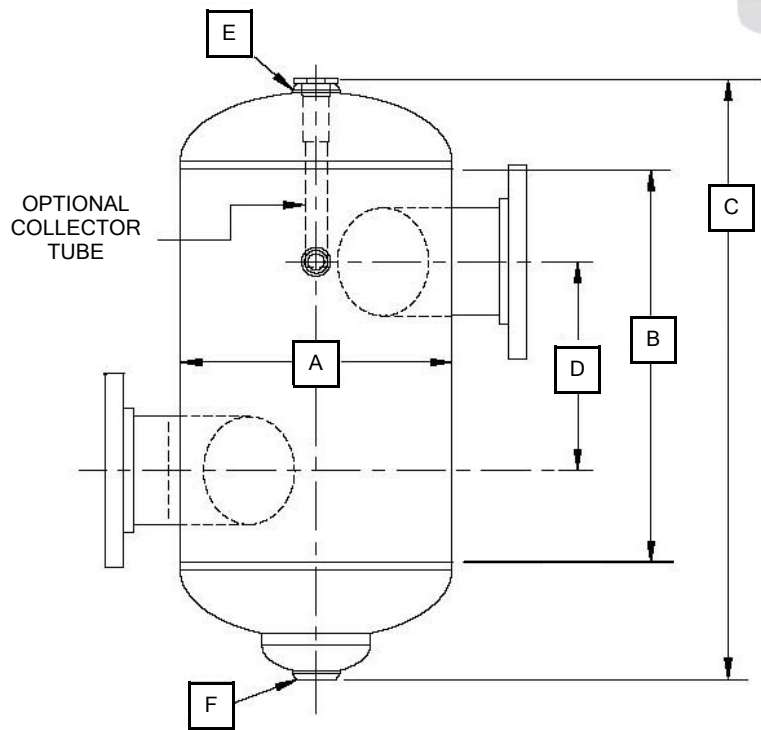
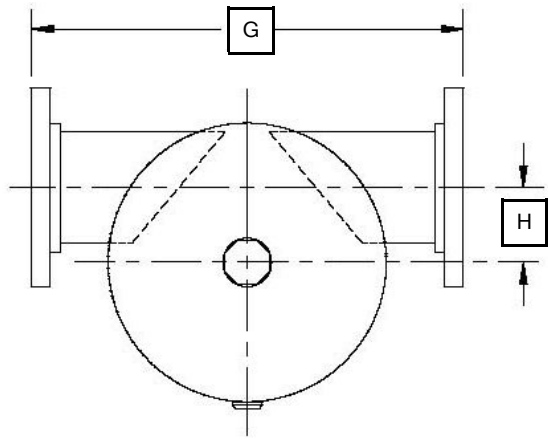
#### TYPICAL DESIGN SPECIFICATION


Furnish and install as shown on plans a John Wood Model No. JDSR-20-\_\_\_\_\_ ASME stamped air/dirt separator with sediment removal bowl. The unit shall have \_\_\_\_\_" flanged/NPT/grooved system connections. A blowdown connection is provided to facilitate preventative maintenance and cleaning of the sediment bowl and separator. The unit must be designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code Section VIII, Division 1, with a stamped MAWP of \_\_\_\_\_PSI (\_\_\_\_\_ kPa).

#### SPECIFICATIONS

- Designed and built in accordance with the ASME BPV Code Section VIII, Division 1
- Installation: vertical
- Shell: Carbon Steel with exterior gray primer finish
- System connections: MNPT for 2" and 2½" sizes; ANSI 150# RF flanges for 3" and larger
- These air separators can be supported in the piping system if the piping system hangers are located under the inlet and outlet nozzles as close as possible to the outside diameter of the shell of the unit.
- Optional factory welded support brackets on the shell are optionally available, but are required for the 6" and larger sizes for seismic designs.
- Lifting lugs are not designed to support the vessel in the piping system.

# JDSR Series Air/Dirt Separators



- OPTIONS**
- Support brackets with FNPT half couplings factory welded to the shell 
  - Stainless steel collector tube

MODEL NUMBER	CODE SYMBOL	MAWP	INLET/OUTLET SIZE & TYPE		A DIAMETER		B DIM	C OVERHEADS		D DIM	E DIM	F DIM	G DIM	H DIM	TANK WEIGHT
			IN	TYPE	IN	MM		IN	MM						
JDSR-20-401	UM	150	2	NPT	12	305	13	21 $\frac{3}{4}$	552	8	1 $\frac{1}{4}$	1	16 $\frac{5}{8}$	4 $\frac{1}{4}$	40
JDSR-20-402	UM	150	2 $\frac{1}{2}$	NPT	12	305	13	21 $\frac{3}{4}$	552	8	1 $\frac{1}{4}$	1	16 $\frac{5}{8}$	4 $\frac{1}{8}$	40
JDSR-20-403	UM	150	3	FLG	12	305	13	21 $\frac{3}{4}$	552	8	1 $\frac{1}{4}$	1	19 $\frac{3}{4}$	3 $\frac{3}{4}$	70
JDSR-20-404	UM	150	4	FLG	14	356	20 $\frac{1}{4}$	29 $\frac{1}{4}$	756	10 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	21 $\frac{1}{4}$	4 $\frac{1}{4}$	85
JDSR-20-405	UM	150	5	FLG	14	356	20 $\frac{1}{4}$	29 $\frac{1}{4}$	756	10 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	21 $\frac{1}{4}$	3 $\frac{3}{4}$	105
JDSR-20-406	U	150	6	FLG	20	508	29	42 $\frac{3}{4}$	1086	14 $\frac{1}{2}$	2	2	28	6 $\frac{1}{4}$	185
JDSR-20-407	U	150	8	FLG	20	508	29	42 $\frac{3}{4}$	1086	14 $\frac{1}{2}$	2	2	28	5 $\frac{1}{4}$	215
JDSR-20-408	U	150	10	FLG	30	762	39	59 $\frac{1}{2}$	1511	19	2	2	41	9 $\frac{1}{8}$	560
JDSR-20-409	U	150	12	FLG	30	762	42	62 $\frac{1}{2}$	1588	19	2	2	41	8 $\frac{1}{8}$	615
JDSR-20-410	U	125	14	FLG	36	914	58	81 $\frac{1}{4}$	2076	31 $\frac{1}{2}$	2	2	46 $\frac{3}{8}$	10 $\frac{1}{4}$	960
JDSR-20-411	U	125	16	FLG	42	1067	72	100 $\frac{1}{4}$	2546	36	2	2	52	10 $\frac{1}{4}$	1460
JDSR-20-412	U	125	18	FLG	48	1219	77	108	2743	41	2	2	61 $\frac{1}{2}$	13 $\frac{3}{8}$	1790
JDSR-20-413	U	125	20	FLG	54	1372	85 $\frac{1}{2}$	120	3048	45	2	2	66	16	2565
JDSR-20-414	U	125	24	FLG	66	1676	92 $\frac{1}{2}$	135	3429	47 $\frac{1}{2}$	2	2	78	19	4935

Dimensions are subject to change  
Weights are approximate  
\*Stock model





# JDSR Series Air/Dirt Separators

**PRESSURE DROP CHART FOR TANGENTIAL AIR SEPARATORS WITHOUT STRAINER**

