

# Cooling & Heating Division



## STEAM SEPARATOR - UNIQUE DESIGN

### MAIN FEATURES

**Application:** Suitable for air, gas and steam applications.

**Performance:** The Wright-Austin Type T entrainment separator, when properly sized, installed and drained, will remove 95% of all liquid droplet and solid particle.

**Operation:** Moisture-laden gas enters the inlet of the separator where it is deflected in a centrifugal downward motion. The entrained moisture is thrown to the outer wall and is separated by reduction in velocity. The separated liquid falls below the "Vortex Containment Plate" (VCP) where it cannot be carried away by dry air/ gas/ steam. Dry clean steam/gas is drawn from the vessel center and it flows upward through the outlet of the separator.

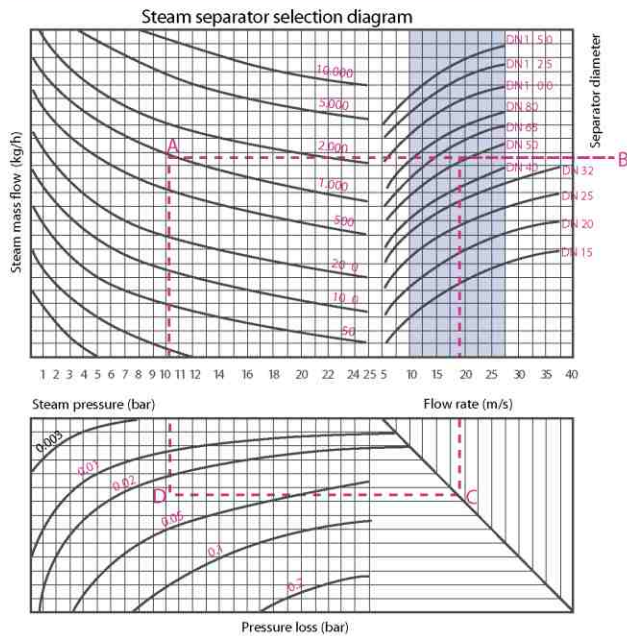
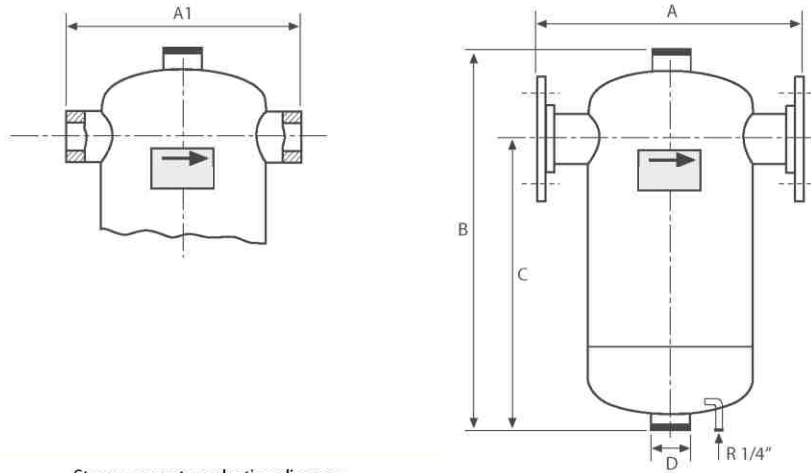
**ASME Code Construction:** These type T separators are of welded steel construction in accordance with section 8. Division 1 of the ASME Code for unfired pressure vessels. Inlet and outlet connections can be rotated radially upon request.

### OPERATING CONDITIONS

DN	Max. Working Pressure (bar)	Max. Working T emp. (°C)
15 - 80	25 ( Steam )	228
100 - 150	21 ( Steam )	217
15 - 150	17 ( Air )	50

<b>Connection</b>	Flanged
<b>Material</b>	Carbon steel
<b>DN</b>	15-20-25-32-40-50 65-80-100-125-150-200

## DIAGRAM



### HOW TO USE THE DIAGRAM

- 1 - 10 bar steam pressure and 1000 kg/h mass flow form A- D line.
- 2 - Extend A- B line horizontally.
- 3 - Any separator are intersecting with the A- B line in the shaded area will be working 100% efficiently (DN 50).
- 4 - Flow rate is determined by B- C vertical line (19 m/s).
- 5 - Pressure loss is established by intersecting A- B line to C- D line (0.03 bar).
- 6 - Separator; should be chosen by determining the flow rate line diameter and pressure loss.

## DIMENSIONS

DN	A	A1	B	C	D
15	180	120	324	242	R 1/2"
20	230	150	389	298	R 1" X 1/2"
25	230	160	384	306	R 1" X 1/2"
32	250	200	426	315	R 1" X 1/2"
40	300	220	467	346	R 1" X 1/2"
50	300	220	493	384	R 1" X 1/2"
65	400	-	616	481	R 1 1/2" X 3/4"
80	450	-	683	520	R 1 1/2" X 3/4"
100	500	-	782	589	R 2" X 1"
125	600	-	937	725	R 2" X 1"
150	600	-	1037	817	R 2" X 1"
200	700	-	1210	968	R 2" X 1"
250	850	-	1750	1350	R 2"
300	950	-	1900	1450	R 2"
350	1000	-	2000	1500	R 2"

Special inspection and certification available on request

In view of our constant endeavor to improve the quality of our products, we reserve the right to alter or change specifications without prior notice.



**THERMAX**

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