

VERTICAL PRESSURIZED STORAGE TANK

Bul.#21832

SELECT TANK SIZE BASED ON ECONOMIZER BTU/HR RECOVERY.

CHECK OFF	BTU/HR ECONOMIZER RECOVERY	MODEL# TANK	SIZE DIA. x O.A.H."	CAPACITY GALLONS	WEIGHT LBS	DESIGN PRESSURE
	75,000	390020	16" 40"	30	118	165
	150,000	390040	20" 48"	60	188	200
	300,000	390090	24" 77"	120	360	200
	550,000	390140	30" 77"	200	565	200
	800,000	390200	36" 82"	300	660	200
✓	1,000,000	390230	36" 104"	400	916	200
	1,550,000	390275	42" 125"	620	1585	150
	2,600,000	390380	48" 156"	1040	2265	150

DESCRIPTION:

THE VERTICAL PRESSURIZED STORAGE TANK IS APPLIED IN SYSTEMS WHERE STEADY WATER FLOW THROUGH THE ECONOMIZER CANNOT BE CONSTANT OR SOMETIMES DROPS DOWN TO AN UNACCEPTABLE FLOW RATE. THE APPLICATION OF THIS SEPARATE SYSTEM, ALLOWS ABSOLUTE CONTROL OF ECONOMIZER OUTLET FLUE GAS AND WATER TEMPERATURES, WHICH CAN BE MAINTAINED IN ADDITION TO THE MAXIMUM BTU/HR. RECOVERY. MAXIMUM BTU/HR. RECOVERY IS ALWAYS POSSIBLE, BECAUSE WATER IS CIRCULATED FROM THE BOTTOM OF THE TANK OR "COLD WATER ZONE" (WHERE NEW WATER ENTERS), TO THE ECONOMIZER, AND BACK TO THE TOP OF THE TANK OR "HOT WATER ZONE" (WHERE HEATED WATER LEAVES). THIS ALLOWS THE GREATEST ENTERING TEMPERATURE DIFFERENCE TO OCCUR, FOR MAXIMUM HEAT TRANSFER EFFECTIVENESS AT ALL TIMES. THE TANK BECOMES THE NEW HEAT SINK OR "BULGE IN THE WATER FLOW LINE" AND IS SPECIFICALLY USED FOR:

1. PROCESS WATER CONTROL
2. PREHEATING MAKEUP WATER TO THE CONDENSATE TANK OR DEAERATOR
3. PREHEATING BOILER FEEDWATER LEAVING THE BOILER FEED PUMP TO THE BOILER

THE PRESSURIZED TANK SYSTEM WILL ELIMINATE ANY POTENTIAL FLASHING IN THE ECONOMIZER, AND FOR ON/OFF BOILER FEEDWATER SYSTEMS, AVOIDS MAJOR FEEDWATER PIPING AND CONTROL CHANGES. THE EXISTING WATER FLOW SYSTEM WILL NOT BE AFFECTED, EXCEPT FOR THE CONTROLLED INCREASE IN WATER TEMPERATURE, AS A RESULT OF THE BTU RECOVERED FROM THE WASTE HEAT COMBUSTION SOURCE.

NOTES:

1. MANUFACTURED IN ACCORDANCE WITH SECTION VIII, ASME PRESSURE VESSEL CODE
2. LEGS ARE FURNISHED WITH ALL TANKS
3. MATERIALS OF CONSTRUCTION: BLACK STEEL
4. * RELIEF VALVE INSTALLED IN "TEE" AT HEATED WATER OUTLET CONNECTION UPON INSTALLATION.
5. DESIGN PRESSURE: 200 PSIG (OR AS NOTED)

