

## SIZING AND SELECTION TSS-B COOLING TOWER PUMP FLOW RATE (FOR HIGH HEAD "HH" PUMP STYLE ONLY)

### 25% SIDE STREAM FILTRATION REQUIRED

- **TSS-B:** Used where the SBC is installed on the system package. SBC is included on the system package. Separator with automatic purge to waste with a MBVSR (Motorized Ball Valve Spring Return), solid waste recovery through stainless steel tank, (optional NRT = No Recovery Tank), control panel, service light, pump/motor, basket strainer, corrosion coupon rack, conductivity controller, and SBC reaction chamber and driver.
- **HH:** High Head pump. Flooded suction required.  
**SIDE STREAM FILTRATION TO COOLING TOWER BASIN WITH SWEEPER PIPING.**  
**Any Basin designed to function without Sweeper Piping allows a Low Head Pump selection.**

Listed in the order of preferred calculation method to be used:

1. **When you have the cooling tower GPM only (the tonnage, the model number, or the basin size are not available):**

Example ~ A GPM of 3000 at 25% side stream equals 750 calculated GPM.

Selection is based on the GPM of the system that is closest to the calculated GPM, or the customer's tolerance for any extra horse power in yearly consumption. The cost of the system may become a factor when you decide whether or not to purchase the next larger sized package:

Example ~ 501-HH (650 GPM) or 600-HH (810 GPM)

2. **When you have the tonnage only (the model number, the basin size, or the cooling tower flow rate are not available):**

Example ~ 200 ton x 3\* = 600 calculated GPM; 600 calculated GPM at 25 % side stream equals 150 GPM

Selection is based on the GPM of the system that is closest to the calculated GPM, or the customer's tolerance for any extra horse power in yearly consumption. The cost of the system may become a factor when you decide whether or not to purchase the next larger sized package:

Example ~ 250-HH (130 GPM) or 251-HH (160 GPM)

3. **When you have the model number only (the cooling tower GPM, the tonnage, or the basin size are not available). Refer to the manufacturer's literature to obtain the GPM.**

Example ~ Select nominal temperature. Hot water is 95°F; cold water 85°F; and wet bulb is 78°F. A GPM of 1017 for Marley Model # NC8304F 95/85/78 cooling tower at 25% side stream equals 254 calculated GPM.

Selection is based on the GPM of the system that is closest to the calculated GPM, or the customer's tolerance for any extra horse power in yearly consumption. The cost of the system may become a factor when you decide whether or not to purchase the next larger sized package:

Example ~ 301-HH (250 GPM) or 400-HH (340 GPM)

SEPARATOR SYSTEMS SELECTION CHART				
SEPARATOR SIZE	NOMINAL FLOW		HIGHER FLOW	
	SERIES	FLOW (GPM)	SERIES	FLOW (GPM)
1"	100-HH	23	101-HH	28
1-1/4"	120-HH	40	121-HH	50
1-1/2"	150-HH	54	151-HH	68
2"	200-HH	90	201-HH	115
2-1/2"	250-HH	130	251-HH	160
3"	300-HH	200	301-HH	250
4"	400-HH	340	401-HH	420
5"	500-HH	510	501-HH	650
6"	600-HH	810	601-HH	1100
8"	800-HH	1400	801-HH	1700
10"	1000-HH	2000	1001-HH	2700
12"	1200-HH	2900	1201-HH	3700