

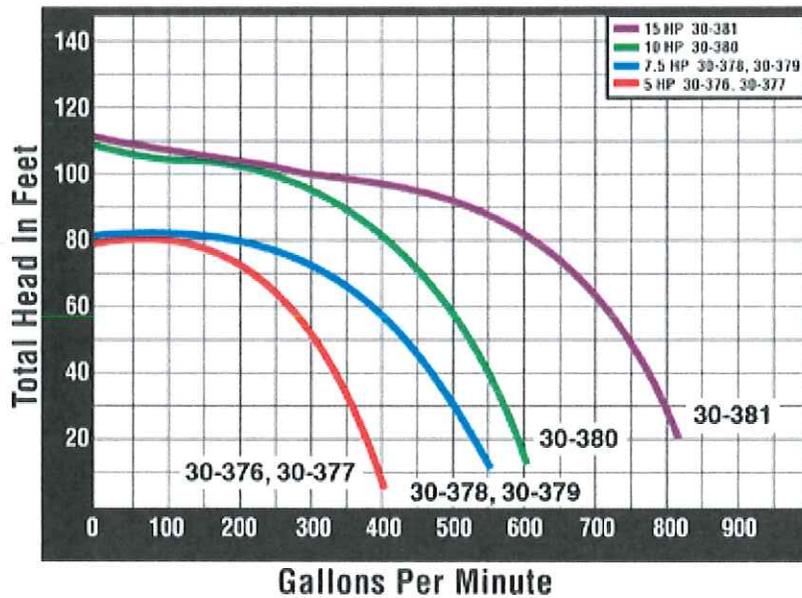
## Total Dynamic Head vs Actual Flow

(Return side of pump)  $X \text{ psi} \times 2.31 = A \text{ Ft of head}$

(Suction side of pump)  $X \text{ Hg} \times 1.13 = B \text{ Ft of head}$

$A + B = C \text{ Total TDH}$      $C = \text{Total TDH}$

- Take C and compare to pump curve for the specific pump.
- TDH is the vertical axis and flow rate is the horizontal axis.
- Actual flow is where the TDH meets the flow curve.



**Example: If A = 30 and B = 20 then C = 50 TDH**

- If we were using the 5 Hp pump (red curve) then the Actual flow rate for this system is 300 gpm.
- If for example each Suction Outlet Covers (SOC) being used has a maximum gpm of 350 then the SOC is within the VGB standard and sized correctly. If the SOC was rated for a maximum gpm of 285 then the SOC does not meet the VGB standard and is undersized.

(Return side of pump)  $\underline{\hspace{1cm}} \text{ psi} \times 2.31 = \underline{\hspace{1cm}} \text{ Ft of head}$

+

(Suction side of pump)  $\underline{\hspace{1cm}} \text{ Hg} \times 1.13 = \underline{\hspace{1cm}} \text{ Ft of head}$

=  $\underline{\hspace{1cm}}$  Total TDH