

Pressure Booster Systems – Designers Handbook

CHAPTER 3: Pump Selection Considerations

SECTION I: PUMP TYPES

Pump Types	Details
End Suction	175 # W.P., Low first cost, good use of floor space, typically 400 GPM or less, Low parts cost, relatively simple to repair, low to medium pressure boosting.
Vertical In-Line	175# W.P., Low first cost, excellent use of floor space, more cost effective on larger flows, reasonable parts cost, very simple to repair, low to medium pressure boosting.
Vertical Multi-Stage	250# W.P., Medium first cost, excellent use of floor space, more cost effective on smaller flows (100 GPM and less), reasonable to high parts cost, reasonably repairable, medium to high pressure boosting (80-200 PSI)
Vertical Turbine	250# W.P., High first cost, good use of floor space, more cost effective on very large flows and pressures, high parts cost, extensive repair work involved, medium to high pressure boosting at high flows. (50 + stories)

Note: W.P. stands for working pressure (i.e. suction pressure + boost)

SECTION II: OTHER CONSIDERATIONS

- 80% of all units will utilize End Suction Pumps.
- Consider multiple configurations for the pump type available. (ex: 6500, 6600 or 6700 Series, DualPak, QuadPak, etc.)
- Most systems should be considered to have an 18-20 year life cycle cost.
- Consider location of unit. (ex: Outdoors require TEFC motors)