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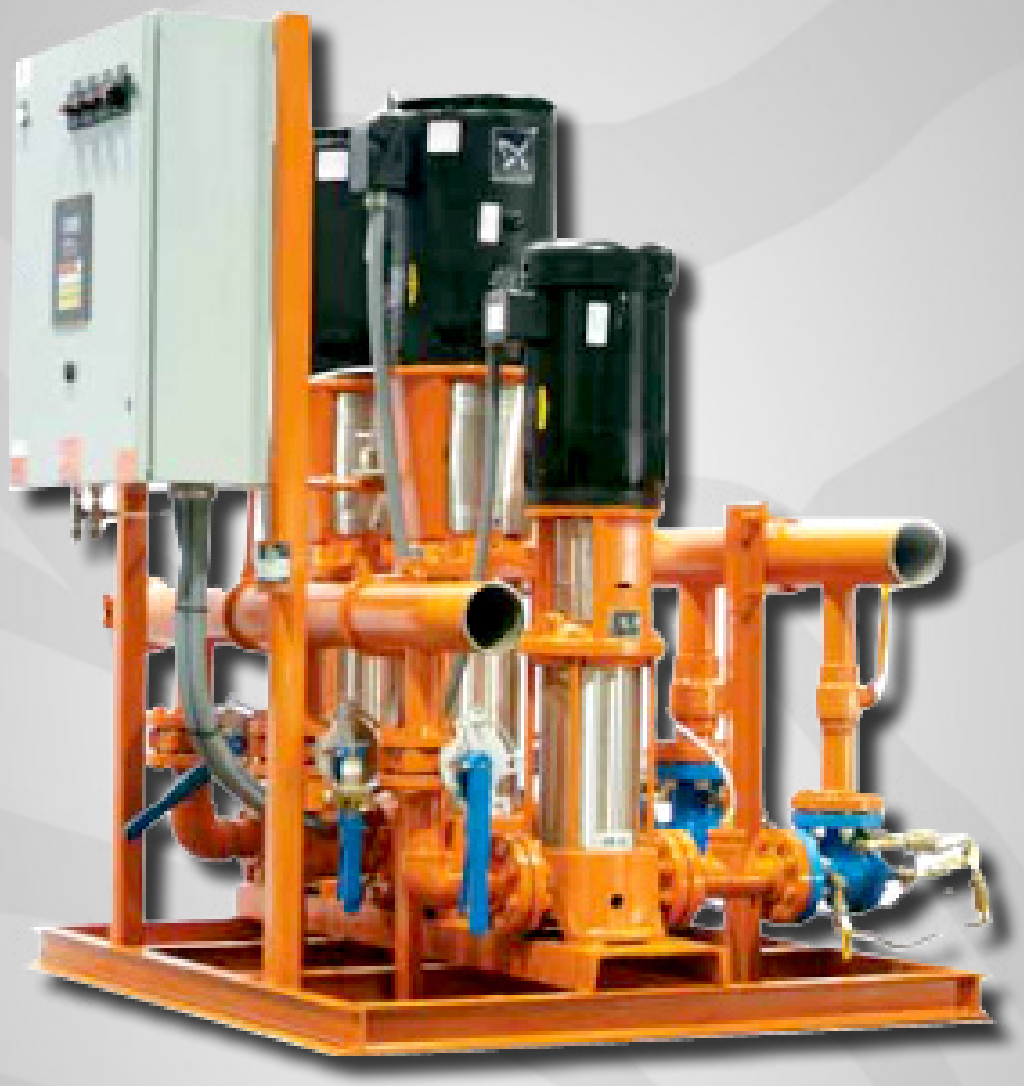

Booster System Sizing Manual

TIGERFLOW Systems, LLC

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How To Specify Your Next Pump Pacakge?

1. Pressure Requirement		PSI (PSIG)
A	Pressure Required at Highest Fixture PSIG (Estimate 30-40 PSIG +/-, or specified requirement)	
B	Static Head PSI (Building Height)	
C	Piping and System Friction Loss PSI (10% of static head)	
D	Required System Processing PSI (A+B+C)	
E	Substract Minimum Suction Pressure Available At Pump Station PSI (Minimum suction pressure at street minus pressure drop through backflow prevention and/or water meter)	
F	Subtotal (D-E) PSI	
G	Internal Booster Station Loss	
H	Total Pump Boost (Differential) Pressure Required (F + G) PSI	
I	Convert Pump Boost TOTAL (I) PSI to TDH (PSI_____X 2.31= _____Ft TDH)	

2. Fixture Unit Calculation

Fixture	Use	Units	Numbers of Fixtures	Total Fixtures x Units
Bathroom	Public	8		
Bathroom	Private	6		
Lavatory	Public	2		
Urinal-Flush Valve	Public	5		
Water Closet- Flush Valve	Public	10		
Water Closet- Flush Tank	Private	5		
Bathtub Public	Public	4		
Bathtub Private	Private	2		
Bathtub Immersion	Public	20		
Shower (Standard)	Public	4		
Sink- Kitchen	Public	4		
Sink-Kitchen	Private	2		
Sink- Services	Public	3		
Garbage Disposal	Public	3		
Garbage Disposal	Private	2		
Dishwasher	Public	6		
Dishwasher	Private	2		
Washing Machine Public	Public	4		
Washing Machine	Private	2		
Ice Machine	Public	1		
Steam Tables	Public	1		
Hose Connection	Public	6		
			Total Fixtures Units	

System Demand GPM Fixture Unit to System GPM
Typical System Fixture/Building GPM

Fixture Units	Apts./ Office	Hotel/Motel	Hospital/School/ Prison
100	70	80	100
300	80	90	100
600	100	120	130
900	120	125	140
1200	140	150	160
1500	150	170	190
1650	170	180	200
1750	180	190	210
2000	190	200	220
2200	210	220	230
2500	220	240	260
3000	250	275	300
4000	300	350	375
5000	350	400	450
6000	400	240	500
7000	450	500	550
8000	500	550	600
10,000	550	600	650

3. Total System Demand GPM

(See Fixture System GPM, above)		GPM
A	Total System Demand	
B	Special Duty Demands (Cooling Tower Makeup, etc.)	
C	Total System Demand	

Suggested System Capacity Splits
(% of System GPM)

DUPLEX (0-300 GPM)	TRIPLEX (301-300 + GPM)
50-50	10-50-50
33-67	20-40-40
65-65	33-33-33
100-100	50-50-50

4. Required System Capacity Splits
(See suggested % of System GPM, above)

	Size	GPM @	TDH	HP
Pump 1				
Pump 2				
Pump 3				

5. Maximum Flow Rate GPM
Note Required Header Size

Size	GPM
3”	300
4”	600
6”	1000
8”	1800
10”	2800

6. Create a TIGERFLOW Packaged Pump System Model Number

S = Simplex D = Duplex T = Triplex Q = Quardraplex	HP Lead Pump	HP Lag Pump(s)	Tank Location A= Adjacent R= Remote S= Skid C= No Tank	Tank Model * 1= 185 Gal, 200 PSI 2= 130 Gal, 125 PSI	Header Material S= Stainless C= Cooper G= Galvanized N= NSF Coated B= Steel	Header Size 3, 4, 6, 8, 10”

* Tanks are ASME Code, NB Stamped with an NSF-61 approved replaceable bladder, 100% drawdown, bottom fill connection, drain valve, pressure gauge and guard.

To place your order, please contact:
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