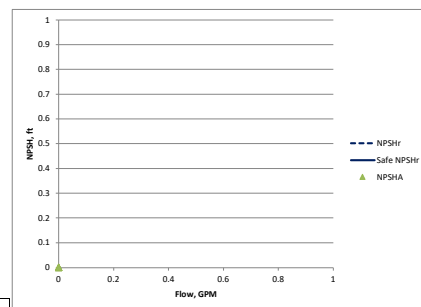


22-07-2025 Pump Curve Input

Instructions: Input data to shaded cells only. Remaining cells are calculated.

Pump Info	Make				
	Model				
	Impeller Size				
	BEP				
	GPM				
Manufacturer's Pump Curve	POR	0	0	GPM	
	Head(ft)	Flow, GPM (1 Pump)	Flow, GPM (2 Pumps)	Derated Values (w/ Header Loss)	
				Head	1 Pump, GPM
				2 Pump, GPM	
				0	0
				0	0
				0	0
				0	0
				0	0
				0	0
				0	0
				0	0
Mfr's NPSHr Curve	NPSHr, ft	Flow, GPM (1 pump)	Safe NPSHr, ft		
			0.00		
			0.00		
			0.00		
			0.00		
			0.00		
Calculated NPSHa Curve @ 34in Level and 40' Hg	Operating Point	WW Level (NAVD88)	Flow, GPM	H _{sum}	H _{op}
	Lead off	0	0	33.96	0
	Lead on	0	0	33.96	0
	Leadlag off	0	0	33.96	0
	Leadlag on	0	0	33.96	0
	Overflow	0	0	33.96	0

Select values for this column from sum of suction losses on the System Curve tab for the corresponding flow rate



BEP Chart

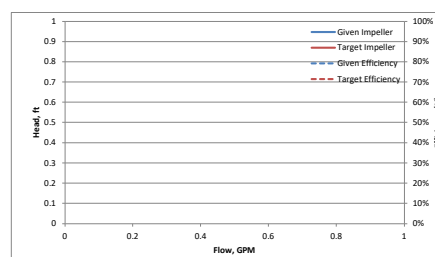
x	y
0	0
0.0001	100

npshr coefficients

Affinity Law Calculator

Use to generate pump curves for a specific impeller diameter from a given diameter. Use the closest available curve.
Works only with constant casing and speed

Works only with constant casing and speed

[illegible]

Calculations for Pump Derating

[illegible]

AOR Chart		
X	Y	
1	0	0
2	0	50
3	0	0
4	0	50
5	0	0
6	0	50
7	0	0
8	0	50
9	0	0
10	0	50
11	0	0
12	0	50
13	0	0
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AOR Chart		
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AOR Chart		
X	Y	
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503	0	0
504	0	50
505	0	0
506	0	50
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AOR Chart		
X	Y	
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Pump Station Design Summary Sheet

Station #	
Address	
By	

Input operating points in shaded cells from pump curves

Station	Storage Volume, gal	0				
	Inflow	Dry	Wet			
	Storage Time, hr	0	0			
Pump	Make	0				
	Model	0				
	Impeller Size, in	0				
	BEP, GPM	0				
	Preferred Operating Range, GPM	Min	Max			
Motor	Make	0	0			
	Model					
	Rated Capacity, HP					
	Max Speed					
	Efficiency					
Force Main	Material	0				
	Hazen-Williams 'C'	0				
	Age	0				
	Diameter, in	0				
	Length, ft	0				
System Performance	Operating Point	Fill/Draw	Design Point	Max 1 Pump	Load Share	Max 2 Pump
	Static Head, ft	0	0	0	0	0
	Total Head, ft					
	Flow, GPM					
	Speed, rpm					
	% of BEP					
	Velocity, ft/s					
	NPSHr, ft					
	NPSHa, ft					
	Pump Efficiency, %					
	Pump BHP, HP					
	% Of Motor Capacity					
	System Efficiency	0%	0%	0%	0%	0%

Assumptions for Analysis:
System Curve includes Force Main Losses only
Modified pump curves include pump suction and discharge losses
Lead Off: Wet well level at which the lead pump turns off
Lead On: Wet well level at which the lead pump turns on
Lead+Lag Off: Wet well level at which the lag pump turns off (pumps in parallel)
Lead + Lag On: Wet well level at which the lag pump turns on (pumps in parallel)
Overflow: Maximum possible wet well level (pumps in parallel)

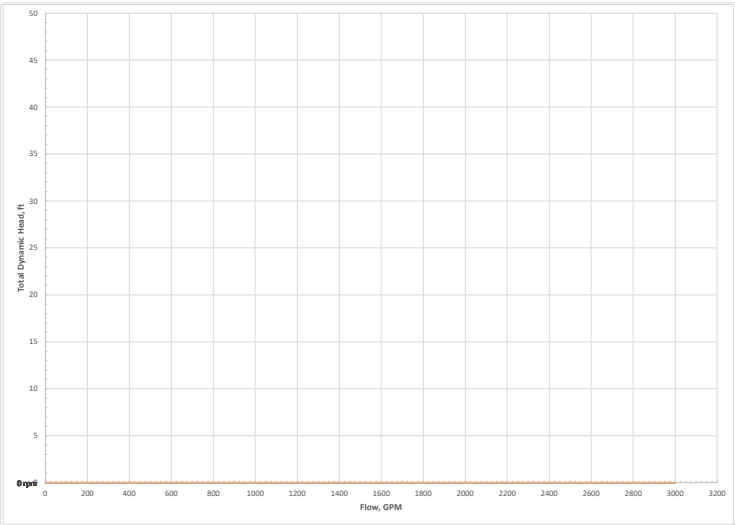


chart title
Pump Station #
Pump Curves:
Pumps,
Force Main,
C=,
Impeller,
in.
Pump Station # Pump Curves: 0 0 Pumps, 0 in. Impeller, 0 in. Force Main, C=0