



Triton Pumps Inquiry Form

Name: _____	Phone: _____
Company: _____	Fax: _____
Address: _____	e-mail: _____
City: _____	Project Name: _____
State/Country: _____ Zip/Code: _____	Project Location: _____

Application: _____

Industry Type: _____

Type of Pump:

Vertical Wet Well: Length: _____ Feet

Vertical Recirculator: Length: _____ Feet

Horizontal Vertical Pedestal

Submersible Explosion Proof

 Guide Rail System

 Recirculator

 Hydraulic Submersible

Property of Liquids:

Temperature: _____ °F _____ °C

PH: _____ % SOLIDS: _____

Specific Gravity: _____

Viscosity (cps): _____ (ssu): _____

Requested Solids Passage Size: _____

Type/Size of Upstream Screening (if any): _____

Pump Performance:

Capacity: _____ GPM _____ M³/Hr

Head: _____ feet _____ meters

 _____ psi

System Description

Inlet Pipe Diameter: _____ inch _____ mm

Inlet Length: _____ feet _____ meters

Inlet Static Head: _____ feet _____ meters

Disch. Pipe Diameter: _____ inch _____ mm

Disch. Length: _____ feet _____ meters

Disch. Static Head: _____ feet _____ meters

Net Static Head: _____ feet _____ meters

Header PSI: _____ PSI

Other: _____

Sump Dimensions:

_____ ft deep x _____ ft wide x _____ ft long

_____ M deep x _____ M wide x _____ M long

_____ ft, _____ meters diameter x _____ deep

Electric Motor Requirements:

_____ HP, _____ RPM, _____ Volts, _____ Ph, _____ Hz

_____ KW, _____ RPM, _____ Volts, _____ Ph, _____ Hz

Enclosure Type: _____

Upstream Grit Removal (if any): _____

Feedstock Sources: _____

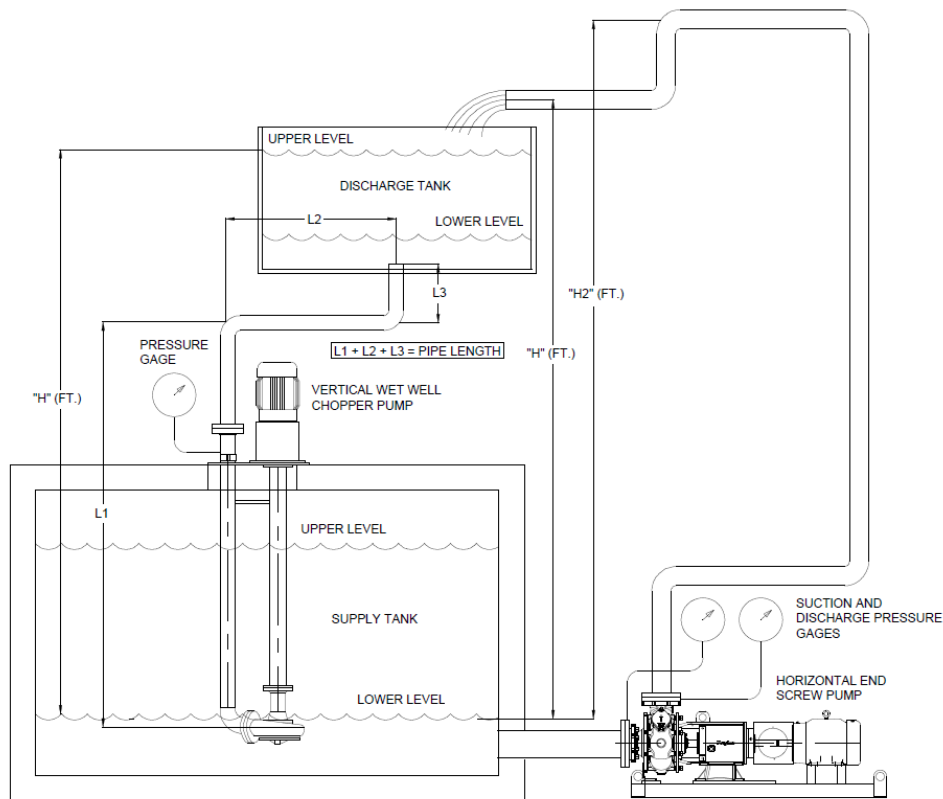
Describe Solids: _____

Please tell us how you heard about Vaughan: _____

Fax, e-mail or mail form directly to:

Vaughan Company, Inc.
364 Monte Elma Road
Montesano, WA 98563
360-249-4042
Fax: 360-249-6155
e-mail: info@chopperpumps.com

TOTAL HEAD CALCULATIONS



TOTAL HEAD:

$$\text{TDH} = \text{Pipeline Friction} + \text{Vertical Lift (H)} + \text{Velocity Head (V}^2/2g)$$

- Pipeline Friction = [Pipe Length (ft) / 100] x friction factor (table on form V137)

Water friction tables are suitable for sewage & most water-borne slurries up to 5% solids. For high solids loadings & heavy organic sludge, use the biological friction table on form V137.

- Vertical Lift = feet up from supply tank low-water level to high level in discharge tank, or to the center of the open discharge pipe.

Note: - Lift may be negative (-) if the pipeline is downhill.

- Intermediate pipeline elevations (H2) higher than the final discharge can be ignored, except that the pump shutoff head must be higher than H2 in order to initiate flow.

- Velocity Head = Energy in the liquid being discharged due to its velocity.

Note: - Usually ignored as insignificant in low head sump pump systems.

- For high head systems, use nozzle manufacturer's printed data, or calculate using data as follows:

$$V = \text{Velocity of the stream at the discharge diameter (ft/sec)}$$

$$G = \text{Acceleration due to gravity (32.2 ft/sec}^2)$$

SPECIAL CASES:

Pipelines with valves & fitting, add appropriate equivalent pipe length.

Pressurized supply or discharge tanks, add the discharge tank pressure, in feet, less any supply tank pressure, in feet, to the above Total Head calculation. Gauge pressure, in psi x 2.31 = head in feet.

Very high solids content sludges & slurries, contact Vaughan on reliable test data for friction values.