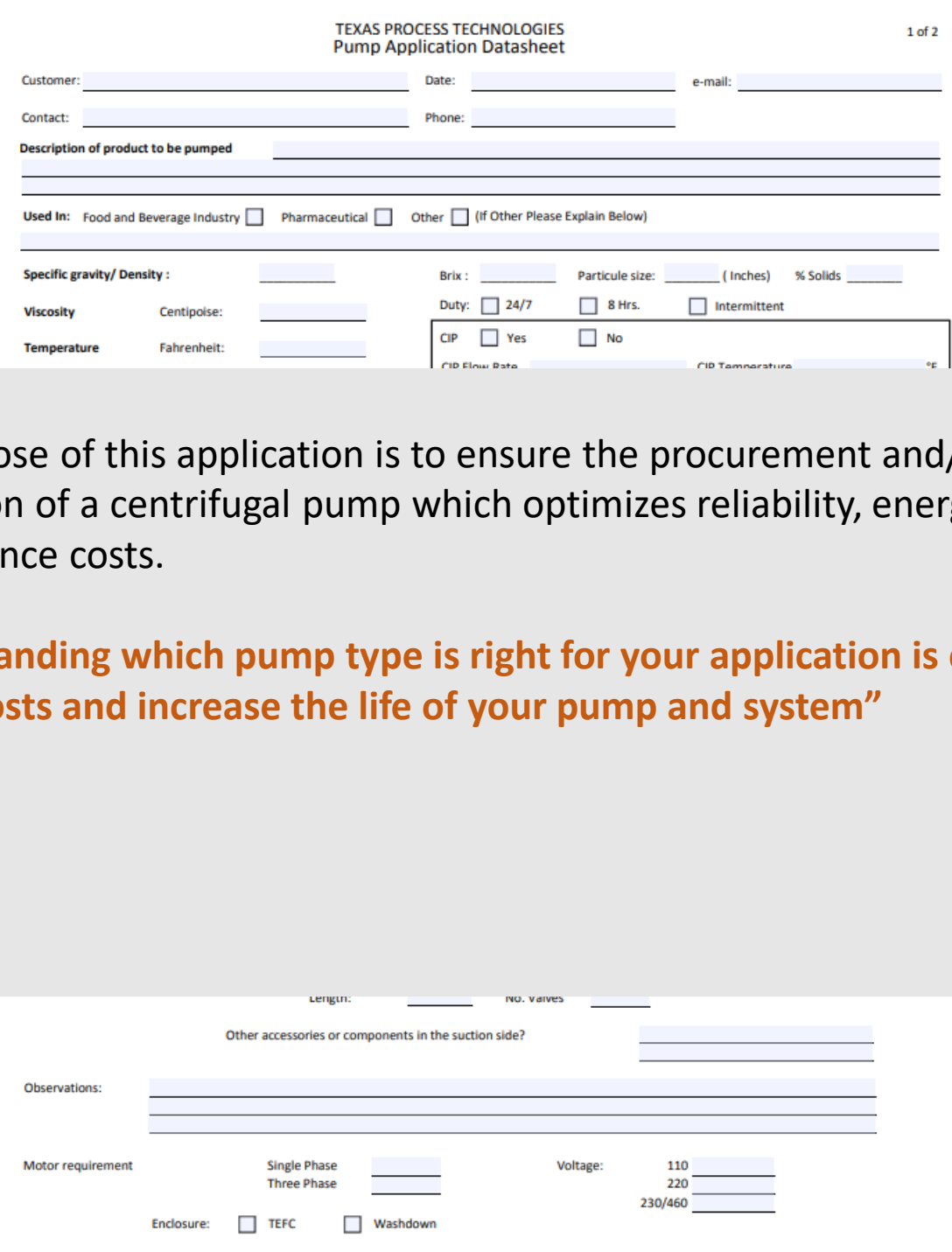


TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density : Brix : Particule size: (Inches) % Solids

Viscosity Centipoise: Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

Temperature Fahrenheit: CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

The purpose of this application is to ensure the procurement and/or application of a centrifugal pump which optimizes reliability, energy usage, maintenance costs.

“Understanding which pump type is right for your application is critical to reduce costs and increase the life of your pump and system”

Length: No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown

TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density : Brix : Particule size: (Inches) % Solids

Viscosity Centipoise:

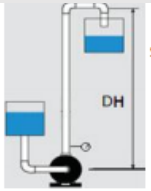
Temperature Fahrenheit:

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Description of product to be pumped:
Example: Cola beverage, also I will use the same pump as a CIP supply pump in order to clean the pipe and my mixing tank.

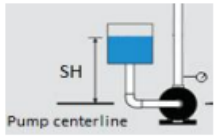


Stainless steel tube or hose? Diameter: Length: No. of elbows/complete coils/curves (Specify) No. Valves

Other accessories, components or equipment:

Observations:

Suctions conditions:



Level on the inlet side of the pump above the pump center line:

Note: Suction Head (SH) Max Inch/Ft Min Inch/Ft

Stainless steel tube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

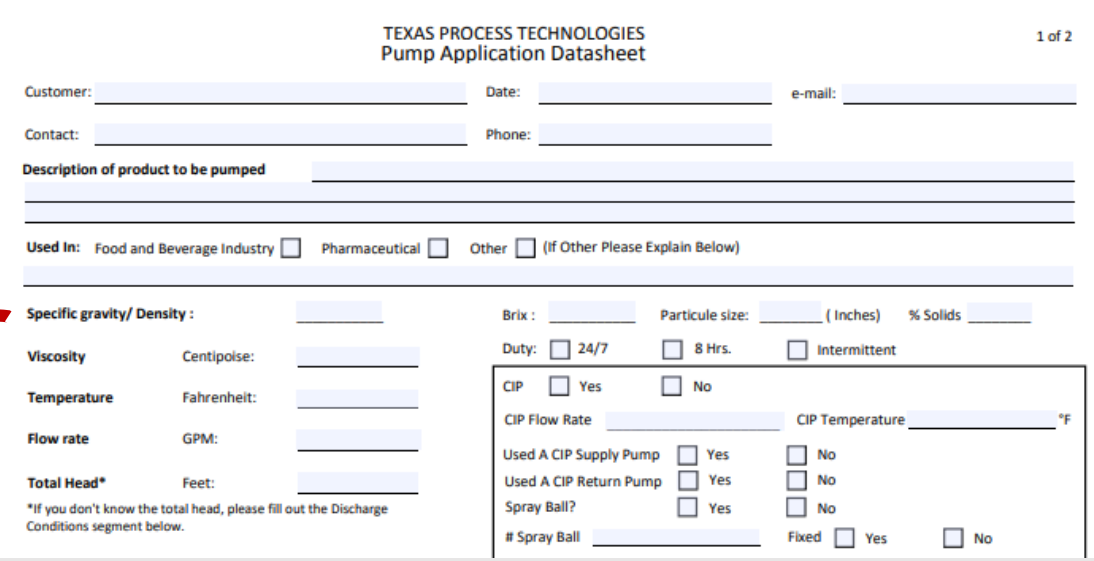
Suction Line: Diameter: Length: No. of elbows/complete coils/curves (Specify) No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

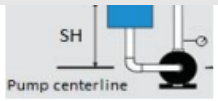
Spray Ball Fixed ☐ Yes ☐ No

Properties of the product to be pumped:

Specific gravity/Density

Also called relative density, ratio of the density of a substance to that of a standard substance. The usual standard of comparison for solids and liquids is **water** at 4 °C (39.2 °F), which has a density of 8.35 **pounds** per gallon US (**lb**/gal).

In our example it is 1.03 (Cola beverage)



Min Inch/Ft

Stainless steel tube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

Suction Line: Diameter: No. of elbows/complete coils/curves (Specify)

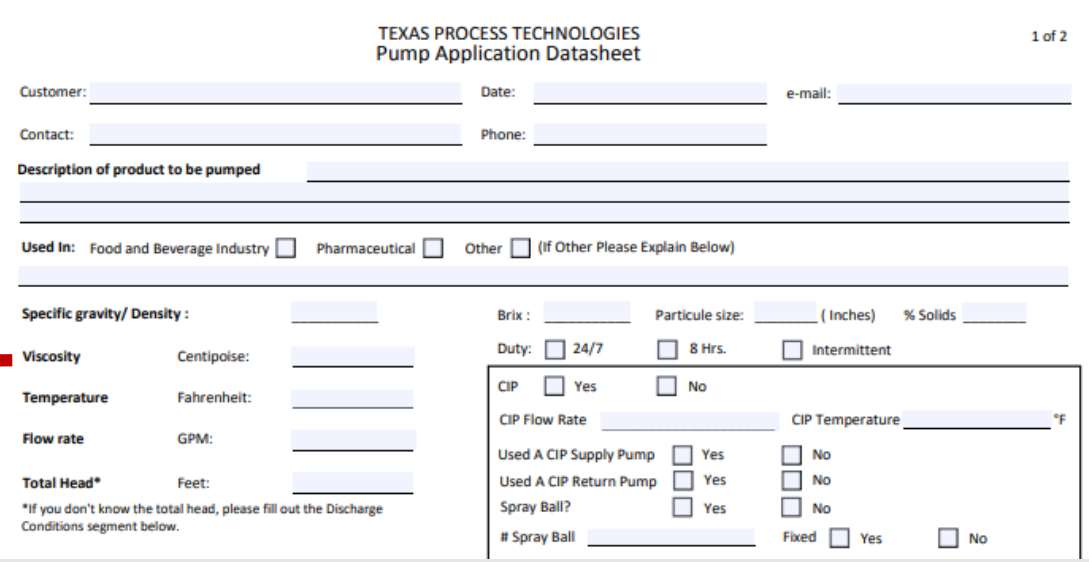
Length: No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Properties of the product to be pumped:

Viscosity:

Viscosity is often referred to as the thickness of a fluid. You can think of water (low viscosity) and honey (high viscosity).

MUSTARD	70,000 CP
CORN SYRUP	12,000 CP
Water	1CP

In our example it is : 1 CP(Cola beverage)

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown

TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Rotary ☐ Yes ☐ No

Properties of the product to be pumped:

Temperature:

Is important in order to determine the kind of the pump gaskets.

Flow rate (Gallons per minute):

It is indispensable to determine the flow capacity of the pump.

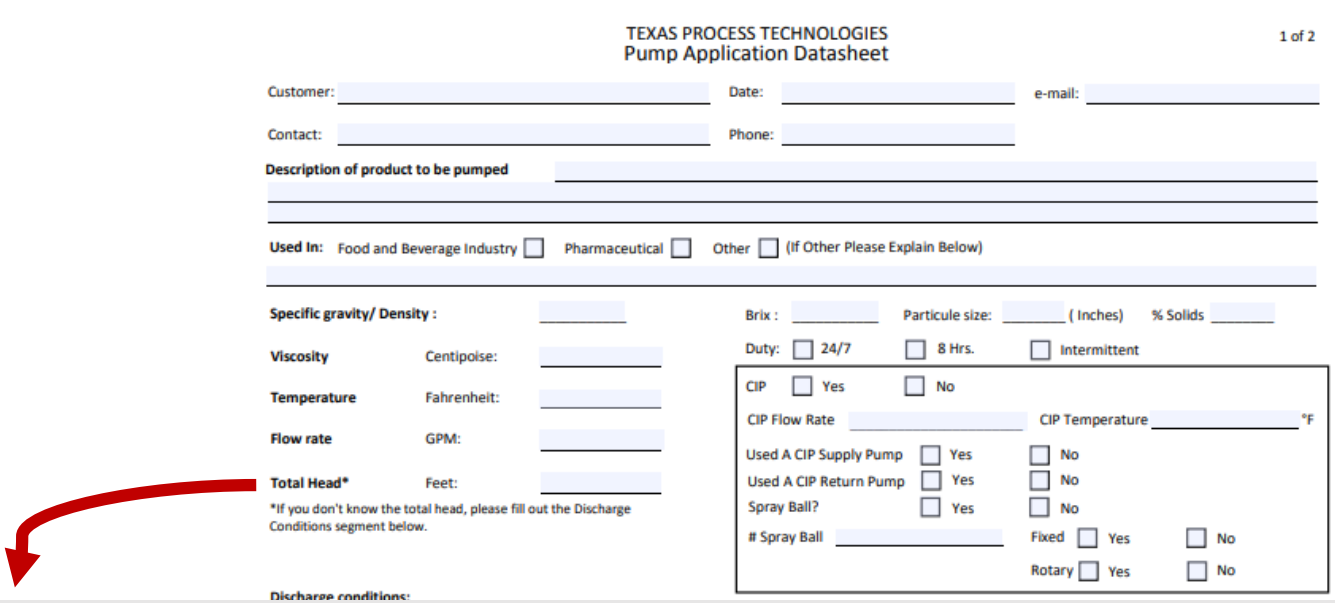
Example: If you want to fill a 55 Gal. tank in one minute Your flow rate is 55/Min.

In our example it is 25 GPM

Motor requirement Single Phase Three Phase

Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Rotary ☐ Yes ☐ No

Discharge conditions:

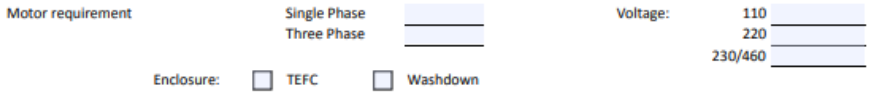
Total Head:

Is one of the most important factors in selecting the proper size of a pump. Total Dynamic Head (**TDH**) is the total equivalent height that a fluid is to be pumped, taking into account friction losses in the pipe.

- **Static Head (SH):** Static head represents the net change in height, in feet, that the pump must overcome.
- **Friction Head:** When fluid flows through any system, friction is caused by resistance in the piping, fittings and valves called friction head. This is also called pressure drop
- **Pressure Head:** When liquid is pumped from a vessel at one pressure to a vessel at another pressure, pressure head exists.

*If you don't know the total head, please fill out the Discharge Conditions segment below.

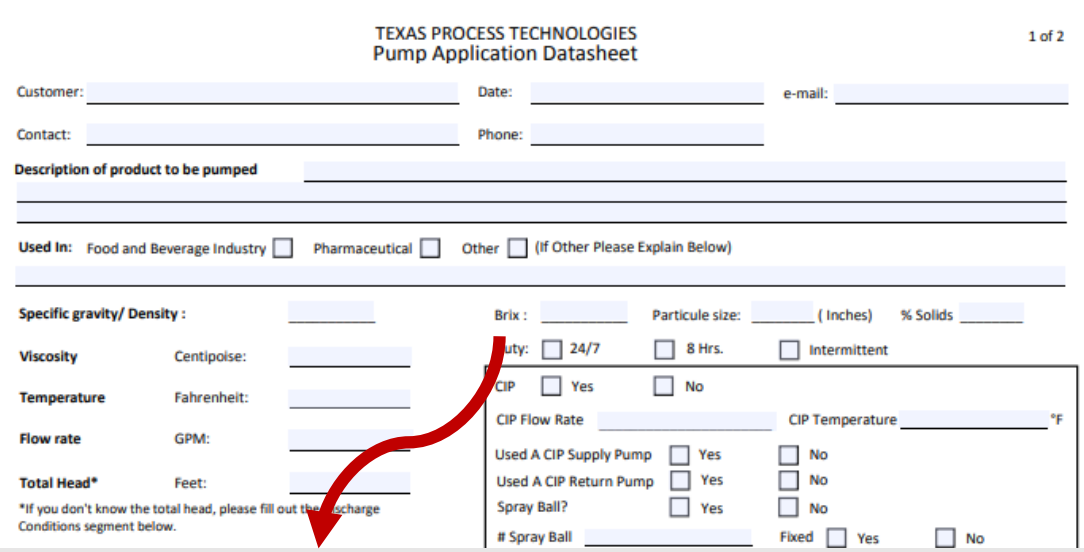
In our example it is 100 Feet.



Motor requirement Single Phase Three Phase

Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

uty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

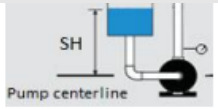
Properties of the product to be pumped:

Brix:

Degrees **Brix** (symbol °Bx) is the sugar content of an aqueous solution. One degree **Brix** is 1 gram of sucrose in 100 grams of solution.

This only applies if you are pumping products containing sugar.

In our example it is 10 °Bx



Note: Suction Head (SH) Max Inch/Ft

Min Inch/Ft

Stainless steel tube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

Suction Line: Diameter: No. of elbows/complete coils/curves (Specify)

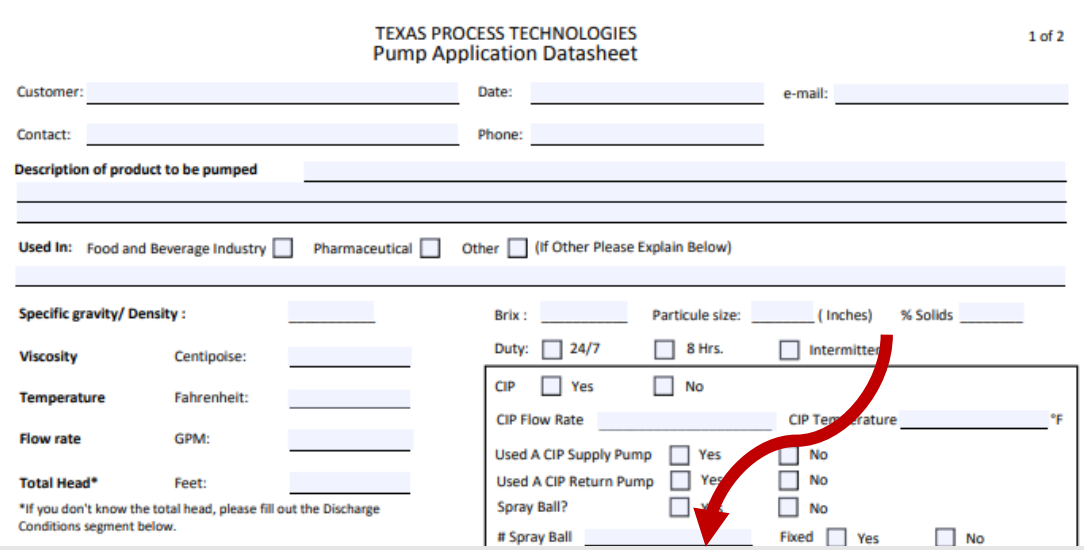
Length: No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermitter

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Properties of the product to be pumped:

Particle size:

Liquid foods with particles require specific types of pumps. The pump must be gentle with the soft solid particles. There are many different types of products that can contain particles. Certain cheeses such as cottage cheese can contain chunks, salsa is also often chunky and other food items such as salad dressings will also contain flavoring, spices and food particulates.

% solids:

Refers to the concentration of these solids in the fluid

Stainless steel tube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

Suction Line: Diameter: No. of elbows/complete coils/curves (Specify)

Length: No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown

TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

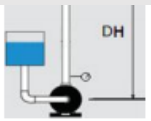
Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Duty:

The amount of time (hours/day) a pump is operational defines its duty cycle.

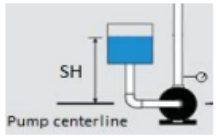


Length: No. Valves

Other accessories, components or equipment:

Observations:

Suctions conditions:



Level on the inlet side of the pump above the pump center line:

Note: Suction Head (SH) Max Inch/Ft

Min Inch/Ft

Stainless steel tube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

Suction Line: Diameter: No. of elbows/complete coils/curves (Specify)

Length: No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown

CIP (Clean in place):

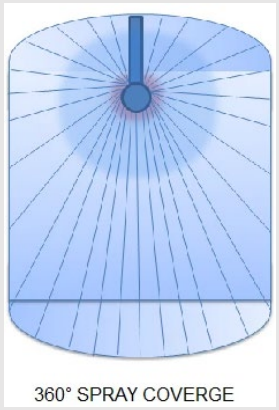
To pump both the product and the CIP fluid with the same pump we need to consider:

The flow requirement for CIP is determined by the minimum velocity of 5 ft/sec. required through the internal diameter of the tube/hose.

Example: If you are using a 2” Tube, you will need 43 GPM.

Therefore, the capacity of the pump of our example must be 43 GPM instead 25 GPM.

If you are using this pump to cleaning a tank, we need consider the size of the tank, the type and quantity of spray balls.

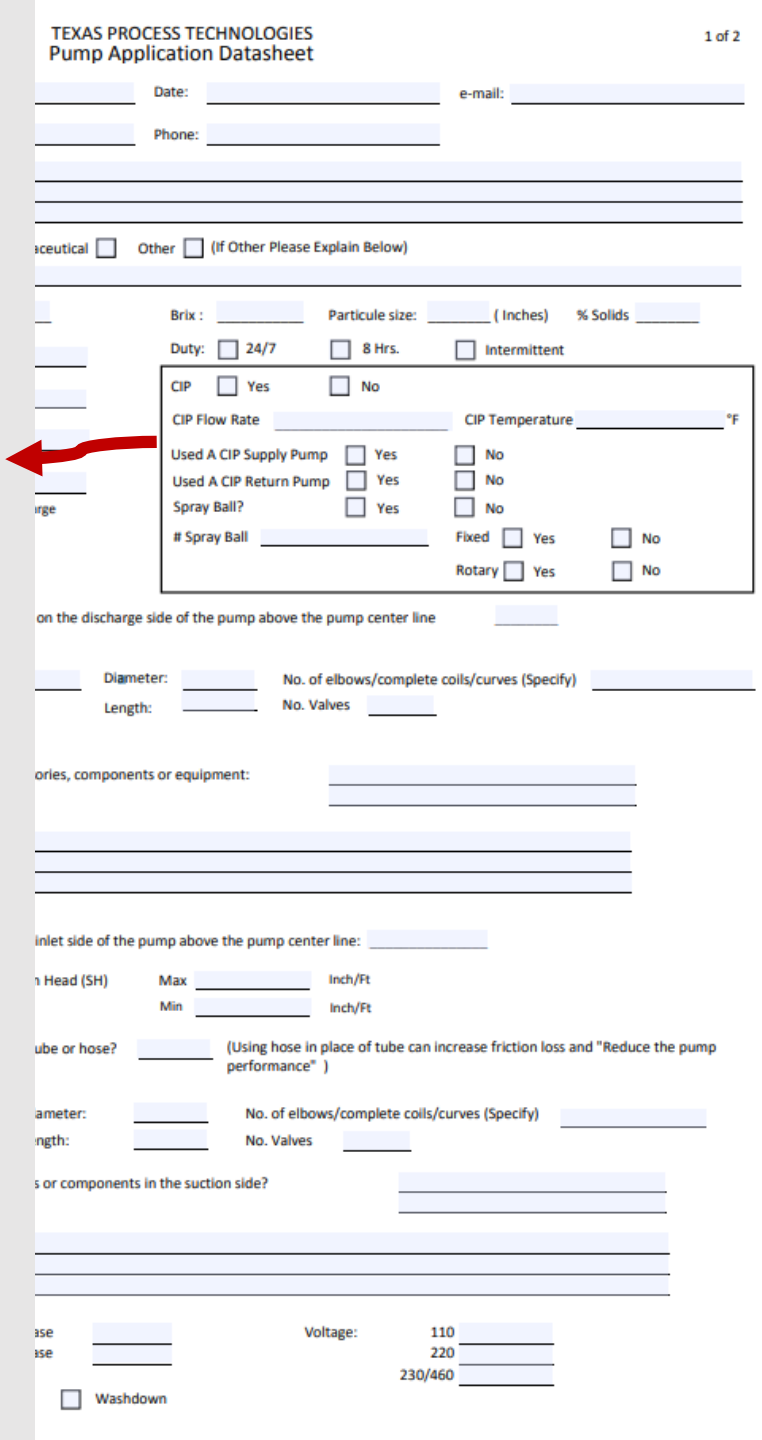


360° SPRAY COVERGE

TEXAS PROCESS TECHNOLOGIES FIXED SPRAY BALL		
SIZE	FLOW RATE @ 30 PSI	40 PSI
1 1/2"	38 GPM	42 GPM

Tank cleaning flow rate:

0.2-0.3 GPM / Square feet



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Date: e-mail:

Phone:

aceutical ☐ Other ☐ (If Other Please Explain Below)

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Rotary ☐ Yes ☐ No

on the discharge side of the pump above the pump center line

Diameter: No. of elbows/complete coils/curves (Specify)

Length: No. Valves

ories, components or equipment:

inlet side of the pump above the pump center line:

n Head (SH) Max Inch/Ft

Min Inch/Ft

ube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

ameter: No. of elbows/complete coils/curves (Specify)

ngth: No. Valves

s or components in the suction side?

ase

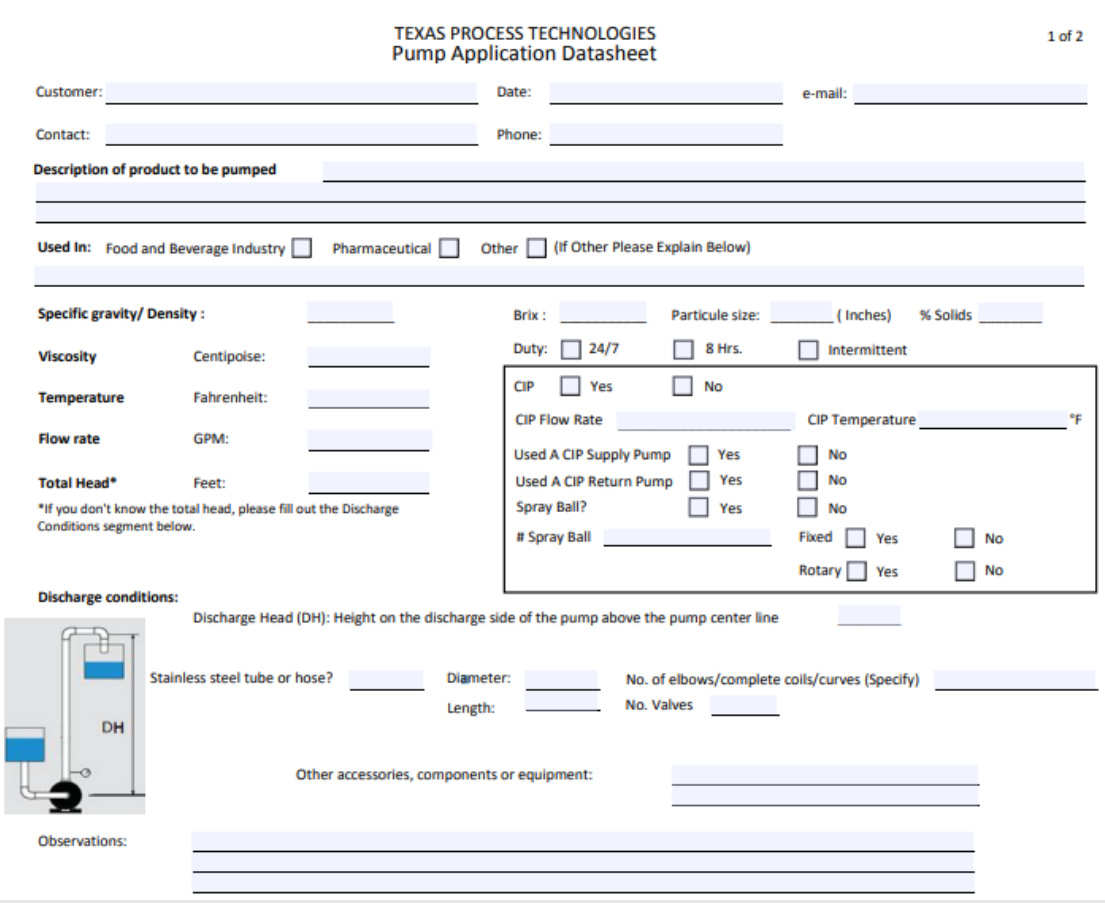
ase

Voltage: 110

220

230/460

☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density : Brix : Particule size: (Inches) % Solids

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Rotary ☐ Yes ☐ No

Discharge conditions:

Discharge Head (DH): Height on the discharge side of the pump above the pump center line

DH

Stainless steel tube or hose? Diameter: Length: No. of elbows/complete coils/curves (Specify) No. Valves

Other accessories, components or equipment:

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown

Discharge conditions:

In order to calculate the total head, we need the discharge head (DH), the total length and the **Friction Losses** of all the pipe/tube and components.

All these friction losses depend of the diameter of the tube/pipe/hose that you are using.

If you have a heat exchanger or a filter/strainer, the pressure drop through them is given by the manufacturer.

If you don’t have this information, we can assume a pressure drop for these equipment and components.

TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

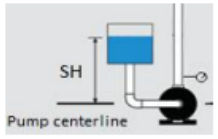
Spray Ball? ☐ Yes ☐ No

Suction conditions:

Many **centrifugal pump** troubles are caused by poor **suction conditions.**
Please put special attention on this section.
We highly recommend that you read our easy installation guide.

Observations:

Suctions conditions:



Level on the inlet side of the pump above the pump center line:

Note: Suction Head (SH) Max Inch/Ft

Min Inch/Ft

Stainless steel tube or hose? (Using hose in place of tube can increase friction loss and "Reduce the pump performance")

Suction Line: Diameter: No. of elbows/complete coils/curves (Specify)

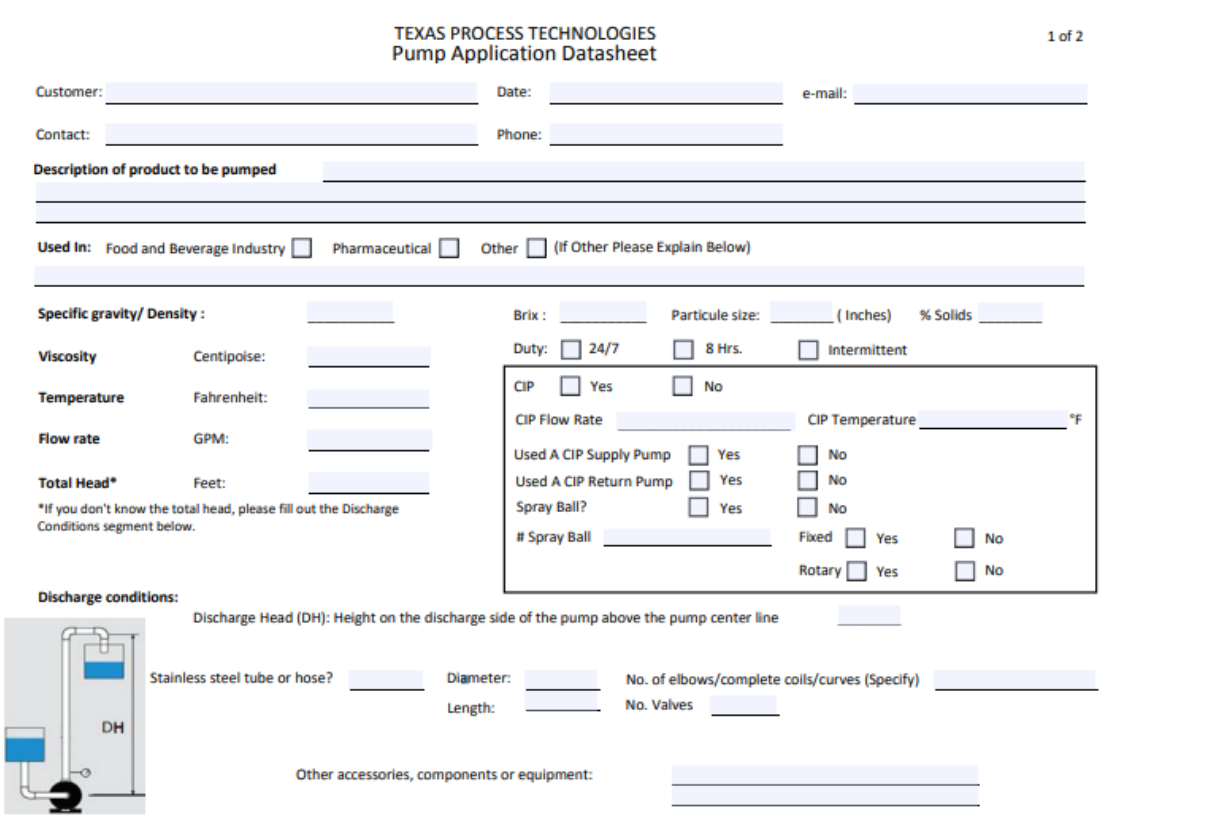
Length: No. Valves

Other accessories or components in the suction side?

Observations:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown



TEXAS PROCESS TECHNOLOGIES
Pump Application Datasheet

1 of 2

Customer: Date: e-mail:

Contact: Phone:

Description of product to be pumped

Used In: Food and Beverage Industry ☐ Pharmaceutical ☐ Other ☐ (If Other Please Explain Below)

Specific gravity/ Density :

Viscosity Centipoise:

Temperature Fahrenheit:

Flow rate GPM:

Total Head* Feet:

*If you don't know the total head, please fill out the Discharge Conditions segment below.

Brix : Particule size: (Inches) % Solids

Duty: ☐ 24/7 ☐ 8 Hrs. ☐ Intermittent

CIP ☐ Yes ☐ No

CIP Flow Rate CIP Temperature °F

Used A CIP Supply Pump ☐ Yes ☐ No

Used A CIP Return Pump ☐ Yes ☐ No

Spray Ball? ☐ Yes ☐ No

Spray Ball Fixed ☐ Yes ☐ No

Rotary ☐ Yes ☐ No

Discharge conditions:

Discharge Head (DH): Height on the discharge side of the pump above the pump center line

DH

Stainless steel tube or hose? Diameter: Length: No. of elbows/complete coils/curves (Specify) No. Valves

Other accessories, components or equipment:

Motor requirement Single Phase Three Phase Voltage: 110 220 230/460

Enclosure: ☐ TEFC ☐ Washdown

Motor enclosure:

TEFC “Totally Enclosed, Fan Cooled":

Totally enclosed motors are suitable for use in **humid environments**. The motor is dust tight and has a moderate water seal as well.

Washdown:

Designed to withstand high pressure wash-downs or other **high humidity or wet environments**. This does not allow for the motor to be submerged.

Example Sketch:

You can draw a simple sketch, no need to worry. It doesn't need to be perfect. All we want is to have a better idea of your application.

Example Sketch