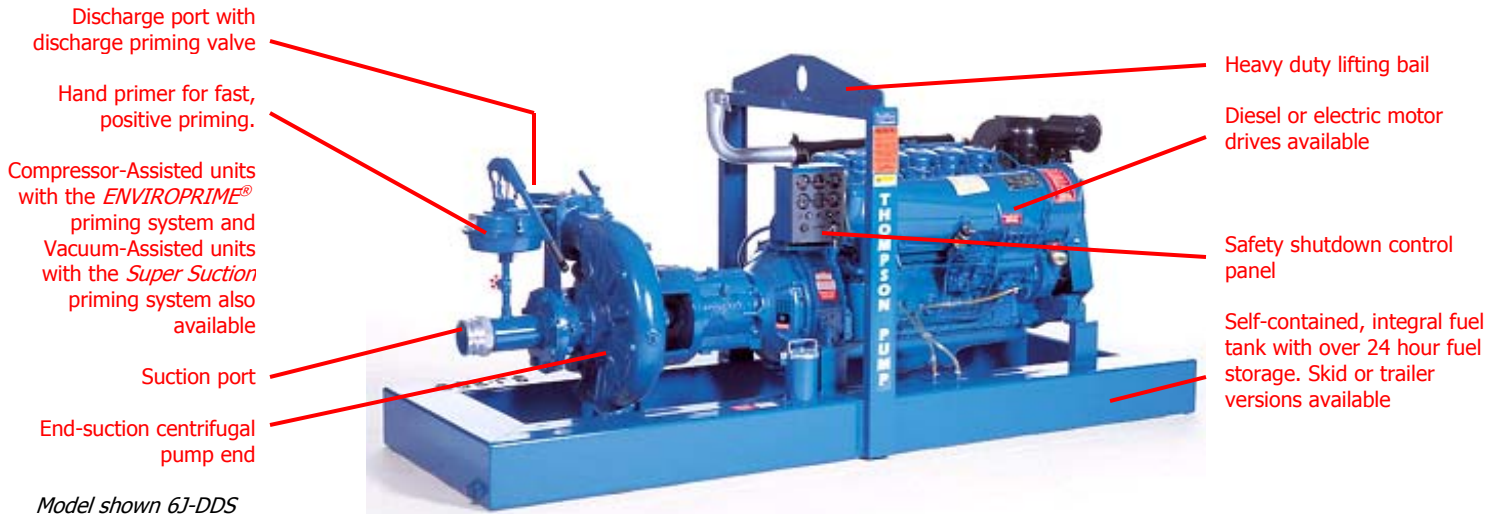


# J SERIES CLEAR LIQUID HIGH PRESSURE JET PUMPS



## Thompson High Pressure Jet Pumps make short work of wellpoint jetting

Perhaps a better name for Thompson High Pressure Jet Pumps would be "water drill." These durable fast action pumps make quick work of jetting in a wellpoint system, with sizes 3-inch and up, flows to 1,600-gpm and pressures over 200-psi. Time is money on a job site and Thompson High Pressure Jet Pumps are proven performers in the field.



Model shown 6J-DDS

### FEATURES

- High pressure capability for jetting
- End-suction centrifugal pump end
- Heavy-Duty cast iron casing and brackets
- Stress-proof stainless steel shaft sleeves
- Bronze impeller and wear rings
- Abrasion-resistant carbon vs. ceramic mechanical seal
- Discharge priming check valves
- Suction and discharge fittings
- Hand priming devices
- Compressor-Assisted version with exclusive *ENVIROPRIME*<sup>®</sup> priming system available
- Vacuum-Assisted version with exclusive *Super Suction* priming system available
- Safety shutdown controls
- Strainers or foot valves are available
- Variable speed engine control



### APPLICATIONS

**Construction:** Wellpoint installation; equipment wash down; pilings; pre-wet operations

**Industry:** Water jetting and blasting; standby fire protection; piping system surcharging and pressure testing

**Agriculture:** Irrigation; dust abatement

**Marine:** Barge cleaning and wash down; pile jetting; docks and seawall installation;

*Note: Alternate pump end materials available for corrosive liquids*

Where installation efficiency is the key to job profitability, the right pump is the critical factor. A "lazy" pump slows the crew's production and costs money. Thompson offers a jet pump to suit every job requirement including applications requiring long discharge hose lines and high vertical deliveries. Delivering "punch" at the end of the hose is Thompson's goal for the jetting contractor.

In the interest of product improvement, we reserve the right to change specifications without incurring any obligation for equipment previously or subsequently sold. Capacity and Head are shown for comparative purposes. Consult engineering data for exact capabilities.

Thompson Pump & Manufacturing Co., Inc. 4620 City Center Drive, Port Orange, Florida, USA 32119  
Phone (800) 767-7310 • Fax (386) 761-0362 • [www.thompsonpump.com](http://www.thompsonpump.com)

# J SERIES CLEAR LIQUID HIGH PRESSURE JET PUMPS



## SPECIAL FEATURES\*

Pedestal frame available.  
Close coupled, engine  
connection standard

Large diameter shaft of  
"Stressproof" steel

Abrasion-resistant  
mechanical seals standard.  
Packing design with large,  
deep stuffing box for  
extended packing life on  
request

External hydraulic balance  
line, unique in the industry

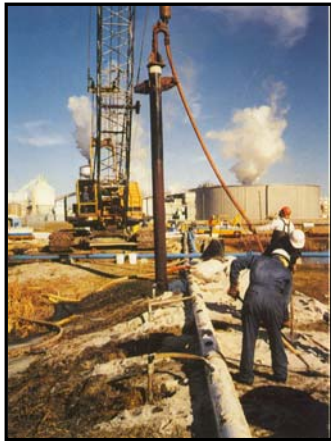
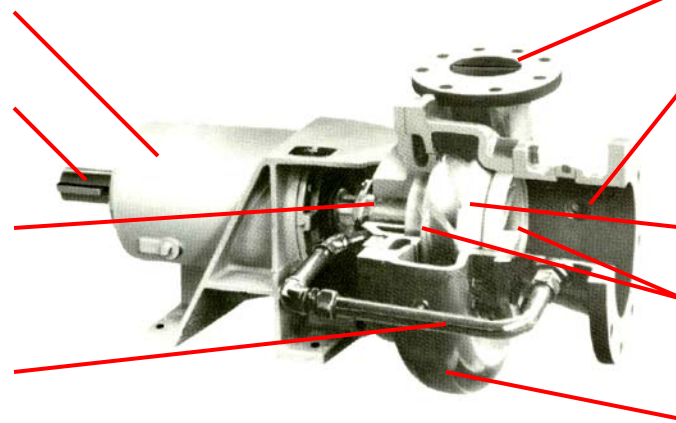
End-suction centrifugal  
pump end with single volute  
design

Clean contoured design for  
smooth liquid entry

Fully machined bronze  
impeller with double  
curvature

Replaceable recessed bronze  
wear rings

Rigid heavy walled cast iron  
construction resists  
distortion (ASTM A48 Class  
30 cast iron)



Jetting wellpoints is one of the applications most common for Thompson High Pressure Pumps. Pressurized water is pushed through a hose to the top of a vertical shaft called a "casing," which holds the wellpoint inside.

The high-pressure water enters the top of the casing and continues down the shaft. Along with the help of a crane, the casing and the wellpoint are pushed into the ground. When the wellpoint reaches the desired depth, the crane pulls the casing out of the ground, leaving the buried wellpoint.

## WORKING PRINCIPLE

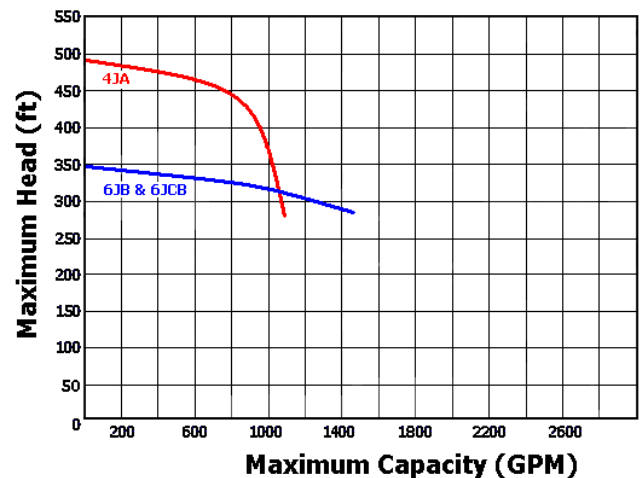
The pump achieves and maintains its prime with the aid of either an on-board hand primer, or Thompson Pump's exclusive *ENVIROPRIME*<sup>®</sup> compressor-assisted priming system. The impeller and volute are designed to handle clear liquid with a slight amount of solids. As the liquid passes through the volute, it is sent out a smaller diameter discharge port. The smaller port increases the pressure as the liquid leaves the pump, creating the jetting feature.

## MODEL SPECIFICATIONS

Unit Model	Size (in.)	Maximum* Capacity (GPM)	Maximum* Head (ft.)	Maximum* PSI	Maximum Solids (in.)
4JA	4 x 2.5	1,100	440	216	0.50
6JB	6 x 2.5	1,600	400	173	0.62
6JCB**	6 x 2.5	1,600	400	173	0.62

\* Consult engineering data for exact maximum performance RPM

\*\* Equipped with ENVIROPRIME<sup>®</sup> Compressor-Assisted Priming System



In the interest of product improvement, we reserve the right to change specifications without incurring any obligation for equipment previously or subsequently sold. Capacity and Head are shown for comparative purposes. Consult engineering data for exact capabilities.

Thompson Pump & Manufacturing Co., Inc. 4620 City Center Drive, Port Orange, Florida, USA 32119  
Phone (800) 767-7310 • Fax (386) 761-0362 • [www.thompsonpump.com](http://www.thompsonpump.com)



# PRODUCT DATA SHEET

October, 2005

## THOMPSON 6JC PUMP

(Driven by 6068T engine)

### GENERAL INFORMATION

This pump uses an oil-lubricated two-cylinder piston compressor that is driven by v-belt off the shaft. A vacuum is created by forcing air through an air/water separator. A float operated valve installed in the separator prevents liquid but allows air to exit the separation chamber. This pump develops higher discharge pressures than trash pumps due to the wear ring and closed impeller design.

### PERFORMANCE DATA

➤ Minimum Speed:	.....	1500 rpm
➤ Maximum Speed:	.....	2300 rpm
➤ Minimum Shutoff Head:	.....	175' (76 psi) <sup>(1)</sup>
➤ Maximum Shutoff Head:	.....	425' (184 psi) <sup>(1)</sup>
➤ Maximum Suction Lift:	.....	28 feet <sup>(2)</sup>
➤ Minimum Flow:	.....	150 gpm
➤ Maximum Flow:	.....	1475 gpm
➤ Maximum Suction Press:	.....	100 psig
➤ Maximum Volute Press:	.....	175 psig
➤ Maximum Temperature:	.....	150°F
➤ Maximum Solids Size:	.....	0.62"

### PUMP SPECIFICATIONS

➤ Impeller Diameter:	.....	15.22"
➤ Wear Ring Clearance:	.....	0.037" – 0.042"
➤ Bearing Lubrication:	.....	Grease
➤ Vacuum System:	.....	Quincy 216P, V-belt driven, air-cooled, two-cylinder, 3.5 HP @ 60 psi, 3.00" bore x 2.50" stroke, 10 cfm
➤ No. Impeller Vanes:	.....	Three, totally enclosed
➤ Mech. Seal Lubrication:	.....	Oil lubricated
➤ Dead Head Pressure:	.....	115 psi @ 1800 rpm

### PHYSICAL SPECIFICATIONS

➤ Suction Fitting:	.....	6" 125# flange
➤ Discharge Fitting:	.....	4" 125# flange
➤ Total Weight:	.....	4000 lbs. (est.)
➤ Overall Height:	.....	7'-4"
➤ Overall Width:	.....	6'-2"
➤ Overall Length:	.....	14'-0"

### MATERIAL SPECIFICATIONS

➤ Pump Volute:	.....	Class 30 fine grain cast iron
➤ Shaft Sleeve:	.....	416 stainless steel
➤ Wear Rings:	.....	Bronze
➤ Mechanical Seal Faces:	.....	Carbon against ceramic
➤ Pump Shaft:	.....	Steel
➤ Elastomers:	.....	Nitrile (Buna N)
➤ Impeller:	.....	SAE 40 brass

### ENGINE SPECIFICATIONS

➤ Engine Make:	.....	John Deere
➤ Engine Model:	.....	6068T
➤ Max. Continuous BHP:	.....	127 @ 1800 RPM
➤ Crankcase Oil:	.....	SAE 10W40 <sup>(3)</sup>
➤ Crankcase Oil Capacity:	.....	20 quarts
➤ Oil Press @ 850 RPM:	.....	15 psi minimum
➤ Safety Shutdowns:	.....	High water temperature & low oil pressure
➤ Grease Lubrication:	.....	No. 2 <sup>(3)</sup>
➤ Fuel Capacity:	.....	66 gallons
➤ Fuel Consumption:	.....	~5.0 gal/hr @ 1800 RPM
➤ Fuel Type:	.....	Grade No. 2 diesel
➤ Combustion System:	.....	Direct injection
➤ Run Time:	.....	13 hours
➤ Coolant Type:	.....	50/50 water/antifreeze
➤ Slow Idle Speed:	.....	850 RPM
➤ Number of Cylinders:	.....	Six
➤ Bore x Stroke:	.....	4.19"x5.00" (414 cu. in. total)
➤ Fuel Filter:	.....	F91-RE50455-001
➤ Oil Filter:	.....	F91-RE59754
➤ Engine Air Filter:	.....	F91-C105004-000

#### Notes:

- <sup>(1)</sup> Based on 1.0 specific gravity
- <sup>(2)</sup> Depends on flowrate and pump speed
- <sup>(3)</sup> Midrange compromise. See John Deere manual.



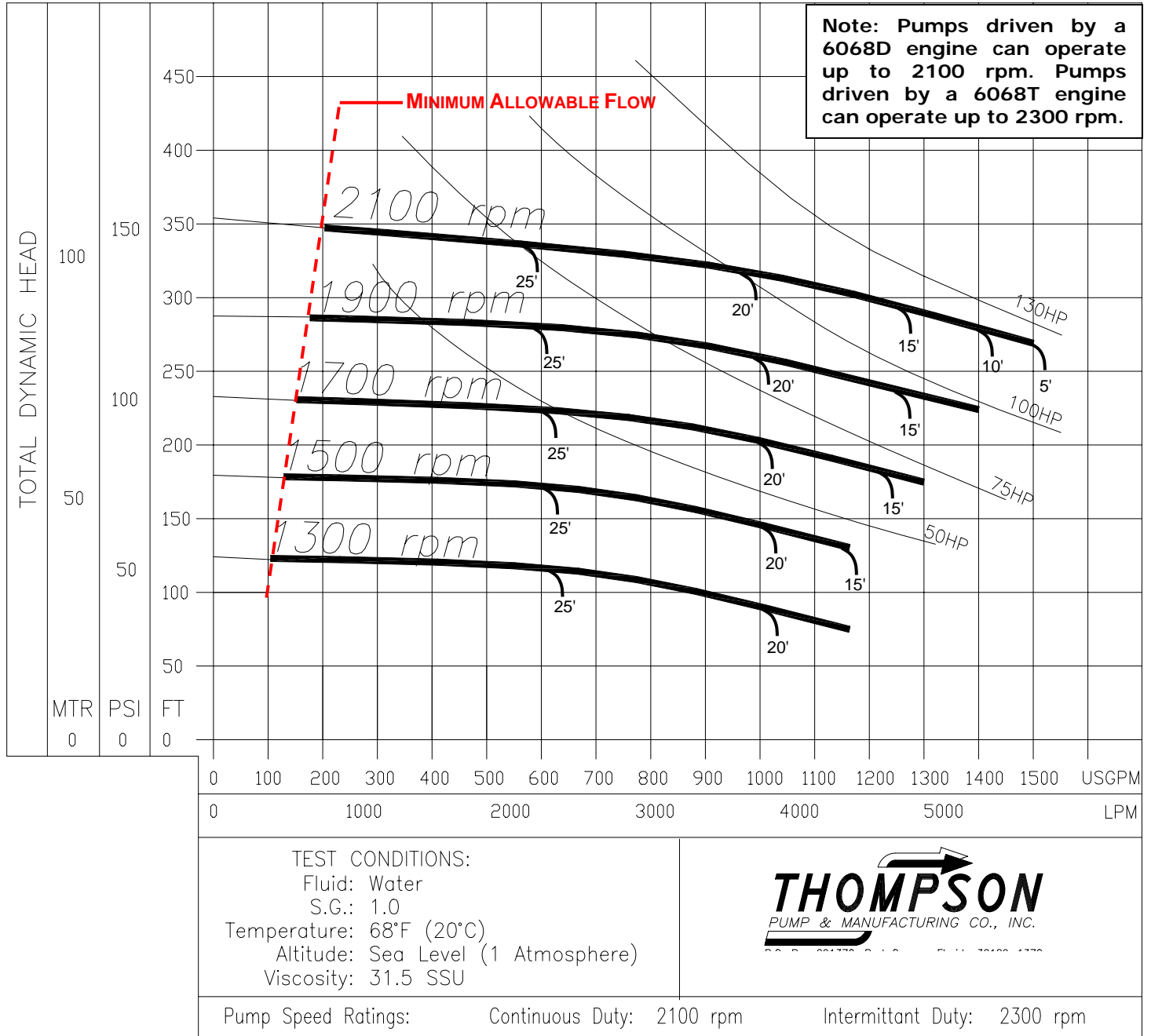
Locations nationwide  
(866) PUMPS-12

## Product Performance Curve

### THOMPSON MODEL 6JC HIGH-HEAD COMPRESSOR- ASSISTED PUMP

June, 2003

Impeller Dia.	Style	No. Vanes	Solids Dia.	Suction	Discharge	Weight
15.22"	ENCLOSED	6	0.62"	6"	4"	790 LBS.



To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. No guarantee of accuracy is given or implied because variations can and do exist. NO WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY BAKER TANKS, EITHER EXPRESS OR IMPLIED.