

May 20. 7:30 am → 8:30 = 1.0  
9:00 → 11:00 = 2.0

# Tangpahan Parish

## Wastewater Pumping

$$8'' \phi = 1160 \text{ ft}$$

$$11'' \phi = 950 \text{ ft}$$

$$10'' \phi = 1200 \text{ ft}$$

### 1. Pump from N pond to Borend Only

$$8'' \phi = 1100 \text{ ft} \quad 1400 \text{ gpm} @ 9 \text{ fps} \quad 2.52 \text{ ft}/100 \text{ ft}$$

$$10'' \phi = 1200 \text{ ft} \quad 1400 \text{ gpm} @ 6.5 \text{ fps} \quad 0.78 \text{ ft}/100 \text{ ft}$$

### Suction lift

$$8'' \phi \quad 1400 \text{ gpm} @ 9 \text{ fps} \times 2.52 \text{ ft}/100 \text{ ft} \times 1100 \quad 10 \text{ ft} \quad 29.72$$

$$10'' \phi \quad 1400 \text{ gpm} @ 6.5 \text{ fps} \times 0.78 \text{ ft}/100 \text{ ft} \times 1200 \quad 9.36$$

$$8'' \text{ wye} \quad .42 \times v^2/2g = .42 \times \frac{81}{64} = .42 \times 1.26 \quad 0.53$$

$$8'' \text{ ch. va} \quad 1.4 \times 1.26 \quad 1.76$$

$$8'' \text{ b. ff. va.} \quad .63 \times 1.26 \quad 0.79$$

$$\text{exit} = \quad 1.26$$

$$\text{total} \quad 51.42 \text{ ft}$$

### 2. Pump from N pond to S. Pond and S pond to Borend @ same time.

### Suction lift

$$8'' \phi \quad 1400 \text{ gpm} @ 9 \text{ fps} \times 2.52 \text{ ft}/100 \times 1160 \text{ ft} \quad 10 \text{ ft} \quad 29.23$$

$$\text{total} \quad 39.23 \text{ ft}$$

### Suction lift

$$4'' \phi \quad 350 \text{ gpm} @ 9 \text{ fps} \times 5.75 \text{ ft}/100 \times 950 \quad 10 \text{ ft} \quad 54.62$$

$$\text{total} \quad 64.62$$

$$10'' \phi \quad 1750 \text{ gpm} @ 7 \text{ fps} \times 1.35 \text{ ft}/100 \times 1200 \text{ ft} \quad 16.20 \text{ ft}$$

$$8'' \phi / 10'' \phi$$

$$\text{total} \quad 35.43 \text{ ft}$$

$$4'' \phi / 10'' \phi$$

$$\text{total} \quad 80.82 \text{ ft}$$

May 20

3. Pump from N. Pond to Brown pit  
L. Pond to Brown

8" Suction lift		10 ft
8" 1400 gpm @ 9 fps	2.52 ft/100 x 1100	<u>27.72</u>
		37.72

4" Suction lift		10 ft
4" 350 gpm @ 9 fps	5.75 ft/100 x 950	54.62

10" 1750 gpm @ 7 fps	435 ft/100 x 1200 ft	16.20 ft
----------------------	----------------------	----------

8" / 10" $\phi$		53.92 ft
-----------------	--	----------

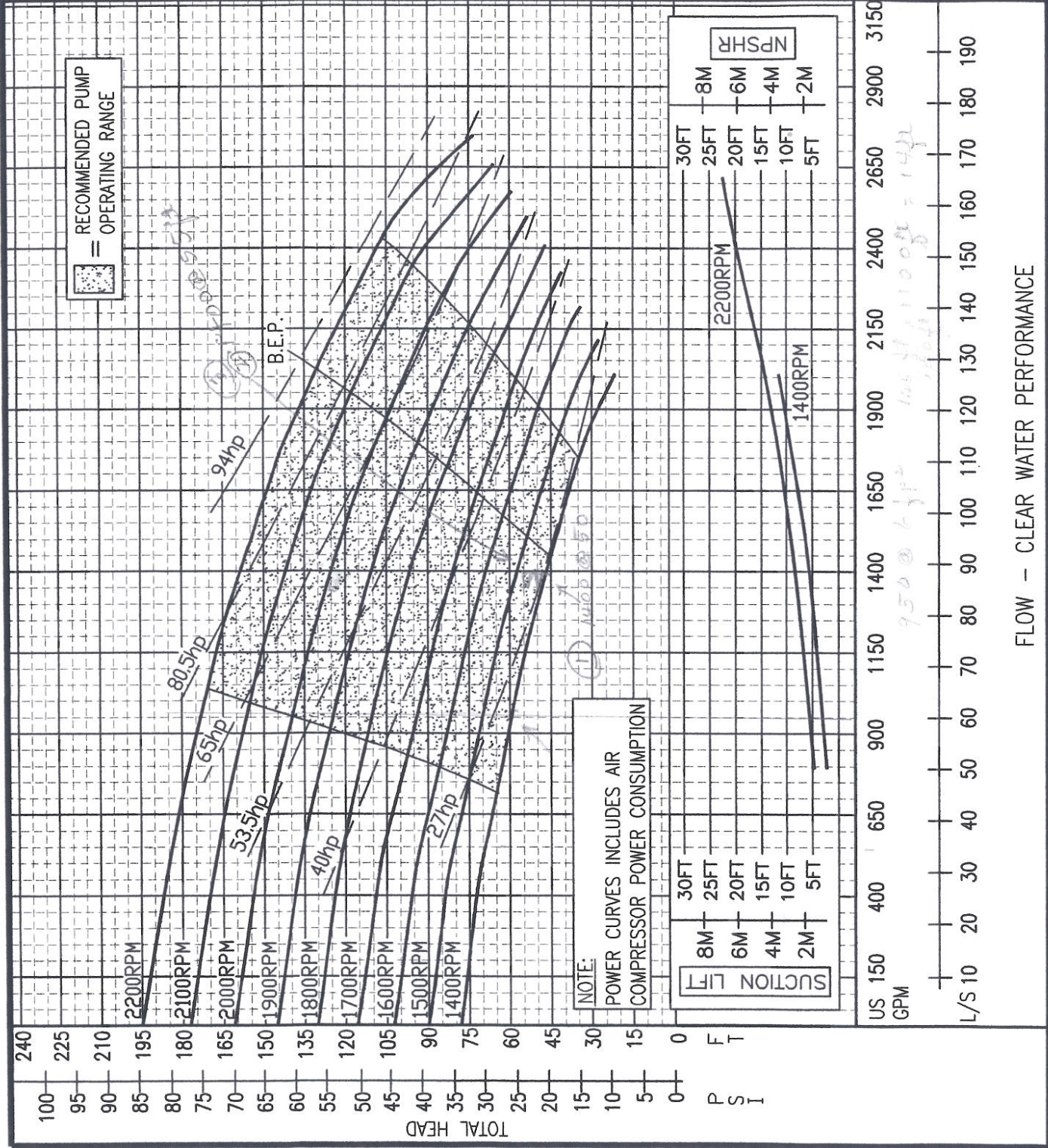
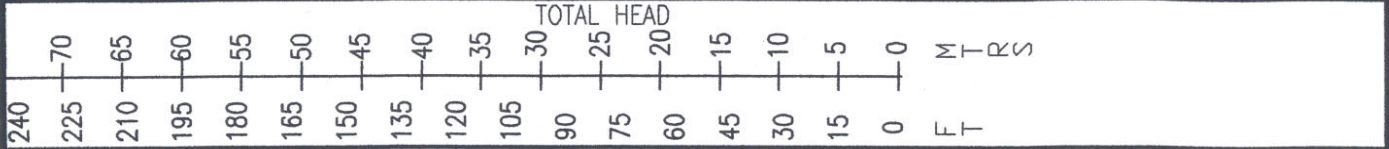
4" / 10" $\phi$		70.82 ft
-----------------	--	----------

# Power Prime Pumps

CURVE: 304141 11/04

PUMP : DV-150i

SUCTION 150mm (6")	DISCHARGE 150mm (6")	MAX. SPHERE 77mm (3")	IMPELLER 2 VANE	IMPELLER ø285mm (11.2")	IMPELLER & WEAR PLATES 316 S/S
-----------------------	-------------------------	--------------------------	--------------------	----------------------------	--------------------------------------



FLOW - CLEAR WATER PERFORMANCE

# Power Prime Pumps

CURVE : 980504P

PUMP : DV-80

SUCTION  
75mm (3")

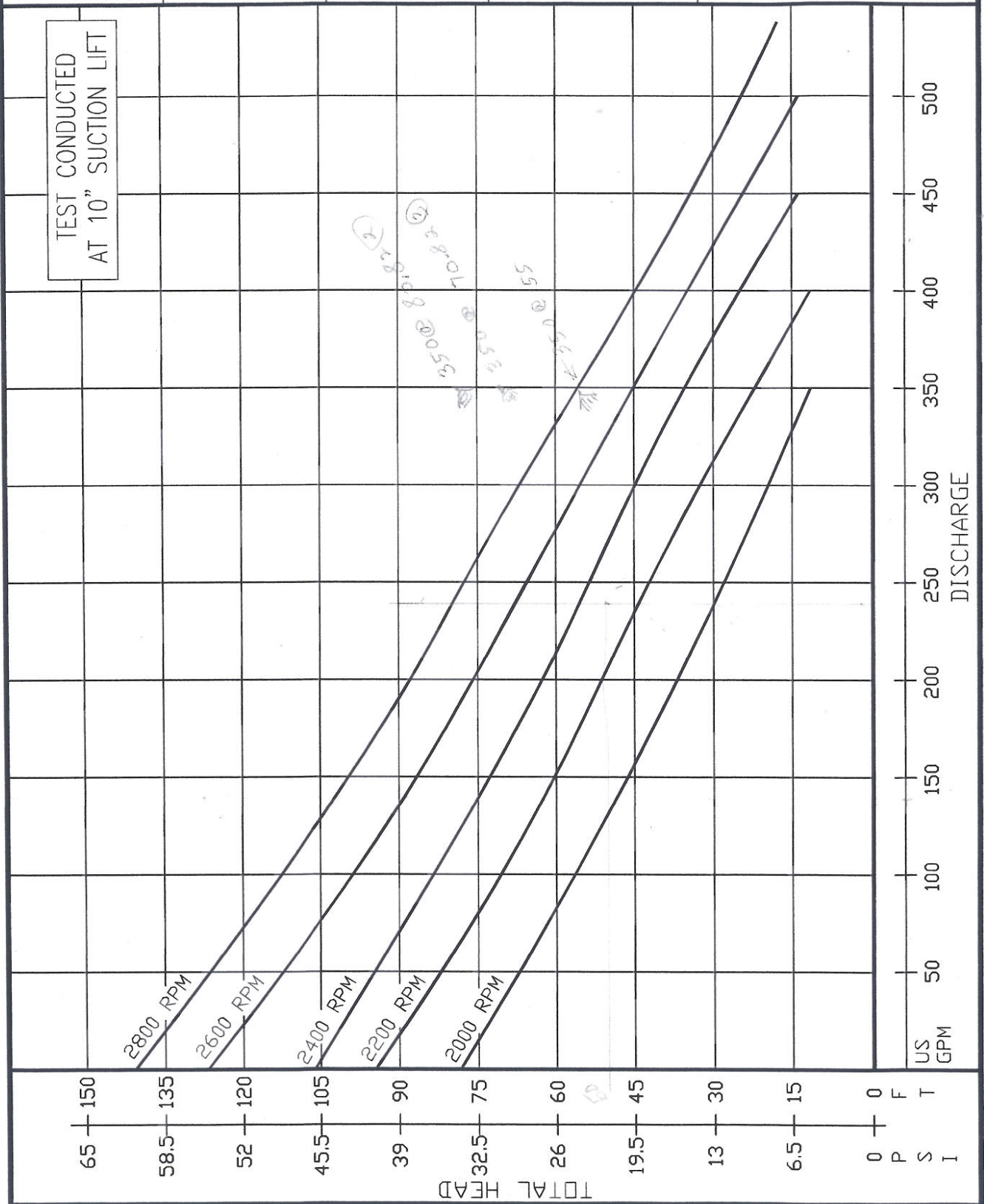
DISCHARGE  
75mm (3")

MAX. SPHERE  
31.75mm (1.25")

MAX. SUCTION LIFT  
8m (26ft.)

DV-80 MAX. 2800RPM

TEST CONDUCTED  
AT 10" SUCTION LIFT



2400 gpm @ 30 ft 2800/100 x 950 = 27.55 ft

# VYLON<sup>®</sup> PIPE



## LAMSON VYLON PIPE

25701 Science Park Drive • Cleveland, Ohio 44122  
Phone: 800-382-0862 • Fax: 216-766-6577 • [www.vylonpipe.com](http://www.vylonpipe.com)

PE3 7/05 DC/SP 5M

## Butt Fusion Time Cycles

For PressureFlex PE 3408 Pipe

Pipe Inches IPS	Heat Time @ 500 Deg. F. (Seconds)	Heat Time @ 425 Deg. F. (Seconds)	Cool Time (Seconds)	Approx. Melt Bead Width (Inches)	Approx. Finished Bead Width (Inches)
1/2	9 – 12	18 – 22	80	1/16	1/16
3/4	12 – 16	24 – 26	80	1/16	1/16
1	16 – 20	27 – 32	90	1/16	1/16 – 1/8
1 1/4	20 – 24	35 – 40	90	1/16	1/16 – 1/8
2	28 – 32	52 – 57	90	1/8	1/8
3	32 – 38	59 – 66	180	1/8	1/8
4	38 – 44	68 – 75	210	3/16	3/16
6	56 – 66	80 – 90	240	3/16	3/16
8	72 – 82	105 – 130	300	3/16	1/4
10	88 – 98	140 – 165	360	3/16	5/16
12	104 – 120	175 – 220	420	3/16	5/16

Note: The information given above is an estimate and may vary depending upon prevailing weather and jobsite conditions.

Recommended interface pressure on these sizes is 75 psi.

For sizes larger than 12 inch, use visual fusion procedures. Recommended interface pressure on these sizes is 40 psi.

### Butt Fusion continued

#### Align

The pipe profiles must be rounded and aligned with each other to minimize mismatch (high-low) of the pipe walls. This can be accomplished by adjusting the clamping jaws until the outside diameters of the pipe ends match. The jaws must not be loosened or the pipe may slip during fusion. The minimal distance requirement between fixed- and moveable-jaws mentioned above allows the pipe to be rounded as close as possible to the joint area. The closer to the joint area that the pipe can be clamped, the better control the operator has in properly aligning the pipe.

#### Melt

Heat the ends of the pipe to the pipe manufacturer's recommended temperature, interface pressure, and time duration. By doing so, the heat will penetrate into the pipe ends and a molten "bead" of material will form at the pipe ends. Heating tools which simultaneously heat both pipe ends are used to accomplish this operation. These heating tools are normally furnished with thermometers to measure internal heater temperature so the operator can monitor the temperature before each joint is made. However, they can be used only as a general indicator because there is some heat loss from internal to external surfaces, depending on factors such as ambient temperatures and wind conditions. A pyrometer or other surface temperature measuring device should be used periodically to insure proper

temperature of the heating tool. If temperature indicating crayons are used, do not use them on a surface which will come in contact with the pipe or fitting. Additionally, heating tools are usually equipped with suspension and alignment guides which center them on the pipe ends. The heater faces which come into contact with the pipe should be coated by the manufacturer to prevent molten plastic from sticking to the heater faces. Remaining molten plastic can interfere with fusion quality and must be removed according to the tool manufacturer's instructions.

#### Join

After the pipe ends have been heated for the proper time and to the proper temperature, the heater tool is removed and the molten pipe ends are brought together with sufficient pressure to properly mix the pipe materials and form a homogeneous joint. The pipe manufacturer's instructions may specify either interface pressure or bead size of molten material as a guide for a proper joint. There are machines available for pipe sizes from 5/8-inch through 72-inch diameters that will assist the operator to apply sufficient force to obtain the proper fusion pressure. Machines for 4-inch diameter and smaller sizes are normally lever-operated. Many of these smaller machines can be fitted with torque wrenches to obtain a theoretical value which allows the operator to consistently apply the approximate force required to properly fuse a joint.

Larger machines employ hydraulics with various types of control systems such as:

1. Manual with hydraulic hand pump.
2. Semi-automatic with motorized hydraulics including pressure reducing, selector, and directional control valves.
3. Fully automatic with computer- or microprocessor-control of the heat and fusion cycles and pressures.

#### Hold

The molten joint must be held immobile under pressure until cooled adequately to develop strength. The designs of the machines vary from a lever-arm-assist to manual or automatic locking devices that assist the operator to accomplish this step. The proper cooling times for the joint are material-, pipe-diameter-, and wall-thickness-dependent and are established by the pipe manufacturer. Allowing proper times under pressure for cooling prior to removal from the clamps of the machine is important in achieving joint integrity.

#### Optional Bead Removal

In some pipe system usage, the bead from the butt fusion process may be undesirable. Inside beads may create minor flow turbulence of liquids or may become an obstacle on which solids in the fluids may become lodged. Furthermore, outside beads may be a hinderance to sliplining operations. Equipment is available to remove the bead if that is desirable.

## High Density Polyethylene IPS Pipe and Pressure Ratings

Iron Pipe Size (IPS)		265 psi SDR 7		200 psi SDR 9		160 psi SDR 11		130 psi SDR 13.5		110 psi SDR 15.5		100 psi SDR 17		90 psi SDR 19		80 psi SDR 21		65 psi SDR 26		50 psi SDR 32.5		
Nom. O.D.	Act. O.D.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	
1"	1.315	0.188	0.291	0.146	0.234	0.119	0.196	0.097	0.163													
1 1/4"	1.66	0.237	0.463	0.184	0.374	0.150	0.313	0.122	0.259	0.107	0.228											
1 1/2"	1.9	0.271	0.607	0.211	0.489	0.172	0.41	0.140	0.34	0.123	0.299	0.112	0.274									
2"	2.375	0.339	0.948	0.264	0.765	0.216	0.640	0.176	0.531	0.153	0.467	0.140	0.429									
3"	3.500	0.500	2.059	0.389	1.661	0.318	1.390	0.259	1.153	0.226	1.015	0.206	0.931	0.184	0.838	0.167	0.763					
4"	4.500	0.643	3.404	0.500	2.746	0.409	2.297	0.333	1.907	0.290	1.678	0.265	1.539	0.237	1.387	0.214	1.261	0.173	1.028	0.138	0.829	
5"	5.563	0.795	5.202	0.618	4.196	0.506	3.511	0.412	2.914	0.359	2.564	0.327	2.352	0.293	2.120	0.265	1.927	0.214	1.571	0.171	1.267	
6"	6.625	0.946	7.378	0.736	5.951	0.602	4.980	0.491	4.133	0.427	3.636	0.390	3.336	0.349	3.007	0.315	2.733	0.255	2.228	0.204	1.797	
8"	8.625	1.232	12.505	0.958	10.086	0.784	8.440	0.639	7.004	0.556	6.164	0.507	5.654	0.454	5.093	0.411	4.631	0.332	3.777	0.265	3.046	
10"	10.750	1.536	19.426	1.194	15.668	0.977	13.111	0.796	10.881	0.694	9.575	0.632	8.783	0.566	7.913	0.512	7.195	0.413	5.867	0.331	4.731	
12"	12.750	1.821	27.326	1.417	22.041	1.159	18.443	0.944	15.306	0.823	13.469	0.750	12.355	0.671	11.127	0.607	10.121	0.490	8.253	0.392	6.655	
14"	14.000	2.000	32.947	1.556	26.575	1.273	22.237	1.037	18.455	0.903	16.239	0.824	14.896	0.737	13.419	0.667	12.203	0.538	9.951	0.431	8.024	
16"	16.000	2.286	43.033	1.778	34.710	1.455	29.044	1.187	24.104	1.032	21.210	0.941	19.457	0.842	17.521	0.762	15.938	0.615	12.997	0.492	10.481	

## High Density Polyethylene DIPS Pipe and Pressure Ratings

Density 0.955  
Corr. Factor 1.045

Ductile Iron Pipe Size (DIPS)		265 psi SDR 7		200 psi SDR 9		160 psi SDR 11		130 psi SDR 13.5		110 psi SDR 15.5		100 psi SDR 17		90 psi SDR 19		80 psi SDR 21		65 psi SDR 26		50 psi SDR 32.5		
Nom. O.D.	Act. O.D.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	Min. Wall	Wt. Lb./Ft.	
4"	4.800	0.686	3.835	0.533	3.0930	0.436	2.588	0.356	2.148	0.310	1.890	0.282	1.734	0.253	1.561	0.229	1.420	0.185	1.158	0.148	0.934	
6"	6.900	0.986	7.924	0.767	6.391	0.627	5.348	0.511	4.438	0.445	3.909	0.406	3.583	0.363	3.227	0.329	2.935	0.265	2.393	0.212	1.930	
8"	9.050	1.293	13.630	1.006	10.995	0.823	9.200	0.670	7.635	0.584	6.719	0.532	6.163	0.476	5.551	0.431	5.049	0.348	4.117	0.278	3.320	
10"	11.100	1.586	20.510	1.233	16.540	1.009	13.840	0.822	11.490	0.716	10.107	0.653	9.272	0.584	8.350	0.529	7.595	0.427	6.193	0.342	4.994	
12"	13.200	1.886	29.000	1.467	23.390	1.200	19.570	0.978	16.240	0.852	14.290	0.776	13.110	0.695	11.809	0.629	10.740	0.508	8.758	0.406	7.063	
14"	15.300	2.186	38.960	1.700	31.420	1.391	26.300	1.133	21.820	0.987	19.200	0.900	17.620	0.805	15.865	0.729	14.430	0.588	11.767	0.471	9.489	

\*Iron Pipe Size - Pressures are based on using water at 23°C (73°F) and are determined by using standard formulas for the industry.

NOTE: Service factors should be utilized to compensate for the effect of substances other than water, and for other temperatures.

## AWWA Pipe Referenced Standards

<p><b>MATERIAL</b> Material used for the manufacturing of polyethylene pipe shall be PE 3408 High Density Polyethylene (HDPE) meeting the ASTM D 3350 cell classification 345464C</p>	<p><b>PIPE</b> Polyethylene pipe shall be manufactured in accordance with AWWA C901 for size 1/2" through 3" and in accordance with AWWA C906 for sizes 4" through 63"</p>
---	--

## Referenced Standards

<ul style="list-style-type: none"> <li>• <b>AWWA C901</b> Polyethylene (PE) Pressure Pipe and Tubing 1/2" through 3" for Water Services</li> <li>• <b>AWWA C906</b> Polyethylene (PE) Pressure Pipe and Fittings 4" through 63" for Water Distribution</li> <li>• <b>ASTM D 2683</b> Socket Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe</li> <li>• <b>ASTM D 3261</b> Butt Fusion Polyethylene (PE) Fittings for Polyethylene (PE) Plastic Pipe and Tubing</li> </ul>	<ul style="list-style-type: none"> <li>• <b>ASTM D 3350</b> Standard Specification for Polyethylene Plastic Pipe and Fittings Material</li> <li>• <b>PPI TR-3</b> Policies and Procedures for Developing Recommended Hydrostatic Design Stresses for Thermoplastic Pipe Materials</li> <li>• <b>PPI TR-4</b> Recommended Hydrostatic Strengths and Design Stresses for Thermoplastic Pipe and Fittings Compounds</li> <li>• <b>NSF Standard #61</b> Plastic Piping Components and Related Materials</li> </ul>
--	--

## Superior Hydraulics

Lamson Vylon HDPE Pipe has superior hydraulic characteristics. In order to calculate the friction loss of water, the Hazen-Williams formula is used:

$$H = \frac{1044 \times Q^{1.85}}{C^{1.85} \times D_i^{4.865}}$$

Where

H = Friction loss in feet of water per 100 ft.  
Q = Flow rate (gpm)  
C = Hazen-Williams Coefficient  
D<sub>i</sub> = Inside Diameter (in.)

The Hazen-Williams coefficient for Lamson Vylon HDPE pipe is 150 and doesn't change over time. With its superior corrosion resistance it will remain smooth and not corrode or tuberculate.

## Construction Advantages

The combination of butt-fused, leak free joints and flexibility allows for more construction options than is possible with rigid pipe. Lamson Vylon HDPE pipe can be bent to a radius 25 times the nominal pipe diameter. This makes Lamson Vylon HDPE pipe ideal for installation methods such as Horizontal Directional Drilling, Pipe Bursting or Sliplining.

## Water Hammer Effects

Water Hammer is a sharp pressure differential caused by differences in the velocity of fluids in a pressurized system. These differences can be originated by pump and valve operations, together with other aspects. AWWA has design formulas that calculate pressure surges for different piping materials.

### Pressure Surge

The formula for pressure surge is:

$$P_s = \frac{a \times \Delta V}{2.31 \times g}$$

P<sub>s</sub> = Pressure surge (psi)  
a = wave velocity (fps)  
ΔV = change in water velocity (fps)  
g = gravitational acceleration (32.17<sup>ft</sup>/sec<sup>2</sup>)

where the wave velocity is calculated by:

$$a = \frac{4660}{[1 + (k(DR-2)/E)]^{1/2}}$$

k = Water Modulus (psi)  
DR = Dimensional Ratio  
E = Modulus of Elasticity (psi)

HDPE pipe is viscoelastic in nature, which causes it to absorb a sizable amount of energy from a pressure surge. This energy absorption enables HDPE piping systems not to be oversized, hence, yielding a cost saving.

## Lamson Vylon Pipe HDPE Maximum Pull Force (MPF) lbs\*

TENSILE Strength  
3200 psi

Size	Nom. OD	SDR 7	SDR 9	SDR 11	SDR 13.5	SDR 15.5	SDR 17
1 1/4"	1.660	1242	1002	838	696	612	
1 1/2"	1.900	1627	1312	1098	911	802	
2"	2.375	2542	2050	1715	1424	1253	
3"	3.500	5520	4452	3726	3092	2721	2496
4"	4.500	9125	7360	6159	5111	4498	4126
5"	5.563	13945	11248	9412	7811	6873	6305
6"	6.625	19778	15952	13349	11078	9748	8942
8"	8.625	33521	27038	22625	18776	16522	15156

Lamson & Sessions recommends a load cell be used to monitor the applied force.  
\* MPF values are based on a temperature of 73° F and are in lbs., not psi.

## Butt Fusion

The most widely used method for joining individual lengths of large diameter polyethylene pipe is by heat fusion of the pipe butt ends. This technique, which precludes the need for specially modified pipe ends or couplings, produces a permanent, economical and flow-efficient connection. Field-site butt fusions may be made readily by trained operators using specially developed butt fusion machines that secure and precisely align the pipe ends for the fusion process.

The six steps involved in making a butt fusion joint are:

1. Securely fasten the components to be joined
2. Face the pipe ends
3. Align the pipe profile
4. Melt the pipe interfaces
5. Join the two profiles together
6. Hold under pressure

### Secure

Each component that is to be fused must be held in position so that it will not move unless it is moved by the clamping device.

### Face

The pipe ends must be faced to establish clean, parallel mating surfaces. Most, if not all, equipment manufacturers have incorporated the rotating planer block design in their facers to accomplish this goal. Facing is continued until a minimal distance exists between the fixed and movable jaws of the machine and the facer is locked firmly and squarely between the jaws. This operation provides for a perfectly square face, perpendicular to the pipe centerline on each pipe end and with no detectable gap.

**Quick-Connect™ Joint**



**Compression Joint**



[Go to related product category: 6](#)

[Click here for more details](#)

- Units Conv
- Desi
- Cont Loac Deta
- Cher Resi Tabl
- Warr
- Trad
- Certi
- Jair**
- Plas Cont Valv Safe Valv
- Fi S**
- Sanc Sepa
- Scre
- Medi & Ma
- Back Cont
- Fer Sys Cher Equ**
- Jain Tank
- Jain Injec
- Vent Injec
- J-Inje Pum
- Mani Ferti
- Sp Irri Sy**
- Lawr Garc ups
- Over Sprir
- Cata Pap Mi (PC**
- Pape pres Deve of Mi Irriga India

# High Density Polyethylene Pipe

## PressureFlex Water HDPE PE 3408 Pipe

Our PressureFlex Water HDPE is manufactured to strict quality standards from the highest grade of polyethylene materials available. The PressureFlex Water is NSF listed and suitable for potable water applications and can be made according to the following standards: AWWA C901, AWWA C906, NSF-61. Available in 1" to 16" IPS sizes and 4" to 14" DIPS sizes.

## PressureFlex HDPE PE 3408 Pipe

Our PressureFlex HDPE is manufactured to strict quality standards from the highest grade of polyethylene materials available. PressureFlex is suitable for pressure and gravity flow sewer and other non-potable applications and can be made according to the following standards: ASTM D 3035 and F714.

Lamson Vylon Pipe's PressureFlex HDPE pipe can be joined by the generic heat fusion guidelines published by the Plastics Pipe Institute (Refer to guidelines on page 4).

## Handling/Shipping/Storage Guidelines

- Follow all applicable safety guidelines.
- Do not drop pipe from delivery truck into an open trench or onto uneven surfaces.
- Inspect pipe prior to installation.
- Temperature extremes have minimal affect on the strength or handling characteristics of polyethylene pipe. Polyethylene remains highly impact resistant even in sub-zero conditions.
- Avoid dragging pipe over the ground.
- Hot weather especially when coupled with direct sunlight, will raise the pipe temperature, but will not significantly affect handling or installation behavior.
- Avoid driving over the pipe.
- Carbon black is added to polyethylene to protect against UV. Unprotected plastic can become less impact resistant over time.

## Typical Physical Properties

\*Nominal Values

PROPERTY	TEST METHOD	ASTM SI UNITS	ENGLISH UNITS
Density (Natural)	D1505	0.944g/cc	
Density (Black)	D1505	0.955g/cc	
Flow Rate(190/21.6)	D1238	8.75 g/10 min.	
Tensile Strength @ Ultimate	D638	31.0 MPa	5000psi
Tensile Strength @ Yield	D638	22.8 MPa	3500psi
Ultimate Elongation	D638	>800%	>800%
Flexural Modulus (2% secant)	D790	827MPa	120,000psi
Environmental Stress Crack Resistance (ESCR) Condition C	D1693	>5,000 hrs.	>5,000 hrs.
Brittleness Temperature	D746	<-117 C	<-180 F
Vicat Softening Temperature	D1525	126 C	259 F
Hardness, Shore D	D2240	66	66
Thermal Expansion Coefficient	D696	1.8x10(-4) cm/cm/C	1.0x10(-4) in/in/F
HYDROSTATIC DESIGN BASIS	D2837	11.0MPa @ 23 C	1600psi @ 73.4F
CELL CLASSIFICATION	D3350	345464C**	345464B**
MATERIAL CLASSIFICATION	D1248	Type III Category 5	Grade P34 Class C or B

\*Nominal values are to be used as guides only, and not as specification limit.

\*\*Cell classification 345464C refers to black pipe only.

\*\*Cell classification 345464B refers to all other colors.

Home

Company

Solution / Services

Products

Site Map

Search

Re

Jains Share in Agriculture

You are here: Home - Products - Pipes - HDPE Pipes Jointing Connections

More

- Drip Irrigation Systems
- Sprinkler Irrigation Systems
- Control & Safety Valves
- Water Filtration Systems
- Fertigation System & Chemigation Equipment
- Pipes & Fittings
- Turnkey Project Services
- Green Houses
- Plant Tissue Culture
- Nursery Plants and Systems
- Bio Fertilizer
- Agri & Engineering Consultancy
- Processed Food
- Plastic Sheet
- Solar Water Heating System

Locate us

Select Country

## HDPE Pipes Jointing Connections



### Features and Specifications:

"NO CHAIN IS STRONGER THAN ITS WEAKEST LINK" is a common saying which can also be applied to the piping system joints. The main requirements to be fulfilled are hydraulic tightness as well as structural stability of the system.

For the satisfactory performance of Jain HDPE pipe system, design and installation methods mainly rely on the appropriate choice and properly made connections. An adequate and properly made pipe joint will lead to faster and non-hazardous systems operations.

With a view to fulfill the above important aspects of pipeline system and to provide the user industry a choice based on application and economy, Jains have developed several types of jointing systems for their range of JAIN HDPE piping systems like - butt fusion, electro-fusion, which are permanent joints and detachable joints such as flanged joints, self restrained sure-loc joints, Quick release joints and compression joints. The choice of joint required for installing Jain HDPE piping system depends upon requirements based on internal or external pressure, leak tightness, restraint against longitudinal movement, construction and installation requirements as well as application.

### Butt Fusion Joint



### Electro-fusion Joint



### Flange Joint



### Self Restrained Sure-Loc® Joint



- Ja an Fi
- Ja Pr
- PVC Pres Pipe (Soh Welc Quic PVC (Rub Joint
- Jain Cabl
- Jain Well and : Pipe
- Jain Loc® Casi Scre
- Jain Loc® Pipe
- Jain an Fi
- HDP
- Quic Coni Pipe
- HDP Loc® Pres Pipe Pipe
- Jain
- Poly Gas Syst
- B-SW an Fi
- SWF
- SWF
- SWF Insta Proc
- D: Tei Info

# INDEPENDENT PIPE PRODUCTS, INC.

HIGH DENSITY POLYETHYLENE PIPE FITTINGS



PRODUCT CATALOG

PRODUCT SUBMITTALS

HDPE SERVICES

ORDER & PRICING INFO

ABOUT IPP | CONT



## IPP HDPE PRODUCTS

### Design-Flow™ Bolt Rings

IPS/DIPS Ductile Iron, IPS/DIPS Stainless Steel, IPS/DIPS Epoxy Coated

### Design-Flow™ HDPE Pipe

IPS HDPE Pipe 2"-24", DIPS HDPE Pipe 4"-24"

### Flange Components

Flange Adapters, Stub Ends, Back Up Rings, Gaskets, Blind Flanges, Butterfly Valve Spacers & Butterfly Valve Flange Adapters

### Reducers

Concentric & Eccentric

### End Caps

Molded & Machined

### Branch Saddle Components

Branch Saddle, Service Saddles, Self-Tapping Tees, Tapping Sleeve/Saddle Assembly

### Valves & Compression Fittings

Butt Fusion Ball Valve, Fuse-A-Corps, Compression Fittings for HDPE

### Pull-Heads

Standard & Custom Built

### Water-Stop/Thrust Isolator Wall Pipe/Anchor Ring

Thrust Restraint for HDPE

### Transitions to Ductile Iron Pipe

MJ Adapter Kits, MJ Gland & Accessories, Bell MJ Kits & Accessories, Hydrant Anchor Spools

### Transitions to PVC Pipe

PVC Slip Joint Anchor, Bell MJ Kits & Accessories, HDPE x SCH 40, Stiffeners for HDPE

### Transitions to Steel Pipe

Thread & Weld End, Brass, Carbon & Stainless Steel

### Elbows

Molded, Mitered & Sweep Elbows

### Tees

Molded & 3pc Line Tees, Branch Saddle Reducing Tees

### Wyes

3pc Unreinforced & Reinforced, 45° & True Equal, Branch Saddle Reducing Wyes

### Crosses

Line Crosses, Reducing Crosses

### Other Fixtures & Fittings

Industrial Manholes, Landfill Riser Shafts, Outfalls, Diffusers, Headers, Manifolds

## BETTER BY DESIGN

Independent Pipe Products, Inc. (IPPI) announces a new 275,000 square foot facility on 26 acres. The state-of-the-art facility incorporates a five extrusion line HDPE pipe production plant with IPPI's expanded HDPE fittings fabrication plant. [Learn more...](#)



## IPPI Leads Rapid Evolution Into PE4710 Pipe I



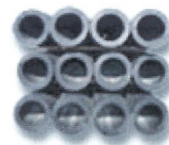
PE4710 is the latest advancement in Density Polyethylene Bi-Modal I. A PE4710 HDPE piping system ( when compared to current cost systems. [Learn more...](#)

## New Product Launch: Design-Flow™ Bolt Rings



Our Design-Flow Bolt Ring is so strong that it has earned "Patent Pending" principle, on its strong, tough, design. Its contoured cross-section deformation which provides a [Learn more...](#)

## New Product Launch: Design-Flow™ HDPE Pipe



Independent Pipe Products, Inc. product Design-Flow™ HDPE Pipe will be available in IPS size sizes 4" through 24" for the industrial wastewater markets. [Learn mo...](#)

Our Mission is to supply polyethylene pipe distributors with reliable, high-integrity polyethylene fitting systems customized to meet your specific requirements, based on a long-term, value added buy

**Have a question? [Contact an IPP representative](#)**

© 2005 Independent Pipe Products, Inc. All rights reserved.

[Home](#) | [Site Map](#) | [Contact Us](#)



[www.hdpe-pipe.com](http://www.hdpe-pipe.com)

-100% Full Port  
Valves

-Size Range Up to 16"  
IPS

-PE2406 and PE3408

### **Polyethylene Ball Valves:**

We offer polyethylene ball valves in both PE2406 and 3408. Our valves can be used for a variety of hdpe pipe applications including gas and water. The valve is rated at up to 160 PSI for water application at normal temperatures.

The valve has superior characteristics, especially in the stem design which have made it the valve of choice for many U.S. and European Gas and Water Companies.

HDPE Valves are available from 1 1/4" IPS through 16" IPS sizes. Valve ends are extra long for butt, socket, or electrofusion applications, and the valve closes with only 1/4 turn. When the valve is in the closed position, the seating is maximized as the pressure from the ball is forced against the seat.

These valves meet or exceed ANSI B-16.40, ASTM D2513, DOT part 192, and are manufactured in accordance with ISO 9002, a total quality management system.

**Home Contact Phone: 770-632-7530 Fax: 770-632-7540**

