

FOR FUEL, CHEMICAL AND ENVIRONMENTAL STORAGE SYSTEMS

FLOATING SUCTIONS

***Our experience in Designing and manufacturing
improved fluid handling equipment
has attracted discriminating business world wide.***



GNY EQUIPMENT, LLC

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GNY FLOATING SUCTIONS

GENERAL SPECIFICATIONS

SWING JOINTS: aluminum, steel, or special alloys for chemical and other applications; flanged dual ball bearing type with O-ring seals or central type with bronze or Ni-Resist bushings. (12 inches or over.)

PIPE OR TUBING: aluminum, steel or special alloys for chemical and fuels, treatment plant decant applications; lengths and sizes are dependent on particular installation requirement; available in 2" through 24" pipe or tubing.

BELLMOUTH: low velocity conical configuration with baffle plate and anti-vortex plate. Basic styles: Model 301-B with 90° bellmouth elbow; Model 301-C with 45° bellmouth elbow and inverted bellmouth for skimming units.

FLOATS: stainless steel and all are pressure tested.

BAFFLE AND STOP LEG: aluminum, steel, iron or special alloys for chemical and other applications; designed to break suction 9 inches above tank bottom. (or as specified)

INSPECTION CABLE: 3/16" uncoated Stainless Steel (Grounded to Arm)

ORDERING INFORMATION

FOR VERTICAL TANK

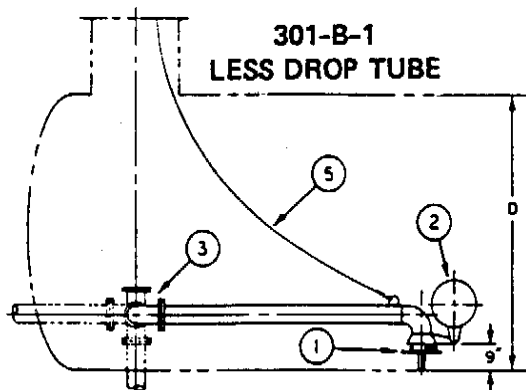
1. Type of liquid to be handled.
2. Preferred style (give model number).
3. Pipe size required.
4. Type of tank (cone or floating roof).
5. Diameter and height of tank.
6. Manhole size.
7. Centerline of nozzle from floor of tank.
8. Note any support or guide columns inside tank.

FOR HORIZONTAL TANK

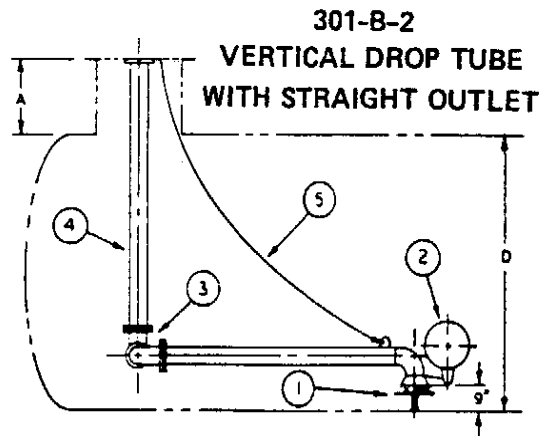
1. Type of liquid to be handled.
2. Preferred style (give model number).
3. Pipe size required.
4. Whether above or below ground tank.
5. Diameter of tank.
6. Location and type of outlet stub (flanged or threaded).
7. Manhole size.
8. For vertical pipes, "A" dimensions.
9. Note any obstructions in tank.

GENERAL NOTE

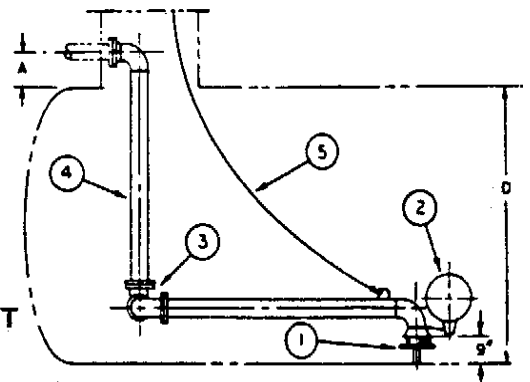
- A. Aluminum materials are standard with units 2" to 8".
B. Steel material are standard with 10" to 24".



LEGEND	
KEY NO.	DESCRIPTION
1	BELLMOUTH AND BAFFLE
2	FLOAT, STAINLESS STEEL
3	FLANGED SWING JOINT
4	VERTICAL DROP TUBE
5	INSPECTION CABLE



**301-B-3
VERTICAL DROP TUBE
WITH 90° ELBOW OUTLET**



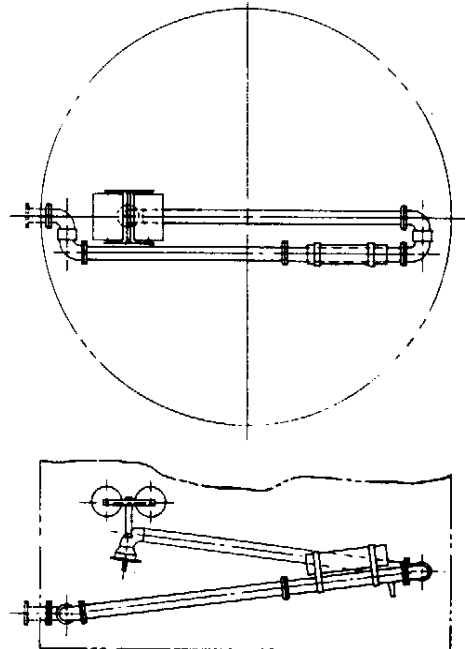
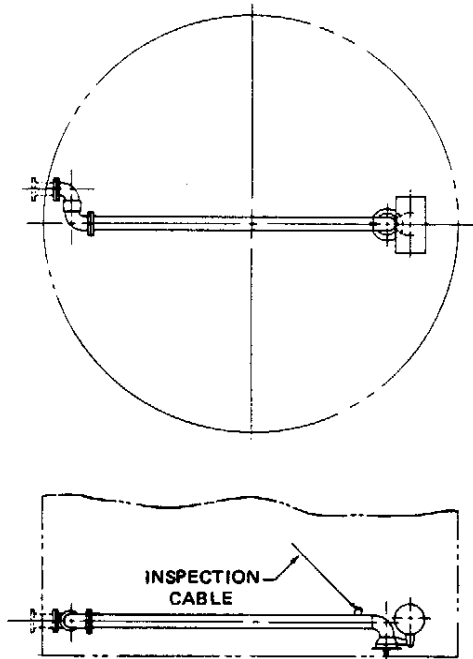
GNY FLOATING SUCTIONS

SIZES:

2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20", 24"
.....up to 36"

DESIGNED TO:

- Deliver a cleaner product by drawing the fluid closest to the surface. The suction intake includes a stop leg in order to maintain an undisturbed tank bottom, eliminating a high percentage of water and sediments from aircraft fuel, motor fuel, heating oils and petrochemicals.
- Decant water from sewage treatment plant separation tanks.
- In an inverted installation can also skim oils from the top of water run off settling tanks (with standard or inverted type inlets).
- Reduce inlet velocity with special bellmouth so "bottom" remains undisturbed.
- Increase efficiency and decrease maintenance of filter separator.



TYPICAL VERTICAL TANK MOUNTING

MODEL 301-B. For use in vertical, above ground fuel tanks for airport and marine bulk storage terminals. Tanks can be used sooner after delivery. Setting time can be greatly reduced. The unit is usually installed in new tanks but can also be added to existing tanks.

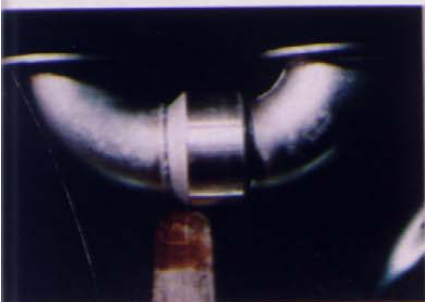
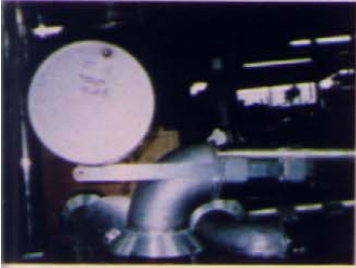
MODEL 301-B-AR. The articulated floating suction is designed for use in a vertical tank in which the tank diameter is too small to allow a single arm unit to reach the top of the product. Articulated multi-arm floating suction units are available on special design.

IMPORTANT NOTE: It is recommended that tanks equipped with floating suction have provision and procedures for systematic draining of tank bottoms (water) same as tanks without floating suction.

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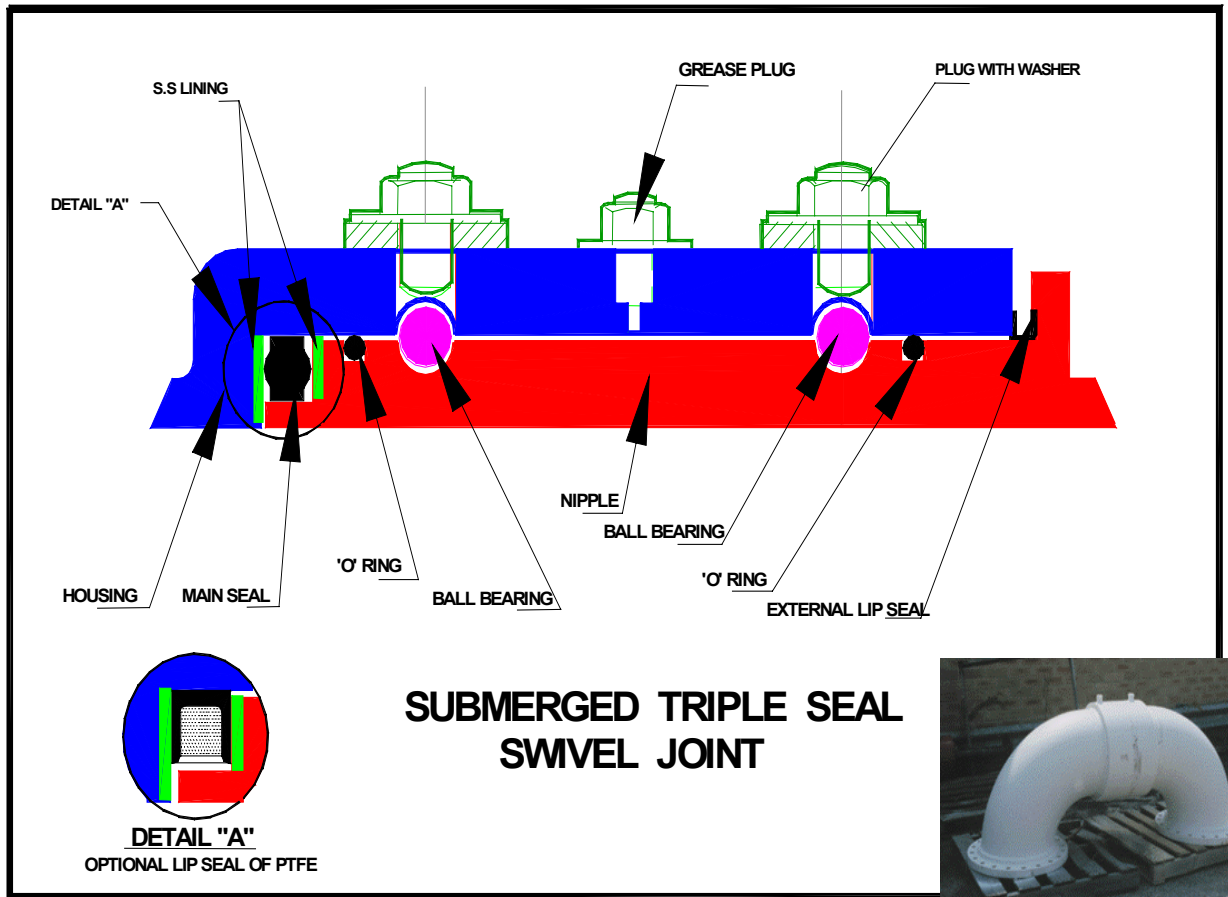
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FLOATING SUCTIONS



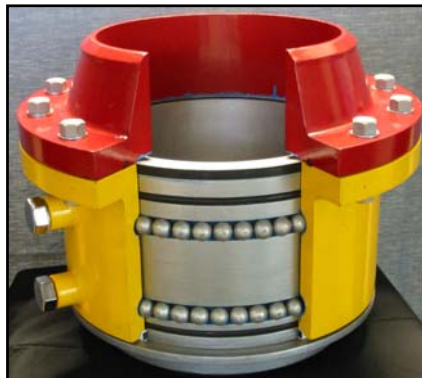


GNY SUBMERGED TRIPLE SEAL SWIVEL JOINTS



**Heavy-duty load bearing capacity widespread
ball-bearing raceway hardened up to 345 BHN**

*Cross-sectional view
of split flange design
Swivel joint spool*



GNY SUBMERGED TRIPLE SEAL SWIVEL JOINTS

Size: 2" (50 mm) to 36" (900 mm).

Swivel Joints are available in style 20, 30 and 40 with threaded, flanged, butt weld ends connection or combinations, in ANSI 150 to 300 class. **Designed** as per API Spec. Standard 6H.

Material of Construction:

Carbon Steel: CS A105/ A515 or A515/A516 Gr. 60/70,

Stainless Steel: SS 304/SS 316 (CF8/ CF8M or equivalent)

Aluminum (up to 10" size)

Two different design constructions :

Two Piece Design

Split Flange Design: The main seal can be replaced without dismantling any bearings.

Ball Bearing, fitted with two rows of **widespread** ball bearing (Chrome CS or SS)

Combination of roller bearing with ball bearing units are also available.

Heavy-duty load bearing capacity widespread ball-bearing raceway hardened up to 345 BHN (equals to 37 Rockwell "C") through a special permanent metal hard facing process.

Seal Contact Faces are overlaid with Corrosion Resistant Stainless Steel (SS) Lining:

All CS Swivel Joints are supplied with **Special Stainless Steel lining** at the main seal faces, on both nipple and housing for longer seal life and smooth rotation.

Triple Seal Design

Main seal of two different types: **O-Ring or Lip Seal.**

O-Ring type: Main Seal of O-ring cross section of Buna-n/Viton ® material and O-rings,

Lip Seal type: Main Lip Seal of PTFE (Teflon ®) with Buna-n/Viton ® Insert and O-rings or

Lip Seal type: Main Lip Seal of Buna-n/Viton ® is also available.

A special Inverted Lip seal design for main-seal is also available.

External Lip Seal (for submerged application)

A third additional lip seal specially designed to provide required sealing for external fluid pressure. External Lip Seal of PTFE (Teflon ®) or Buna-n/Viton ®.

A special Inverted external lip seal design is also available.

Positive and Negative pressures

Nipple (female) portion is **specially dimensioned** for the main seal to remain in the proper functioning position under both positive and negative pressure.

Designed to withstand temperature variations from -40 to 100 Deg. Centigrade

A special low or high temperature application is also available.

Factory Lubricated and Sealed:

Lubricated with Special wear resistant high temp. PTFE based lubricant and

Lubricated-for-life (maintenance free) is also available.

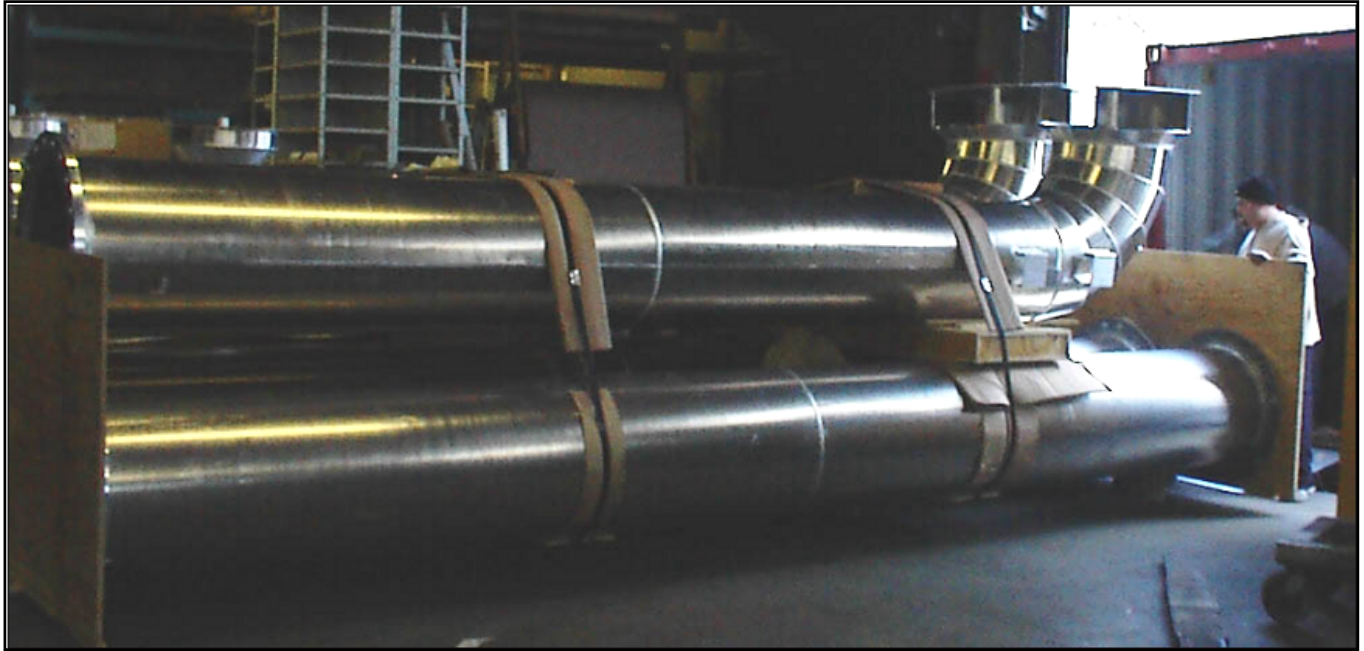
Dust Proof

Hydro testing and Special Testing

All Swivel Joints are Internally Hydro-tested at shop before shipping. The Air test, Vacuum test, Bending moment/Radial load test, Pull load test, Torque test, External Pressure test, Electrical conductivity test and Life Cycle Tests (US Patented) have been conducted during the R&D (research and development) and these tests can be conducted upon request at extra cost.

GNY 24" FLOATING SUCTION (JOB: 1134)

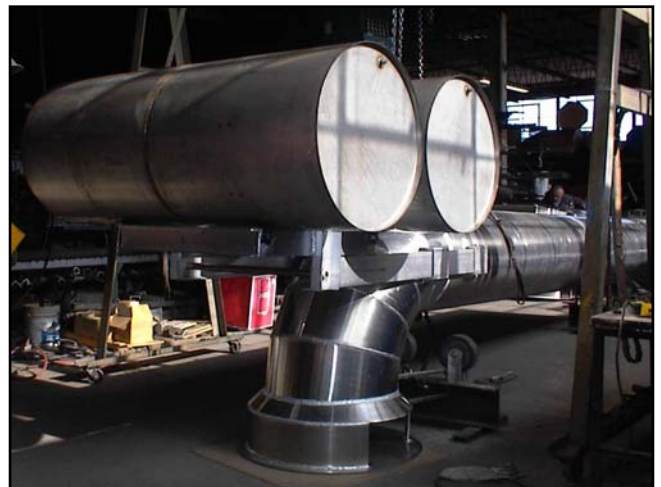
Supplied to Client in China (Year 2002)



24" x 4 nos. Floating Suction Arm packed on skids.



**24" x Style 40 CS Submerged
Two-Piece Design Swivel
Joint with Triple Seal of PTFE**



**Dual Stainless Steel Float
Assembly for 24" Floating
Suction Assembly**

GNY 12" FLOATING SUCTION (JOB: 1133)

Supplied to Client in China (Year 2002)



12"x 4 nos. Floating Suction Arm packed on skids.



**12" x Style 40 CS Submerged
Two-Piece Design Swivel
Joint with Triple Seal of PTFE
Epoxy Painted Inside-outside**



**Dual Stainless Steel Float
Assembly for 12" Floating
Suction Assembly**

DUAL STAINLESS STEEL FLOATS 508mm DIA.,
X 62" LONG, AIR TESTED TO 10 KPa ONE FLOAT WILL
BUOY THE COMPLETE SUCTION ARM.



1. TOP END OF TEST / BONDING CABLE MUST
BE HARD ATTACHED TO TANK OR MANHOLE.
2. ALL FLOATING SUCTION COMPONENTS WILL FIT
THRU A MANHOLE.
3. FOR PLAN VIEW REFER TO SHEET 2 OF 2 CF-0702-04.
4. FOR PIPE SUPPORT REFER TO SKETCH
5. FOR SUBMERGED SWIVEL JOINT REFER TO SKETCH
NO. CF-0702-04-2
6. FOR FUEL SAMPLING ASSY. REFER TO SKETCH.

STAINLESS STEEL TEST / INSPECTION/
BONDING CABLE, 5mm DIAMETER
CABLE LENGTH = 1.5 X TANK HEIGHT

TOLERANCES

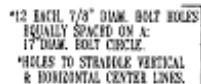
UNLESS OTHERWISE NOTED	
ANGLE:	$\pm 0.3^\circ$
DISCREPANCY:	± 0.3 mm

TITLE: GNY MODEL 301-B: 12" FLOATING SUCTION
FOR AVIATION TURBINE FUEL

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SCALE:	DWG. NO.: CR-0702-04	REV. E
NONE	SHEET 1 OF 2	



PLAN VIEW

541P

1. SHY TRIPLE SEAL SUBMERGED SWIMMER. FIRST IS FACTORY SEALED AND LUBRICATED (DO NOT LUBRICATE).
2. STATIC WATER TESTER.
3. PUSHER: EMPTY CHARTER INSIDE AND OUT.
4. ESTIMATED WEIGHT = 275 LBS.
5. HOIST BOLTS TO STABILIZE VERTICAL AND HORIZONTAL CENTER (LONG).

LIST OF MATERIALS				
ITEM	QTY	DESCRIPTION	MATERIAL	PART NUMBER
1	12"	STEEL JOINT BEARING ASSEMBLY	STEEL	
2	1	12" 1500 SELF-ON PLANGE OF ANGE BLES	STEEL	4120
3	1	12" STEEL JOINT BEARING ASSEMBLY	STEEL	SEE ORDER
4	2	12" 1500 SELF-ON PLANGE OF ANGE BLES	STEEL	425400
5	1	12" 1500 SELF-ON PLANGE OF ANGE BLES	STEEL	410000

12" STYLE 40F
CAN TRIPLE SEAL STANDARD STYLE JOINT ASSEMBLY

GNY EQUIPMENT, LLC

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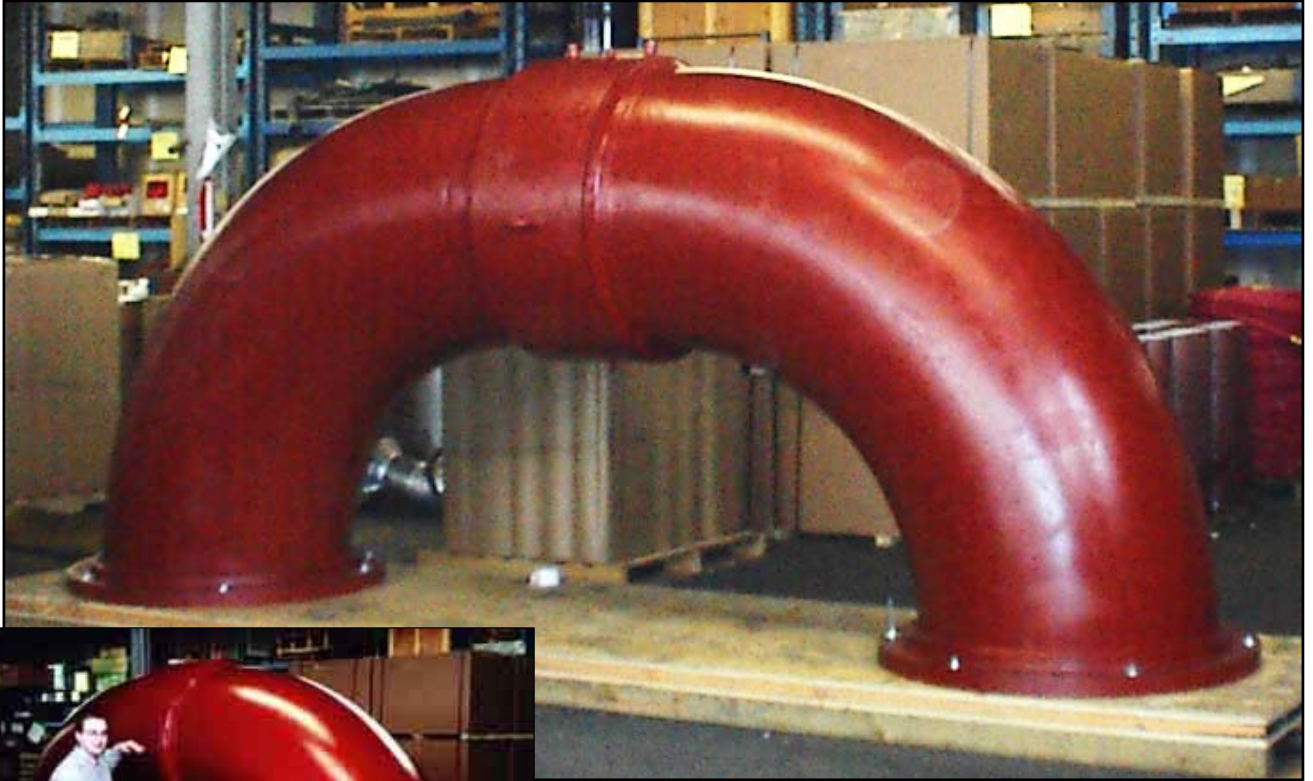
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FLANGE DETAIL:
SIZE: 12" X 150 LBS. (ANSI CLASS 150)

TOLERANCES	
UNLESS OTHERWISE NOTED	
ANGLES	0.1°
DIMENSIONS	0.1 mm

GNV SWIVEL JOINT

SIZE: 36"



***36" Swing Joint
Style 40 with
36" Elbows and Flanges
For Submerged Hot Bitumen Applications
Supplied to Client in Canada (Year 2000)***