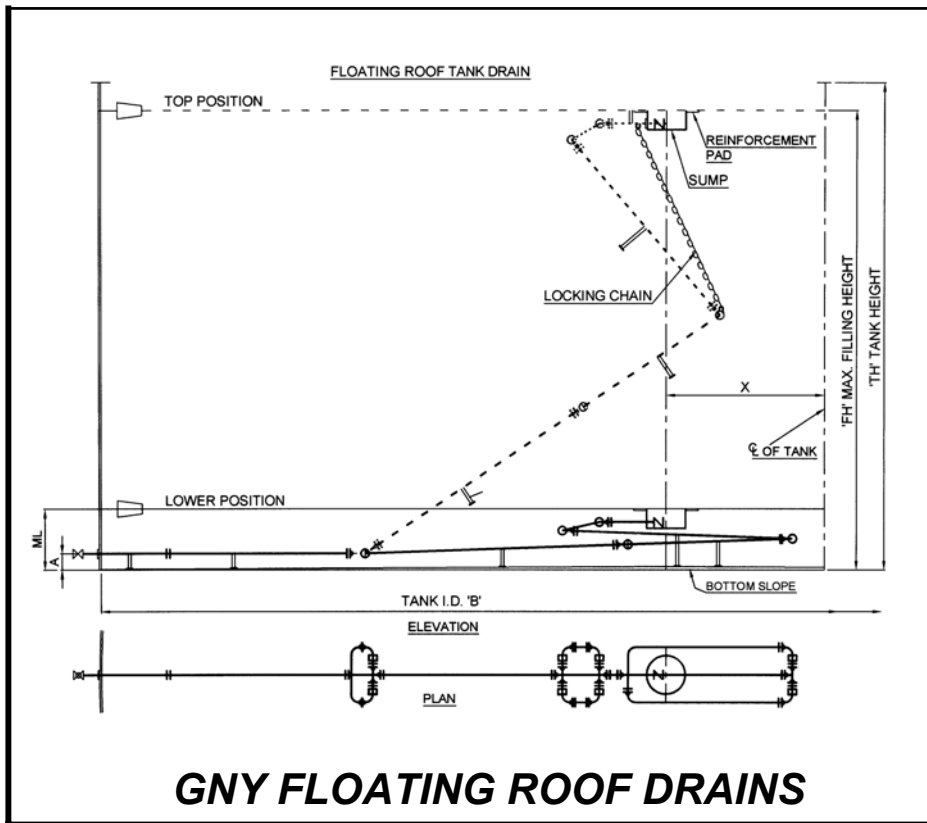


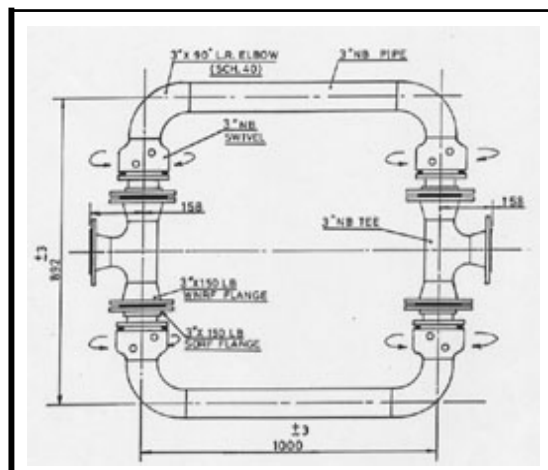
# GNY SUBMERGED ROOF DRAINS AND SKIMMERS

(USING SUBMERGED TRIPLE SEAL SWIVEL JOINTS)

- **Size:** 2" (50 mm) to 36" (900 mm) and larger
- **Material of Construction:** CS A515-516 Gr. 60/70, SS 304/ 316, and Aluminum
- **Submerged Triple Seal Swivel Joints with:**  
**External Lip Seal** (a third seal) provides require sealing for external fluid pressure in tanks.  
Available in both, **Two Piece Design** and **Split Flange Design** in CS/SS:



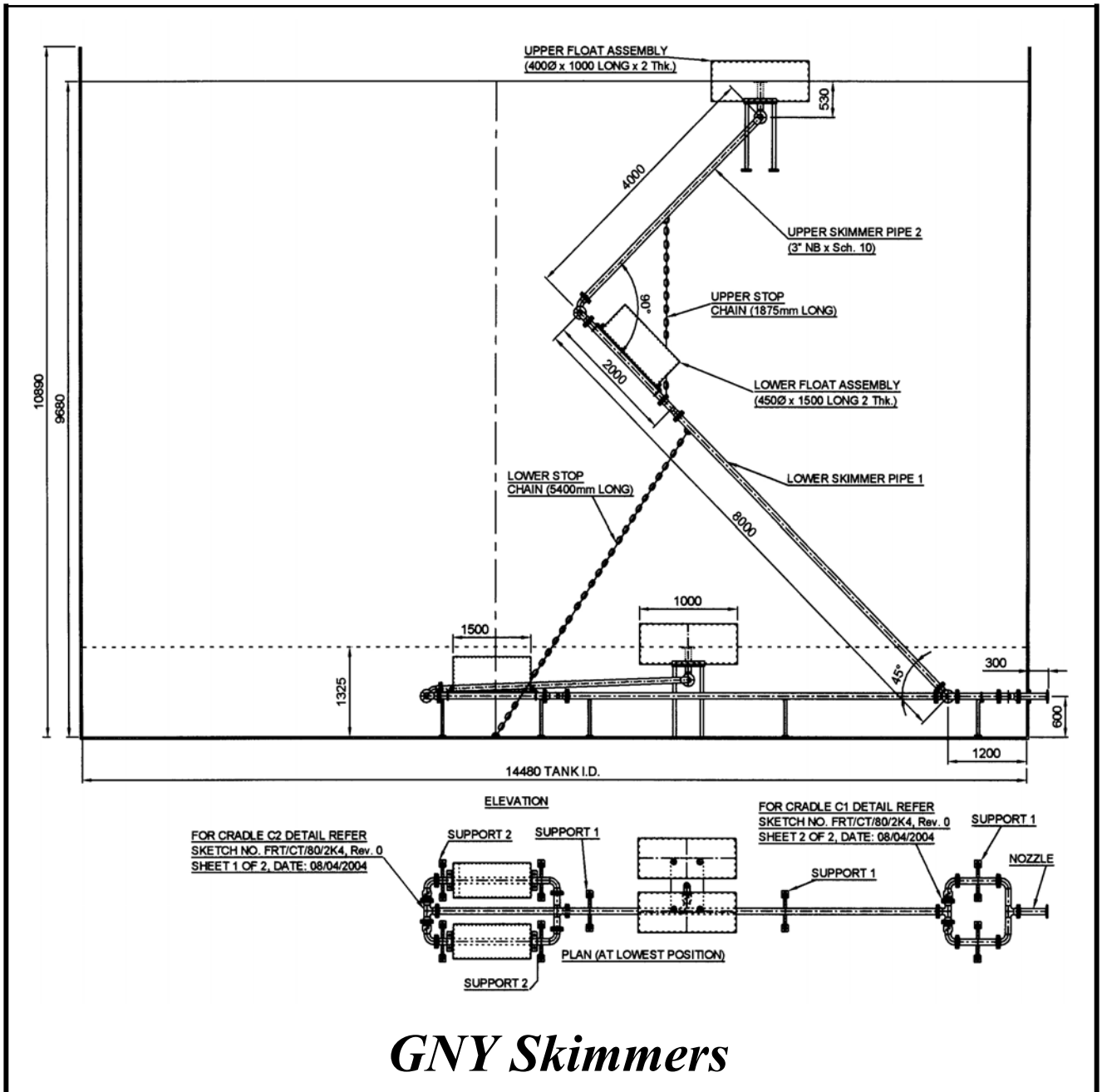
*Submerged Swivels Loop "Cradle Type" shown here*



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(USING SUBMERGED TRIPLE SEAL SWIVEL JOINTS)

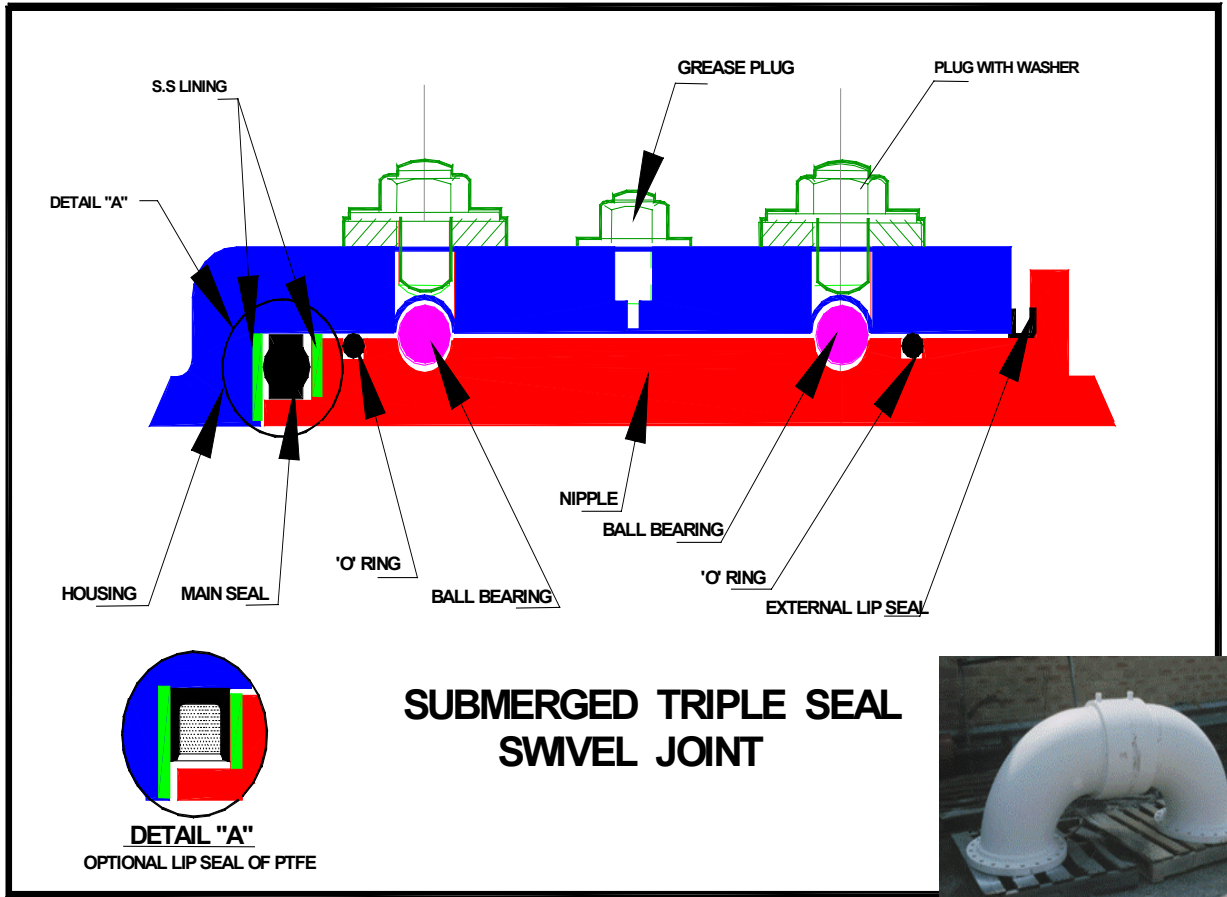
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*GNY Skimmers*

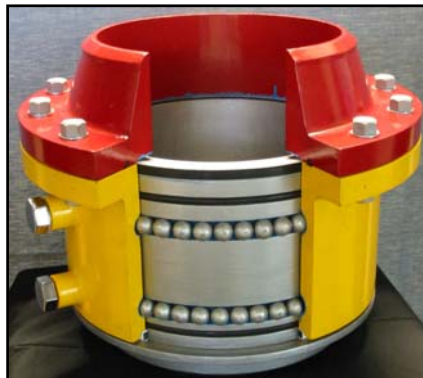


# ***GNY SUBMERGED TRIPLE SEAL SWIVEL JOINTS***



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

*Cross-sectional view of  
split flange submerged  
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 EQUIPMENT, LLC

Phone: (631) 273 4940 \* Fax: (631) 273 5018 \* Email: shah@gnyequipment.com

## Enquiry Data Sheet for Roof Drains

### DESIGN DATA FOR ROOF-DRAINS FOR FLOATING ROOF TANKS

#### Refer G.A. Sketch

01	Tank Diameter	DT	
02	Tank Height upto pontoon	HP	
03	Lowest Height of Pontoon	HLP	
04	Minimum Height of outlet From Tank bottom	A	
05	Is Steam/Heating coil provided	Yes/No	
06	Max. Space occupied by steam Coils from Tank Centre line on each side		
07	Preferred Types Drain a) Economy with 4/5 Swivels b) Sturdy Cradle type Roof drain		
08	Max. Rain fall in one hour		Inch
09	Max. Rain fall in 24 hour		Inch
10	Number of Drain/ Tank		
11	Center line of sump from center line of Tank for more than on roof drain 'X'		Inch
12	Max. Space available between steam coil loop in center to accommodate roof drain 'Y'		Inch
13	Height of steam coil from tank bottom 'HSC'		Inch
14	Period of decommissioning tank after putting in service		Months
15	What is the angular rotation of pontoon in horizontal and vertical plane.		Degrees Respy.