



**SANDHYA FLEX**

ISO 9001:2015 certified company

## **Slurry and Mud / Dewatering/ Mining Rubber Hose as per IS:13071**

### **TECHNICAL DATASHEET**

Sandhya Flex is a well-known and trustworthy manufacturer that provides excellent mud and slurry rubber hoses. Our products are highly renowned for their soft natural rubber compound composition and effective abrasion resistance. The addition of a low-resistant electrical binding wire between the reinforcing piles made electrical continuity along the entire length of the hose feasible. Additionally, these hoses offer remarkable resilience against weather and abrasion.

Rubber hoses for slurry and mud have extensive uses in a variety of industries, including building sites, irrigation projects, bridges and more. The whole range is tested rigorously to guarantee the performance and quality of the product. High-quality materials are used in the manufacturing of the hoses, which are designed to work optimally in challenging conditions. Sandhya Flex is committed to offering top-notch mud and slurry rubber hoses that satisfy the industry's demanding standards.

#### **Construction:**

**Core :** Black colour, Synthetic and natural rubber blend resistant to abrasion

**Reinforcement :** High Tensile Synthetic Textile cord

**Cover :** Black hue, abrasion-resistant combination of natural and synthetic rubber

#### **History of Slurry and Mud Rubber Hoses :**

- **Early 1900s Development:** Rubber hoses began to be used in mining and dredging industries for carrying slurry, mud, and abrasive materials.
- **1920s–1930s Industrial Expansion:** Advancements in synthetic rubber improved hose flexibility, pressure resistance, and durability for heavy-duty applications.
- **1940s Wartime Demand:** Industrial growth during World War II increased the use of reinforced rubber hoses in construction, excavation, and material transport systems.
- **1950s Reinforcement Technology:** Introduction of textile and steel-wire reinforcement made slurry and mud hoses capable of handling high pressure and abrasive mixtures.
- **1970s Specialized Hose Design:** Manufacturers developed abrasion-resistant inner linings specifically for cement slurry, drilling mud, mining tailings, and dredging operations.

- **Modern Era:** Slurry and mud rubber hoses are now widely used in mining, construction, oil drilling, cement handling, dredging, and industrial pumping systems worldwide.

### Materials :

The slurry and mud rubber hose should be manufactured from high-quality synthetic and natural rubber compounds designed for abrasion resistance, flexibility, and durability. The hose compound may contain reinforcing fabrics, steel wire, carbon black, antioxidants, and other additives such that, when processed, the hose meets the required standards for pressure resistance, wear resistance, and performance under demanding industrial conditions.

RAW MATERIALS OF SLURRY & MUD RUBBER HOSE				
S. No.	Raw Material	Image	Typical Grade / Example	Function / Purpose
1	Natural Rubber (NR)		RSS, TSR Grades	Main base material providing elasticity, strength and resilience
2	Synthetic Rubber		SBR, NBR, EPDM	Improve abrasion resistance, oil resistance, weather and ageing resistance
3	Reinforcing Material		Polyester Fabric, Nylon Fabric, Steel Wire	Provide strength, pressure capacity and dimensional stability
4	Carbon Black		N220, N330, N550 Grades	Increase tensile strength, abrasion resistance and durability
5	Fillers		Calcium Carbonate, Clay, Talc	Improve dimensional stability and reduce production cost
6	Plasticizers / Process Oils		Aromatic Oil, Paraffinic Oil	Improve flexibility and processability
7	Vulcanizing System		Sulphur, Accelerators (ETU, CBS, TMTD, etc.)	Enable curing (vulcanization) and improve elastic properties
8	Antioxidants / Antiozonants		TMQ, IPPD, 6PPD, WAX	Protect rubber from ageing, oxidation, ozone and cracking
9	Adhesion Promoters		Resorcinol Formaldehyde Latex, RFL, Others	Improve bonding between rubber and reinforcing layers
10	Pigments / Marking Compounds		Iron Oxide, Phthalocyanine Blue, Composite Pigments	Provide color, branding and identification



For builders and contractors seeking reliable slurry handling solutions and high-quality industrial hose products, SANDHYAFLEX is the ideal partner. Their commitment to quality, durability, and performance makes them a trusted choice for slurry transfer, mud handling, cement material feeding, dredging tube, and other demanding industrial applications.

## Types of Slurry & Mud Rubber Hoses and Their Applications

S. No.	Type of Hose	Description	Major Applications
1	Slurry Suction Hose	Heavy-duty hose designed for suction and discharge of abrasive slurry materials	Mining, dredging, sand slurry transfer
2	Slurry Discharge Hose	High-pressure hose used for transporting slurry under pressure	Mineral processing plants, fly ash handling
3	Mud Rubber Hose	Flexible hose for drilling mud and wet abrasive materials	Oil drilling rigs, borewell operations
4	Cement Feeding Hose	Abrasion-resistant hose for cement and dry powder transfer	Construction sites, cement plants
5	Sand Blast Hose	Tough hose built to handle highly abrasive sand particles	Sand blasting and surface cleaning industries
6	Dredging Hose	Large-diameter hose used in dredging operations	Ports, harbors, river and seabed dredging
7	Concrete Pump Hose	Reinforced hose for concrete and grout transfer	High-rise construction and infrastructure projects
8	Oil Mud Hose	Hose resistant to oil-contaminated drilling fluids	Petroleum and offshore drilling industries
9	Water Suction & Discharge Hose	Multi-purpose hose for water and light slurry movement	Irrigation, dewatering, industrial water transfer
10	Air & Pneumatic Mud Hose	Hose designed for compressed air and mud handling	Pneumatic conveying systems and industrial plants

### TYPICAL CROSSECTION OF SLURRY / DEWATERING / MINING RUBBER HOSE



## Packing standard of Slurry and mud rubber hose

S No	Description	Max Length
1	6" (150mm)ID x 6 Mtr (LG) with Both End MS Flange as per ASA 150#	15 Mtr
2	8" (200mm)ID x 6 Mtr (LG) with Both End MS Flange as per ASA 150#	06 Mtr
3	10" (250mm)ID x 6 Mtr (LG) with Both End MS Flange as per ASA 150#	06 Mtr
4	12" (300mm)ID x 6 Mtr (LG) with Both End MS Flange as per ASA 150#	06 Mtr
5	14" (300mm)ID x 5 Mtr (LG) with Both End MS Flange as per ASA 150#	05 Mtr
6	16" (300mm)ID x 5 Mtr (LG) with Both End MS Flange as per ASA 150#	05 Mtr

### FLANGES – TYPES, DIMENSIONS & APPLICATIONS

1. WELD NECK FLANGE	2. SLIP ON FLANGE	3. SOCKET WELD FLANGE	4. LAP JOINT FLANGE	5. BLIND FLANGE	6. THREADED FLANGE
					
High strength and excellent for high pressure and high temperature applications. <b>Application:</b> Oil & Gas, Petrochemical, Power Plants	Easy to install and cost-effective. Used in low pressure applications. <b>Application:</b> Water Works, HVAC, Low Pressure Piping	Provides good strength and prevents leakage in small diameter high pressure pipes. <b>Application:</b> Instrumentation, High Pressure Lines	Used with a stub end, easy alignment and low cost. <b>Application:</b> Chemical Plants, Pipelines	Used to close the end of a piping system. <b>Application:</b> Pressure Vessels, Pipe Line Closures	Threaded connection eliminates welding, suitable for small bore pipes. <b>Application:</b> Low Pressure, Non-critical Services

#### FLANGE DIMENSIONS (AS PER ASME B16.5)

NOMINAL SIZE (INCH)	OUTSIDE DIAMETER (D)	BOLT CIRCLE DIAMETER (K)	NUMBER OF BOLT HOLES (n)
6"	279	241.3	8
8"	343	298.4	8
10"	406	362.0	12
12"	483	431.8	12

Note: Dimensions are for Class 150 flanges. Dimensions may vary for different pressure classes.

#### COMMON MATERIALS

- Carbon Steel (ASTM A105)
- Stainless Steel (ASTM A182 F304 / F316)
- Alloy Steel (ASTM A182 F11 / F22)
- Duplex & Super Duplex Steel
- Cast Iron, Bronze (for special applications)

#### KEY FEATURES

- ✓ Strong and leak-proof connection
- ✓ Available in various types and pressure classes
- ✓ Easy installation and maintenance
- ✓ Suitable for wide range of industrial applications
- ✓ Manufactured as per international standards

#### APPLICATIONS

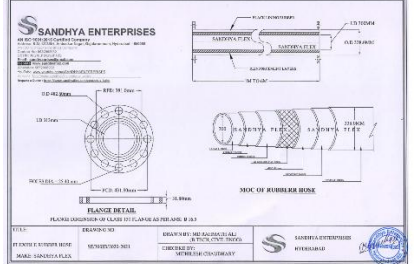
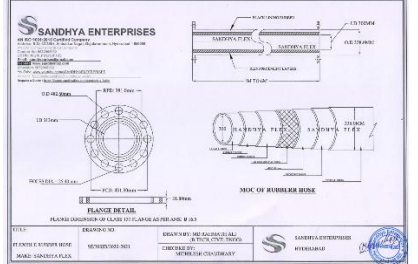


**QUALITY ASSURED** – Manufactured as per ASME B16.5 / ANSI Standards | Tested for Strength, Durability & Performance

# Slurry and Mud / Dewatering/ Mining Rubber Hose as per IS 13071

## Specificaiton with diagram,

S.No.	Description	HSN Code	Quantity
1	<p><b>Size:6"(150mm) ID x 6.0Mtr,</b>  <b>with Both End with MS Fixed Flange as per ASA 150 @#</b>  <b>Woking Pressure 10 bar weight 75kg/nos Approx.</b>  <b>Flange Dimension OD 279.4, PCD 241.3mm, No of Holes 8, Holes Dia 22.2mm, Make : "SANDHYAFELX"</b></p>	4009	
2	<p><b>Size:6"(150mm) ID x 6.0Mtr,</b>  <b>with Both End with MS Fixed Flange as per ASA 150 @#</b>  <b>Woking Pressure 25 bar Weight 75kg/Nos Approx.</b>  <b>Flange Dimension OD 279.4, PCD 241.3mm, No of Holes 8, Holes Dia 22.2mm, Make: "SANDHYAFELX"</b></p>	4009	
3	<p><b>Size:8"(200mm) ID x 6.0Mtr,</b>  <b>with Both End with MS Fixed Flange as per ASA 150 @#</b>  <b>Woking Pressure 10 bar weight 110kg/nos Approx.</b>  <b>Flange Dimension OD 342.9, PCD298.4mm, No of Holes 8, Holes Dia 22.2mm, Make : "SANDHYAFELX"</b></p>	4009	
4	<p><b>Size:8"(200mm) ID x 6.0Mtr,</b>  <b>with Both End with MS Fixed Flange as per ASA 150 @#</b>  <b>Woking Pressure 25 bar, Wieht 110kg/nos Approx.</b>  <b>Flange Dimension OD 342.9, PCD298.4mm, No of Holes 8, Holes Dia 22.2mm, Make : "SANDHYAFELX"</b></p>	4009	
5	<p><b>Size:10"(250mm) ID x 6.0Mtr,</b>  <b>with Both End with MS Fixed Flange as per ASA 150 @#</b>  <b>Woking Pressure 10 bar, weight 145kg/nos Approx., Flange Dimension OD 406.9, PCD 361.9mm, No of Holes 12, Holes Dia 25.4mm, Make : "SANDHYAFELX"</b></p>	4009	
6	<p><b>Size:10"(250mm) ID x 6.0Mtr,</b>  <b>with Both End with MS Fixed Flange as per ASA 150 @#</b>  <b>Woking Pressure 25 bar, 145kg/Nos Approx.</b>  <b>Flange Dimension OD 406.9, PCD 361.9mm, No of Holes 12, Holes Dia 25.4mm, Make : "SANDHYAFELX"</b></p>	4009	

7	<p><b>Size:12"(300mm) ID x 6.0Mtr, with Both End with MS Fixed Flange as per ASA 150 @#</b></p> <p><b>Woking Pressure 10 bar, weight 175k/nos approx. Flange Dimension OD 482.6, PCD 431.8mm, No of Holes 12, Holes Dia 25.4mm, Make : "SANDHYAFELX"</b></p>	4009	
8	<p><b>Size:12"(300mm) ID x 6.0Mtr, with Both End with MS Fixed Flange as per ASA 150 @#</b></p> <p><b>Woking Pressure 25 bar weight 175kg/Nos approx. Flange Dimension OD 482.6, PCD 431.8mm, No of Holes 12, Holes Dia 25.4mm, Make : "SANDHYAFELX"</b></p>	4009	

### **Application:**

Sandhya Flex is a reputable and top producer of slurry and mud rubber hose, producing soft, naturally abrasion-resistant rubber compounds. To allow electrical continuity along the entire length of the slurry and mud rubber hose, a low-resistance electrical binding wire is implanted between the reinforcing plies. It is quite resilient to abrasion and weather. Among other places, it is used for grouting on building sites, irrigation projects, and bridges. Extensive testing is conducted on the spectrum to guarantee optimal quality and performance. Our rubber hose for mud and slurry has a sturdy build and excellent functionality

### **Advantageous Properties: SANDHYAFLEX Slurry & Mud Rubber Hoses boast:**

- High abrasion resistance for handling slurry, mud, and highly abrasive materials.
- Excellent flexibility and tensile strength for reliable performance under high pressure.
- Superior weather, ozone, and ageing resistance for long service life outdoors.
- Strong reinforcement layers for enhanced pressure-bearing capacity and durability.
- Excellent resistance to wear, impact, and harsh industrial working conditions.
- Leak-proof and vibration-resistant construction for safe material transfer operations.

## PHYSICAL AND CHEMICAL PROPERTIES

**Size:** 6" ID to 10" ID

**End Fitting:** MS Flange as per ASA 150 # ANSI 16.5 Drilled and DIN Specification.

**Working Pressure - 10 to 25kg/cm<sup>2</sup>**

**Color:** Black

**Vaccum:** 500 to 700hg

**Temperature - 150° C Top:** Plain and Corrugated.

**Lining :** High Ablation Resistance Synthetic Rubber

**Reinforcement:** High Quality and Heat Resistance Fabric and Tyre Cord Reinforcement.

**Helical Wire:** 10 WWG to 8 SWG High Tensile Spring Helical Wire

**Cover:** Resistance to Weather Rubber Synthetic

**REGULAR SIZE:** SANDHYAFLEX-SMRH -150NB -6 Inch ID SANDHYAFLEX-SMRH -200NB -8 Inch ID SANDHYAFLEX-SMRH -250NB -10 Inch ID

### REQUIREMENTS FOR PVC WATER STOPS:

- Operational Pressure: 25 Bar, or 25 kg/cm.
- Proof pressure equal to 1.5 W.P.
- Peak Pressure: Three times W.P.
- Two or three galvanised wire helices embedded in layers of rubber compounds serve as reinforcement.
- End Connection: Type of Built-in Flange.
- Bore: Smooth Bore Curvature Radius: 10 times the inner Hose Vacuum Diameter: Minimum 700 mmHg (0.9 Bar)
- Material for lining: NR/SBR unable to be penetrated by corrosive and abrasive products.
- 50 to 60 Shore A hardness.
- Carcass: Steel Helix Coated Embedded in Synthetic Textile Plies Content: Adaptability to Adverse and Severe Weather.
- Temperature range: -1°C to 100°C

## **APPLICATIONS BY COUNTRIES : Slurry / Mud / Mining Rubber Hoses**

### **India:**

- Widely used in mining industries for slurry transfer in coal, iron ore, and mineral processing plants.
- Common in construction and infrastructure projects for dewatering and mud handling.
- Used in cement plants, thermal power stations, and fly ash handling systems.
- Increasing demand in river-linking, tunneling, and metro rail projects.

### **China:**

- Massive demand due to large-scale mining, dredging, and infrastructure development projects.
- Extensively used in steel plants, thermal power plants, and industrial slurry transport systems.
- Strong application in tunnel construction, hydraulic dredging, and heavy industrial operations.
- Widely adopted in marine reclamation and port expansion projects.

### **United States:**

- Widely used in mining, oil drilling, and wastewater management industries.
- Common in hydraulic fracturing, slurry transfer, and industrial dewatering systems.
- Increasing demand in infrastructure rehabilitation and environmental dredging projects.
- Used extensively in construction concrete pumping and aggregate transfer applications.

### **Europe:**

- Used in industrial slurry handling, quarry operations, and wastewater treatment plants.
- High demand in marine dredging and tunnel construction projects.
- Preference for high-performance abrasion-resistant hoses in automated industrial systems.
- Growing use in renewable energy and offshore infrastructure projects.

### **Africa:**

- Essential in mining sectors including gold, copper, diamond, and mineral extraction industries.
- Widely used in irrigation dewatering and mud pumping applications in arid regions.
- Common in infrastructure and humanitarian water removal projects due to durability and easy deployment.
- Increasing application in oil, gas, and pipeline maintenance operations.

### **Middle East:**

- Strong demand in oil drilling, refinery operations, and petrochemical industries.
- Used for abrasive slurry handling in desalination and construction projects.
- Widely applied in large-scale infrastructure and desert dewatering projects.

**Australia:**

- Extensive usage in iron ore, coal, and mineral mining industries.
- Common in slurry transport systems and mine dewatering applications.
- Used in quarrying, dredging, and bulk material handling operations.

**South America:**

- High demand in copper, lithium, and mineral mining industries.
- Used in slurry transfer systems for mineral beneficiation plants.
- Growing application in hydroelectric and infrastructure development projects.

**Get in touch:**

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