



# The Leader



IS: 4985



# SUDHAKAR

uPVC PIPES & FITTINGS



## Background of the Group

### Shri. Meela Satyanarayana - Founder

Shri Meela Satyanarayana, the founder of the group is a freedom fighter, teacher turned businessman and industrialist. His contribution to the plastics industry especially in the Southern India is acclaimed by many organizations. President of Andhra Pradesh Plastic Manufacturers Association in 1984, Joint Secretary of All India PVC Pipes Manufacturers Association, New Delhi in 1985. He is the first entrepreneur to start a PVC pipe manufacturing unit in Andhra Pradesh. Municipal Chairman of Suryapet for the Period 1989-92, Andhra Pradesh. Chairman and Founder of The Sudha Co-Operative Urban Bank Ltd. Suryapet, Andhra Pradesh. He is recipient of many awards such as

- ☞ "Bharata Ratna Mokshagundam Vishveshwaraiah Memorial Small Scale Entrepreneur Award"
- ☞ "Vijayaratna", "HMA Small Scale Entrepreneur Award"
- ☞ Best Industrialist Award . Govt of Andhra Pradesh, India

Shri Meela Satyanarayana is a self made Industrialist and is a good manager. His valuable suggestions and advices to the boards of all companies will always enhance the managerial capabilities of the Boards.



### Rigid P.V.C. Pipes

#### uPVC Pipes for Solvent Cement Jointing

**SUDHAKAR uPVC PIPES** are manufactured in accordance with Bureau of Indian Standards Specifications IS:4985:2000 and other International Standards DIN, BIN, ASTM. Sudhakar manufacture Rigid PVC Pipes in the range of 16mm to 400mm diameters of Solvent cement jointing in different working pressures ( 2.5, 4, 6, 8, 10 & 12.5Kgf/cm<sup>2</sup>)

#### uPVC Plumbing Pipes

uPVC plain end pipe for plumbing in buildings from 20mm to 50mm conforming to IS:4985/2000.

#### uPVC PIPES for Elastomeric Rubber Ring Jointing

**SUDHAKAR ELASTOMERIC RUBBER RING JOINTING PIPES** to overcome problems commonly experienced in solvent cement jointing of above 140mm dia uPVC Pipes. We manufacture uPVC PIPES for Elastomeric Rubber Ring Jointing in accordance with beareu of Indian standards and other International Standards DIN, BIN, from 63mm to 315mm of 4, 6, 8, 10 & 12.5Kgf/cm<sup>2</sup> pressure classes.

**SUDHAKAR**  
uPVC PIPES & FITTINGS



**uPVC Blue Threaded Pipes**



We manufacture uPVC-Blue Threaded pipes as per ASTM D-1785 from 1/2 inch to 4 inch Nominal Bore.

**DIMENSIONS AND WATER PRESSURE RATING AT 23°C FOR "SUDHAKAR" PIPES AS PER ASTM D-1785.**

**1/2 " to 4" Available**

Nominal Bore (Inch)	Outside Diameter (mm)	Schedule 40			Schedule 80		
		Wall Thickness (mm)	Working Pressure		Wall Thickness (mm)	Working Pressure	
			MPa	psi		MPa	psi
1/2	21.34 ± 0.10	2.77 + 0.51	2.07	300	3.73 + 0.51	2.90	420
3/4	26.67 ± 0.10	2.87 + 0.51	1.65	240	3.91 + 0.51	2.34	340
1	33.40 ± 0.13	3.38 + 0.51	1.52	220	4.55 + 0.53	2.21	320
1 1/4	42.16 ± 0.13	3.56 + 0.51	1.24	180	4.85 + 0.58	1.79	260
1 1/2	48.26 ± 0.15	3.68 + 0.51	1.17	170	5.08 + 0.61	1.65	240
2	60.32 ± 0.15	3.91 + 0.51	0.97	140	5.54 + 0.66	1.38	200
2 1/2	73.02 ± 0.18	5.16 + 0.61	1.03	150	7.01 + 0.84	1.45	210
3	88.90 ± 0.20	5.49 + 0.66	0.90	130	7.62 + 0.91	1.31	190
4	114.30 ± 0.23	6.02 + 0.71	0.76	110	8.56 + 1.02	1.10	160

Note : Working pressure rating apply to pipes in unthread condition.

MPa = Mega Pascal; 1 MPa = 10 Kg/cm<sup>2</sup>; 1 Kg/cm<sup>2</sup> = 14.5 psi

**Sudhakar Blue Threaded Pipes** are normally manufactured in standard lengths of 3mt & 6mt .Varied lengths can be manufactured according to customer requirements.

**uPVC Casing Pipes for Bore/Tube well**

**We manufacture uPVC Casing pipes for Bore / Tube wells**

- **CM Type** - from 40 mm to 250 mm nominal diameters
- **CS Type** - from 150mm to 250mm nominal diameters.

**CS(Shallow well)** pipes suitable for wells with depth up to 80m.

**CM(Medium well)** pipes suitable for wells with depth above 80m & up to 250m

IS:12818



**Features & Advantages**

- ▲ High quality and have greater strength with uniform wall thickness.
- ▲ High impact compressive strength.
- ▲ Light in weight and easy to handle and install.
- ▲ Smooth bore, hence excellent flow properties.



## uPVC Casing Pipes for Bore/Tube well



### Properties

- ▲ Specific Gravity : 1.40 g/cm<sup>3</sup> - 1.45 g/cm<sup>3</sup>
- ▲ Vicat softening temperature : 76°C.
- ▲ Tensile strength : 50 ± 5 N/mm<sup>2</sup>
- ▲ Impact strength : Complies with IS : 12818
- ▲ Yield strength : 55 N/cm<sup>2</sup>

**Table 3 Dimensions of 'CM' Casing Pipes**

All dimensions in millimeters

Nominal Diameter DN	Mean Outer Diameter of pipe		Wall Thickness	
	Min	Max	Min	Max
40	47.9	48.2	3.5	4.0
50	60.0	60.2	4.0	4.6
80	87.9	88.3	4.0	4.6
100	113.0	113.3	5.0	5.7
125	140.0	140.4	6.5	7.3
150	165.0	165.4	7.5	8.5
175	200.0	200.5	8.8	9.8
200	225.0	225.5	10.0	11.2
250	280.0	280.5	12.5	14.0

**Table 4 Dimensions of 'CS' Casing Pipes**

All dimensions in millimeters

Nominal Diameter DN	Mean Outer Diameter of pipe		Wall Thickness	
	Min	Max	Min	Max
150	165.0	165.4	5.7	6.5
175	200.0	200.5	7.0	7.8
200	225.0	225.5	7.6	8.8
250	280.0	280.5	9.6	11.0

### QUALITY CONTROL

Sudhakar Polymers Ltd. is having well equipped quality testing equipments in their labs as per the ISI standards and DOT standards for testing of all Rigid PVC Pipes and Fittings. The high quality performance is attained with experienced and qualified staff and skilled workers.

Each batch of SUDHAKAR Rigid PVC Pipes & Fittings are tested as per Bureau of Indian Standards relevant scheme of testing and inspection.

### INSTALLATION GUIDELINES

- ❖ Care should be taken to ensure that the uPVC Casings & Ribbed Screens are lowered properly in a tube-well to ensure proper gravel packing.
- ❖ The gravel packing must be carefully selected depending upon the soil Conditions the size of slot for the screens depends on this.
- ❖ Care should be taken to ensure that the gravel packing sits all around the pipe and there should not be any bridging.
- ❖ Care should be taken to ensure no excessive uneven pressure is generated at the time of development and surging

### METHOD OF JOINTING

- ❖ "SUDHAKAR" uPVC Casing and Ribbed and Screen pipes are provided with male threads at one end and female threads at the other (trapezoidal threads).
- ❖ These joints have a good tensile strength and can take the suspended weight of the assembly for greater depths as compared to conventional metric pipe threads.
- ❖ It must also be noted that the buoyancy when the assembly is submerged in the water greatly reduces load on the threaded joints.





## HDPE Pipes

**SUDHAKAR**  
uPVC PIPES & FITTINGS

Our associate **SUDHAKAR Plastic Ltd.** manufacture following SUDHAKAR HDPE pipes conforming to IS:4984:1995 specification of PE-63 grade and PE-80 grade.

- PE-63 Grade - From 20 mm to 250 mm outer diameter with different working pressures (2.5 kgf/cm<sup>2</sup>, 4 kgf/cm<sup>2</sup>, 6 kgf/cm<sup>2</sup> and 10 kgf/cm<sup>2</sup>).
- PE-80 Grade - From 20 mm to 250 mm outer diameter with different working pressures (2.5 kgf/cm<sup>2</sup>, 4 kgf/cm<sup>2</sup>, 6 kgf/cm<sup>2</sup> and 10 kgf/cm<sup>2</sup>).



IS:4984  


Sudhakar HDPE Pipes are normally manufactured in coils from 50 m to 500 m depending on sizes. Varied lengths and coils can be manufactured according to customer requirements.

### Features & Advantages

- **Light Weight** : HDPE pipes (High Density Polyethylene Pipes) are lighter and hence easy for installations & reduces the cost of Transportation.
- **Toughness** : These pipes are tough enough to withstand any adverse conditions like soil movement rock falls, Traffic loads, etc.,
- **Chemical Resistant** : The pipes have excellent corrosion resistance properties. No need to any Internal lining & external protection.
- **Low Electrical and Thermal Conductivity** : The pipes are very low electrical and thermal conductivity and the Ideal choice for refrigeration telephone cables etc.,
- **Resistant to low temperatures upto -40°C**
- **Easy Connectivity** : HDPE Pipes can be easily connected and detached, wide range of fittings are available to suit any requirements joints and Joints are totally leak proof.
- **Durability** : HDPE Pipes are made so to last more than decades in all kinds of weather conditions protected from sun light and ultraviolet radiation, due to carbon content in black HDPE Pipes.
- **Smooth Finish** : HDPE Pipes have smooth inner walls so; frictional losses are minimal or negligible, no problem of sludge or bacterial deposit during course of time.
- **Flexibility** : Because of elasticity pipes are flexible.
- Excellent welding properties.

### Applications

**Water Supply System Can be used in Potable water main & sub mains distribution and service lines.**



- Irrigation Systems ■ These pipes are widely used for sprinkler and drip irrigation lines and accessories.
- For cooling and chilled water lines.
- For slurry disposal lines.
- For dematerialized water lines.
- Sewage pipe systems, mainly for aggressive sewage and in drinking water protection areas.
- Drinking water systems in domestic pipe lines.
- Gas pipes for medium & low pressure range
- Discharge pipes in the field of deposition.
- Cable pipelines, Industrial pipe lines for transport of aggressive fluids like acids/gas/amine etc.,
- Ducting pipe lines.



### MEET THE PIONEER IN PVC PIPES

SUDHAKAR Group of Industries situated at Suryapet, Andhra Pradesh, INDIA, playing a significant role in PVC Products Sector. SUDHAKAR PVC Products was registered as an SSI Unit in 1971 exclusively for the manufacture of Electrical Conduits. Over the years emerged as a potential leader in Rigid PVC Pipes and also made its foray in to lucrative Rigid PVC Fittings. Promoted by a visionary entrepreneur, this group has played a pioneer role in the field of PVC Products. By being innovative and quality conscious, SUDHAKAR Group distinguished it self from other organizations as accompany having an inbuilt culture of High Customer care. The Result: This company has now progressed from strength to strength and has bagged many prestigious awards, millions of happy and satisfied customers and attained leadership in this field of PVC Pipes. National wide dealership network and service back up facilities, dedicated sales force and timely delivery makes Sudhakar more closer to customers.



### EXPERIENCE THE WORLD CLASS TECHNOLOGY

SUDHAKAR Uses hi-tech machinery efficient manpower to produce pipes and Fittings that confirming to Indian and International standards. Sudhakar's modern workshop adopts State of the Art technology and perfect quality measures to produce accurate moulds and dies and precision components.

Manufacturers :



# Sudhakar Polymers Limited.

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