



# SWASTH HDPE PIPES

Extract water from borewells.



#### We Innovate to Create Value

Ashirvad Pipes, an Aliaxis group company, setup its Bengaluru units in 1998 and is a wholly owned company of Aliaxis group. Aliaxis group is a global leading manufacturer and distributor of plastic fluid handling systems used in residential, commercial and industrial buildings. Headquartered in Brussels, Belgium, Aliaxis is present over 40 countries with more than 100 manufacturing and commercial entities, employees over 15,700 people and generates more than 3 billion Euro (₹. 21, 600 crores approx.) in annual sales.

Today, Ashirvad is the world's largest manufacturer of uPVC column pipes and successfully exports over to 35 countries. The CPVC Hot and Cold plumbing system is manufactured in collaboration with Lubrizol, USA. Ashirvad expanded its product range with an innovative triple layer low noise SWR and a foam core underground drainage system along with specialty items - manholes, inspection chambers and non-return valves. The company has successfully entered into the sanitary space with its leading range of traps, couplings, pan connectors and concealed valves.

The 2008 national award winning company has a state of the art manufacturing facility with a production capacity of 2,00,000+ M.T.P.A, man power strength of 4000+ across various functions and 20 ware houses pan India. Ashirvad pipes aims to become a one stop shop for all plumbing, industrial, sanitary and drainage products in the country.

#### Ashirvad SWASTH

Ashirvad introducing high quality superior grade HDPE (High Density Polyethylene) pipes intended for the conveyance of water.

These pipes are manufactured as per BIS specifications - IS 4984 & available in raw material grades PE-63, PE 80 and PE 100 in various pressure rating classes.

#### **Key Features**

- Manufactured from 100% virgin raw material.
- Outstanding flexibility and crush resistance
- Excellent SCGR (Slow Crack Growth Resistance) properties
- Superior hydrostatic strength and durability for long life
- Lightweight and highly flexible for faster & easier installations
- Excellent chemical resistance
- Fusion welded joining provides leak-free monolithic pipe systems
- Anti-microbial properties reduces bacterial growth
- Excellent flow characteristics

- UV Resistant
- Low thermal & electrical conductivity
- Easy to maintain
- · Smooth internal & external surface

#### **Applications**

- Potable water supply
- Gas transmission
- Drip & sprinkler irrigation
- Bore wells
- Sewerage/drainage
- Industrial effluents
- Chemical industries
- House service connections

## Ashirvad HDPE pipes are suitable for various application conditions as below.

- Underground
- · Above ground
- · Under water
- · Floating pipe applications

#### Why Ashirvad SWASTH HDPE pipes

- Manufactured from 100% virgin raw materials (PE 63, PE80 & PE100).
- It does not impart any odour or toxicity to the liquid that is being transported.
- HDPE pipes possesses advanced properties like resistant to UV & corrosion, non-toxic, inert to chemicals, low thermal conductivity and high electric resistance.
- HDPE is flexible in nature and has excellent abrasion & weather resistance.
- Internal surface is so smooth which enables higher flow & lower frictional losses.



#### **Quality assurance**

Ashirvad conducts following stringent quality checks at each stage of manufacturing to ensure only best quality product is delivered to the customer.

- Dimensional check
- Internal pressure creep rupture test
- Longitudinal reversion
- Carbon black content & dispersion
- Melt flow rate
- Oxidation induction time
- Overall migration
- Density
- Tensile strength
- Elongation at break
- Slow crack growth rate

#### **Butt-Welding**

Butt - welding is used for Polyethylene pipe jointing. This is the most widely accepted method and it is highly economical and simple. In this process the preheated pipes and / or fittings are joined under controlled pressure and temperature conditions. Some of the fittings e.g. bend, tee of large diameters are also fabricated by this process. A trained and skilled pipe welder should be engaged for the job. HDPE pipe welding uses a welding machine. In butt welding, fusion areas i.e. pipe or fitting ends are heated and joined by mechanical pressure.

#### Procedure:

- 1. Cleaning Clean the pipe, fitting surfaces and heating plate.
- 2. **Alignment -** Surfaces of the joining parts should be checked for alignment and matching.
- 3. **Heating** The machine shall be equipped with a thermometer or other built-in temperature-measuring device. Once the fusion temperature is attained, position the heating plate in the butt welding machine.
- 4. **Apply Pressure -** Press the pipe or fitting surfaces against the heating element with the required force until the entire circumference of each of the joining faces rests completely against it and a bead is formed.
- 5. **Joining -** After the recommended heating time, remove the heating element and push the heated pipe ends together immediately with pressure to form a joint.
- 6. **Cooling -** Allow the recommended cooling time as per the pipe size to get the required strength.

#### **Handling & Storage**

- Workers should wear personal protective equipment and be aware of the potential hazards involved with a given task, and work environment when working with HDPE pipes.
- The use of power equipment is suggested to lift and handle pipes greater than 8" in diameter.
- Dragging of pipes or coils over rough ground or dropping them from height on sharp stones should be avoided.
- If due to unsatisfactory storage or handling, a pipe is damaged or "kinked" the damaged portion should be cut out completely.
- Low temperature does not affect HDPE as much as other plastic materials, and there is no need for taking additional precautions in handling during cold weather.
- The storage area should provide adequate protection against physical damage to components.
- It should be large enough to accommodate piping components as well as allow handling equipment to move about freely.
- Where adequate ground conditions do not exist or when a bed cannot be prepared, the pipe may be placed on planking.

Size Range (O.D)	16 mm to 500 mm
Material Grade	PE 63, PE 80 & PE 100
Pressure Class	2 Kg/cm² to 20 Kg/cm²
Standard Dimension Ratio	SDR 41, SDR 33, SDR 26, SDR 21, SDR 17, SDR 13.6, SDR 11, SDR 9, SDR 7.4 & SDR 6
Colour	Black with Blue strips
Working Temperature	-40° C to 45° C
Availability	Coils up to 125 mm & above 125 mm straight lengths













uPVC COLUMN PIPES | uPVC AGRI PIPES | uPVC CASING PIPES | uPVC BLUE CASING PIPES | HDPE PIPES



by aliaxis

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