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HIGH DENSITY
LONG LASTING
HDPE PIPES

Certified Company

NSIC CERTIFIED CO.

ISO 9001:2015 COMPANY

ISO 14001:2015 COMPANY

ISO 45001:2018 COMPANY

BERLIA®
HDPE PIPES

Welcome to Berlia Pipe

About Us

Berlia Pipes is a well known established concern, manufacturing variety of pipes since 1975. We have our expertise in manufacturing a varied range of plastic pipes, providing complete solution for Potable water supply, High pressure irrigation, Sewerage & Dewatering applications, Wire ducting, Grouting/Anchoring applications, etc.

Quality products served with an essence of continual innovation assures for our success. To ensure high quality performance, we use Standard material for Extrusion and conduct various tests to ascertain that the products are being produced as per the guidelines of Indian/International standards. Right from testing the grade of raw material to marking we apply a number of tests to check the quality, strength & performance of our products.

At Berlia, with a well established supplier's network we follow the concept of Just in time manufacturing ensuring lowest cost of production with minimum stock level which enables us to deliver the best quality customized products at lowest prices.

We are an ISO 9001:2008 Company accredited from TUV Rheinland, manufacturing a range includes HDPE Pipes & Fittings for all sizes ranging from 20mm to 1200mm in all pressure classes ranging from PN2.5 to PN25, under material grades PE 63/80/100 in compliance to various standards like ISI, ISO, DIN, BS, MS, EN, AS. We have recently launched FR Ducts (Fire proof H DPE Pipes) tested as pr UL 94 at V0, V1, V2 levels, ideal for cable ducting applications.

Vision

To procure, Trust in Relationship, Stability in quality, a leading role in the Market & Greater levels of satisfaction for the stake holders.

Mission

To have a Presence across Nation with well established supply chain, cost efficiency in production, standards in Quality & procedures, emphasis on continual innovation.

HDPE Pressure Pipes

Pipes made from Polyethylene (PE) is a cost effective answer for a number of piping problems in Metropolitan, Municipal, Industrial, Underwater, Mining, Cable duct and agricultural applications. It has been tested and proven effective for underground, above ground, surface, under water as well as floating pipe applications.

BERLIA pipes are strong, extremely tough and long lasting, appropriate for long service, trouble-free installation, flexibility, resistance to corrosion and chemicals.

At BERLIA, we have recently innovated FR (Fire Resistance) Ducts at V0, V1, V2 Levels for Cable Ducting applications, tests conducted as per Ul94.

Properties	Value
Material	High-Density Polyethylene (HDPE)
Durability	Highly durable, resistant to corrosion
Flexibility	Flexible, can withstand deformation
Lightweight	Lightweight, easy to handle and transport
Chemical Resistance	Resistant to chemicals, adds, and bases
Low Friction	Smooth interior surface for low friction
UV Resistance	UV-resistant for outdoor applications
Hygienic	Non-toxic, suitable for potable water
Longevity	Service life exceeding 50 years
Installation	Heat fusion techniques for strong joints
Environmental Benefits	Recyclable material, reduced emissions
High Fiow Capacity	Efficient fluid flow, high capacity
Cost-Effective	Long-term cost savings in many applications

Our Product Range

Diameter (Outer)	:	16mm to 1200mm
Material Grades	:	PE63/80/100
Pressure Ratings	:	From PN 2 to PN 25
Fittings/Specials	:	HDPE Fittings/Saddles Moulded & Fabricated from 20mm to 1200mm PP Compression Fittings (Push Fit) up to 110mm & Ball Valves Electro fusion Fittings for various sizes.
Welding Machines	:	Welding machines & tefelon heaters for pipes ranging from 63mm to 1200mm
Standard Reference For Pe Pipes	:	IS 4984, IS 14333, IS 14885, IS17425, ISO 4427, ISO4437, TEC GENERIC REQUIREMENTS NO. TEC/GR/TX/CDS-008/04/MAR- 19, RDSO/SPN/TC/45/2012, EN 12201, AS/NZS 4130, ASTM D3035, DIN 8075, BS 6437, GOST, UL94 (FR)
Fittings	:	IS 8008, ISO 4427

Product Applications

HDPE pipe is an environmentally sustainable option as it is non-toxic, corrosion and chemical resistant, has a long design life, and is ideal for trench less installation methods because of its flexibility. When fused together, HDPE has a zero leak rate because the fusion process creates a monolithic HDPE system.




HDPE PIPES

Berlia Pipes is a pioneer in the manufacture of plastic pipe systems in Pan India. Today's modern polyethylene resins are highly engineered for rigorous applications within a wide range of applications where a tough, ductile material is required to assure long term performance.

Polyethylene pipes provide a cost effective solution for a wide range of piping applications such as water supply, drainage and sewerage, gas distribution, industrial piping for slurry and abrasive materials, liner for petroleum flow lines, electrical and telecommunication cable ducting.

One of the major factors that contribute to the growth of polyethylene as a piping material is the cost savings in installation. Polyethylene pipe is a tough and durable system whilst retaining its flexibility and leak proof characteristics thus ensuring lower maintenance costs and increased service life as compared to traditional piping materials. HDPE pipes produced by Berlia ranges from 20 mm to 1200 mm in diameter. The smaller sizes are available in coils whilst the bigger pipes are cut to pipe lengths (e.g. 6 m, 12 m). The company provides transport for bulk purchases to our customer's destination.

Berlia Pipe offers comprehensive welding Know-how for Polyethylene, including Butt Fusion, Electrofusion and mechanical jointing from 63mm to 1200mm.

Based on our customer's request, Berlia Pipe is on hand to provide competent technical advice and support. These include, but not limited to, the following:

- Choice of pipe class and size of pipe
- Electrofusion and mechanical jointing on site
- Custom design fittings
- Pre-Dispatch inspection in-house premises

Pressure Pipe for Infrastructure (Water supply & Sewerage)

HDPE Pipe for water supply & sewerage from 20mm to 1200mm nominal diameter as per various National & International standards in PE 63/80/100, Pressure Rating PN2 to PN25.

- Used in Rural/Urban government schemes for Potable water supply, BERLIA HDPE do not constitute toxic hazard, do not support microbial growth and would not give rise to unpleasant taste or odour, cloudiness or discoloration of water.
- HDPE Pipes in larger diameter are used for Sewerage facilities
- HDPE/MDPE Pipes (also known as Pe-X Pipes) are used for House service connection

HDPE Pipe for industrial application

HDPE due to its inert properties found application in handling chemicals, brine, sour water, etc. It is also found appropriate in slurry & sand pumping due to its abrasion resistance quality.

Agriculture & Landscaping

Berlia manufactures complete range of sprinkler irrigation equipments & fittings/accessories used as per IS 17425, Sprinkler irrigation system are used for agriculture & Horticulture. Mini sprinkler sets are used in Landscape irrigation system used in Coil form for submersible Pump in shallow & deep tube well.

HDPE PLB DUCT For Communication & Signalling

- PLB Ducts are used for cable laying applications through open trench/Trench less method and are used for insertion of OFC / Coaxial laying for CCTV & other networking applications.
- Monolayer HDPE Pipes as per IS 4984 also used for trenchless / open trench Low/High tension cable laying.

FR (Fire resistant) Ducts

We have recently launched FR Ducts for Fire proof HDPE Pipes tested as pr UL 94 at V0, V1, V2 levels, ideal for High / Low Tension cable ducting & are also effective when used as conduit for in-house cable Ducting / OFC Ducting

Fittings & Specials for various applications

- Fabricated & Moulded Tees/Bends/Flanges/Saddles upto 1200mm are used in various water & cable laying applications. BERLIA HDPE Fittings are jointed through Butt Welding technique & are leakproof. PP Saddles are used for the purpose of house connection & are accessible to BSP fittings.

- BERLIA PP Compression fittings available up to 110mm are meant for all water & cable laying applications, compression fitting are leakproof & are suitable for cable blowing for cable insertion.

- Electrofusion fittings comes with in built electrical heating element, which generated heat when connected to electrical source. The resulted heat fuses the fitting with the pipe uniformiy offering an extremely reliable joint.

For Anchoring (Grout & Sleeve)

Berlia HDPE Grout & Sleeve pipes are appropriate for Anchoring. Various Prestigious companies in Geostructure Projects are using our products. In grouting process HDPE Pipes with capacity to withheld high pressure are used, since now we have successfully implemented various projects.

Perforated Pipes

We have successfully done various designs of perforation on varied sizes up to 1200mm, Perforation could be done as per specific design or random perforation as per the requirement. We have well equipped team for perforation with years of experience & ability to understand & customise to cater best results in minimum cost.

Butt Welding and Electrofusion for PE Pipes

Butt welding is a commonly used method for joining PE (Polyethylene) pipes in various applications, including water supply, gas distribution, and industrial piping systems. Butt welding is especially effective for joining PE pipes because it creates a strong, leak-free connection. Here are the basic steps and key considerations for butt welding PE pipes:

Electrofusion is a welding process used to join plastic pipes and fittings,It involves creating a strong, reliable, and leak-proof joint by melting the ends of the pipes or fittings and fusing them together using controlled electrical heating. Electrofusion is commonly used in water supply, gas distribution, and industrial piping systems.

Joint Strength	Strong, as strong as the original pipe material	Strong, provides reliable joint strength
Joint Integrity	Excellent leak-proof seal	Excellent leak-proof seal
Surface Finish	Smooth interior surface	Smooth interior surface
External Materials Required	Generally none required	May require external fittings or couplers
Joint Consistency	High degree of consistency	High degree of consistency
Welding Equipment	Requires specialized butt welding machine	Requires specialized electrofusion machine
Skill Level	Requires skilled operators	Requires skilled operators
Installation Time	Longer setup and welding time	Faster installation
Size Limitations	Suitable for large-diameter pipes	Typically used for smaller to medium pipes
Environmental Impact	Minimal environmental impact	Minimal environmental impact
Pressure Drop	Low pressure drop	Low pressure drop
Maintenance Requirements	Low maintenance needs	Low maintenance needs
Cost	Initial equipment investment can be higher	Lower initial equipment investment

Welding machines / Teflon Heater (Mirror) & other accessories for Butt Welding

Welding machines with a capacity of jointing of HDPE pipes & Fittings up to 1200mm are used for jointing of HDPE Pipes through Butt welding Technique. Jointing through Butt welding technique is most efficient & cost effective.

Special sized for specific applications

Berlia manufacture special sizes of HDPE Pipes for specialized purpose as per the specific requirement of the consignee, we like to experiment & Innovate whenever necessity arises.

MDPE Pipes for Gas Distribution

MDPE Pipes for City Gas Distribution, Medium Density Polyethylene (PE) pipe was proven for Gas distribution in early 1960. PE pipe has proven its capabilities for gas distribution as many of the systems currently in use have been in continuous service since inception. The uses of polyethylene as piping material being liked by users in recent years as it offers advantages in costs as well as technical requirements such as lower permeation of gas constituents, lack of corrosion effects, flexibility of material, relining operation of old gas lines.

Today, more than 70% of the pipe installed for natural gas distribution in Europe, US and other part of the world is polyethylene. In fact, PE has become the material of choice for gas distribution worldwide. Design engineers assume that (Medium Density Polyethylene) PE piping networks will provide safe and reliable service for more than a design targeted life of 50 years. The industry is approaching that 50-year milestone of use.

HDPE Duct with Tracer Wire

Berlia is a revolutionary HDPE Duct with built-in detect-ability feature designed to provide precise location of underground PE ducting systems.

Berlia copper tracer duct carries a co-extruded HDPE encased copper wire along its entire length, which acts as a corrosion proof conductor, and its available in combination with PLB HDPE DUCT, PLAIN HDPE DUCT, MULTILAYER DUCT and Power Duct for smart cities.

Spiral grove duct

spriral groove HDPE PLB Duct- At Berlia, We offer spriral grove HDPE duct, it has spriral tornado type groves in inner surface of pipe, that makes it easy to instaull wire/ofc inside duct and helps duct to release excess heat, which is generated at the time of laying due to friction.

FR DUCT

As per UL94, level V0, V1 & V2

Designed to use in applications where smoke, toxic fumes, and acidic gas pose a risk to human health. These areas include enclosed public areas and poorly ventilated areas such as tunnels, mass transit corridors, and confined spaces.

- **Flame Retardant:** PE FR ducts are manufactured with flame-retardant additives to inhibit the spread of flames in case of a fire.
- **Polyethylene Material:** They are typically made from polyethylene, which is known for its durability and resistance to corrosion and chemical damage.
- **Compliance:** PE FR ducts are designed to meet specific fire safety standards and regulations, ensuring they perform reliably in case of a fire emergency.
- **Leak-Proof:** Like other duct systems, PE FR ducts are designed to be leak-proof to maintain efficient airflow while preventing the escape of smoke and gases.
- **Easy Installation:** They are often designed for easy installation, making them suitable for both new construction projects and retrofitting existing ventilation systems.
- **Customizable:** PE FR ducts come in various sizes and configurations to suit different applications and can be customized to meet specific project requirements.

Anti rodent
HDPE anti rodent ducts provide best solution to rodent attack by incorporating a bitterant in the pipe to dissuade rodents from gnawing it.

PLB Duct Pipe
BERLIA Permanent lubricated PE duct provides an end to end solution for ducting and secure a communication line, electrical installation or a signalling requirement, from tolls to railways Berlia PLB ducts are capable to provide a smooth cost effective solution. These types of ducts are often used in the installation of cables and wires for telecommunications, electrical, or fibre optic applications. The permanent lubrication is designed to make it easier to pull or push cables through the duct, reducing friction and the risk of damage to the cables during installation.

Specialized Pipes

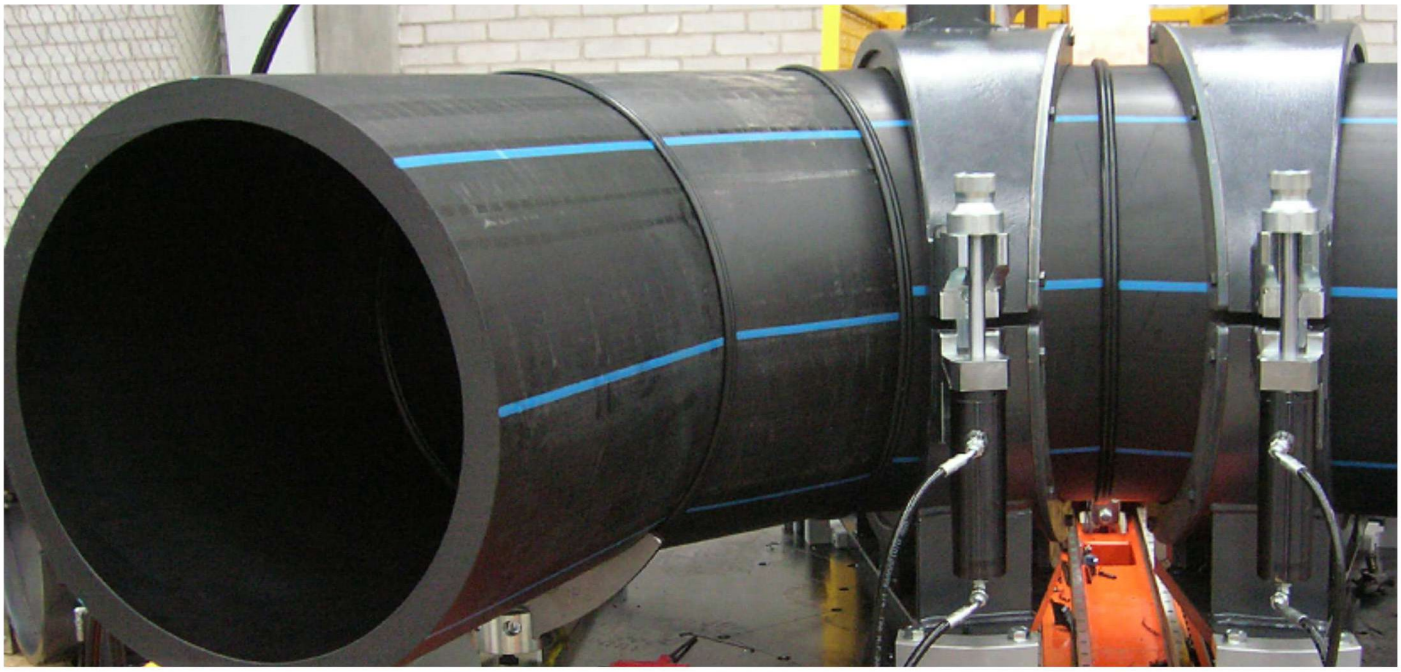
Dreging Pipe
BERLIA HDPE dredging pipes have unique features for a long term, corrosion free abrasion resistant & low maintenance performance in the seas, lakes and all other water bodies. Our high density PE pipes are fitted with welded stub-ends & steel flanges. Our dredging pipes are made from virgin compounded HDPE material for high performance and superior finish. Higher abrasion resistant varieties also available.

Applications:
- Dredge Pipe Lines
- Water Transportation
- Slurry Transportation
- Floating Cable Casing Lines
- Aquaculture breeding area cage

Perforated pipes
Perforated HDPE pipe plays an integral role in many applications. Generally, perforated pipe is used to accelerate the removal of subsurface water in soils or to allow storm water to percolate into the soil. HDPE pipes are produced with slots or perforations to collect and convey subsurface water to a more favourable location for discharge. The perforations shall be approximately circular and arranged in rows parallel to the axis of the pipe.
HDPE perforated pipe is generally used for gravity flow water management applications including storm water drainage, subsurface drainage, sides of roadways, detention/retention systems, golf courses, athletic fields, retaining and foundation walls and agricultural drainage projects.

Conductive pipe
Corrosion-resistant, safe and easy to install (due to compact electrofusion fittings) the BERLIA HDPE piping system helps fuel flow safely, even providing protection against ground movements (using the elasticity and flexibility of HDPE). Safety can be enhanced further by installing BERLIA conductive piping option, ensuring continuous conductivity between the tank and the end of the line (which can be earthed). This helps to prevent the accumulation of electric charges that could otherwise be created by the friction of the fuel velocity and the plastic inner surface.

PE Pipes Edge Over Other



Property	HDPE	P.V.C	Mild Steel (MS)
Life	50 years underground.	More than 20 years (When not exposed to sun)	Less than 10 years under protection
Health Hazard	No additives during Manufacturing, Hence totally safe	Lead based stabilizer causes long term health hazard	Corroded pipes allow out side contaminated water to seep into the system.
Weathering Resistance	Good due to presence of Carbon Black	Tends to becomes brittle when exposed to sun.	Poor resistance against Corrosion and chemicals
Recommended Temprature	"-40 to 50 Deg C"	" +1 to +45 deg C"	Can stand any temprature
Chemical Resistance	High degree of resistance to acids alkalis and high anti corrosive properties	Moderate resistance to most alkalis and acids	Poor
Water hammer chracteristics	Excellent water hammer characteristics. 50% better than in MS and 30% better than PVC pipes	Need higher diameter pipelines to control surge pressure under similar conditions as that of HDPE	Poor resistance absorb surge wave. Needs thrust blocks.
Flexibility	Highly Flexible Can be sent over curves. Requiring very fewer fittings	Limited flexibility and requires lots of fitting and specials during installation	Highly Rigid. Needs huge fittings and specials
Lenghts	Pipe up to 110 mm can be supplied in Coils of 100 Mt. Small dia pipe can be supplied in 1000 Mt	Comes in Straight lenghts of maximum 6mts	Comes in straight lenghts of maximum 6 mts
Load bearing capacity	Flexible. Deform under load and recovers on its release.	Low impact strenght, Cracks under heavy loads.	Can take high dead load and live load
Maintenance	Virtually Maintenance free	Regular Maintenance to replace broken parts.	High Maintenance after few years of use
Internal /External Coatings	Not required	Not required	Requires coating to prevent corrosin and reduce friction
Soil Settlement	Resistance to ground movement, even earthquakes	Poor resistance to Soil movement	Poor resistance to Soil movement
Friction to Flow	Smooth inside surface. C Factor-50, Lowest resistance to flow	Smooth inside surface. C Factor-50, Lowest resistance to flow	Rough inside surface. Roughness increases with age

BERLIA HDPE PIPES

Govt Clients

Indian Oil Corporation Limited
ONGC
BHEL
NTPC
HVPN
Hindustan Zinc Limited
EdCIL Education • Innovation • Transformation
ECIL Electronics Corporation of India Limited
HINDUSTAN PETROLEUM CORPN. LTD.
हिंदुस्तान कॉपर लिमिटेड (भारत सरकार का उद्यम) राष्ट्र का ताम्र खनिक
RAMKY GROUP Towards sustainable growth
ऑयल इंडिया लिमिटेड Oil India Limited
झारखंड बिजली वितरण निगम लिमिटेड Jharkhand Bijli Vitran Nigam Limited
INDIAN RARE EARTHS LIMITED
Public Health Engineering Department Haryana
INDRAPRASTHA GAS LIMITED
BRIDGE & ROOF CO. (INDIA) LTD.
मेकॉन लिमिटेड MECON LIMITED A Schedule 'A' PSU under Govt. of India
ENGINEERS INDIA LIMITED
DELHI JAL BOARD SAVE WATER SAVE LIFE
GAIL (India) Limited
Bharat Electronics Limited
UHBVNL
ARUNACHAL PRADESH
Hindustan Aeronautics Limited
Rail Vikas Nigam Limited
Manganese Ore India Limited
CPCL Chennai Petroleum Corporation Limited
Rajasthan State Mines & Minerals Limited
Hindustan Shipyard Limited
Indian Navy
BHARAT COKING COAL LIMITED
PUNJAB WATER SUPPLY AND SEWERAGE BOARD
ROURKELA SMART CITY LTD.
Smart City INDORE
NORTHEAST FRONTIER RAILWAY 1958
DRDO
South Central Railway
North Western Railway
UTTARAKHAND
Coal India
पावरग्रिड
UCIL
NORTHERN RAILWAY
EASTERN RAILWAY

Bussiness Associate

STERLING & WILSON
RSSB
DOOSAN Doosan Power Systems India Private Limited
HCL FOUNDATION
Hero
APL Assam Petro-chemicals Limited
fiem LIGHT UP THE WORLD
CHAMBAL FERTILISERS & CHEMICALS LTD.
RFCL
JUPJindal Metals & Alloys Ltd
NCC
Mālaxmi
Godrej
TATA TATA PROJECTS
ESSAR STEEL
JWIL SUSTAINABLE WATER MANAGEMENT
KEC KEC INTERNATIONAL LIMITED
Shapoorji Pallonji ENGINEERING & CONSTRUCTION
PRAKASH INDUSTRIES LTD.
JINDAL STEEL & POWER
AFCONS AFCONS INFRASTRUCTURE LIMITED
Nestle
Tdi
TATA POWER-DDI
JAKSON EMPOWERING PEOPLE
SGIL
Sintex Industries Limited
RELIANCE Power
UNISTAR Universal Cables Ltd.
TOSHIBA Leading Innovation
JAYPEE GROUP
Schneider Electric
WONDER CEMENT EK PERFECT SHURUAAT
SIEMENS Ingenuity for life
ireo
BLUE STAR
HMEL
MP BIRLA GROUP
Honeywell
NPCBL
Amul The Taste of India
Petrofac
L&T Construction
ALSTOM
SHIRKE GROUP OF COMPANIES
BAPS
Sona

• Sustainable Products for • a Sustainable Growth

BERLIA®

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For More Detail

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