

# Sintex Infracflex

HDPE  
PLUS



Stronger Connections.  
Excellence That Delivers.





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Our Vision

## About Welspun ▶

Welspun has successfully made its mark and more across businesses such as home textiles, advanced textiles, flooring solutions, retail, infrastructure, warehousing, line pipes, DI pipes, stainless steel & alloy, pig iron, TMT rebars and more.

Presence in more than **50 countries**

**\$5 billion USD** turnover

**30,000 plus** employees across global locations

**Over 100,000** shareholders

**20+** Manufacturing Facilities in **India, USA, KSA** and present in **50+ countries**



### Our Vision

Delight our customers through innovation and technology, achieve inclusive and sustainable growth to remain eminent in all our businesses.



### Our Mission

**We aim to be amongst:**

The top 2 value creators in each of our businesses.

The top 10 most respected Indian brands.

The top 50 groups in India in terms of market value.

# Legacy of Sintex

- Iconic water storage tank brand of India since **50 years**
- **200 litres** to **16 lakh** litres of tank capacity for retail & commercial usage
- Category creators & leaders with top-class consistent quality & innovation
- Sintex is now a part of Welspun World, a **\$5 billion** Indian conglomerate



## About

### **Sintex Infracflex** | HDPE PLUS

Sintex believes in crafting Polyethylene pipes from 100% virgin raw material built to last longer from advanced raw material & machineries that deploy the best of modern technology. HDPE pipes for potable water are ideal for fulfilling water supply requirements intended for human consumption with regard to delivering quality water. HDPE Pipes are non-toxic and do not impart any foul smell to the water that is conveyed through it. HDPE Pipe properties make these pipes suitable for conveyance of sewerage and industrial effluents.

Polyethylene have excellent SCGR (slow crack growth resistance) properties and superior hydrostatic strength with durability for longer life expectancy. HDPE Pipes are an ideal substitute for D.I. (Ductile Iron) & C.I. (Cast Iron) pipes. The lightweight and flexible design makes for faster and easier installations. It has an edge over other products in respect to complete life cycle cost, i.e., cost of material, transportation, installation & maintenance over the life cycle of the pipeline system.

## **Applications of HDPE Pipes**

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**Water Supply System**



**Agriculture & Irrigation**



**Sewerage & Drainage  
Systems**



**Dredging & Slurry**

## Features & Advantages



### **Tough & reliable:**

Strong enough to resist crushing, impacts and heavy earth loads when laid underground.



### **Long-lasting strength:**

Designed with superior hydrostatic strength and a lifespan of minimum 50+ years.



### **Hygienic and safe:**

Does not support microbial growth, keeping water clean and pure.



### **Smooth water flow:**

Extra smooth inner walls (highest "C-Value" of 150) ensure easy, uninterrupted flow.



### **All-weather durability:**

Resistant to corrosion, UV rays, abrasion, chemicals and effluents. Non-conductive for added safety.



### **Easy to handle:**

Lightweight pipes that don't need heavy machinery for installation.



### **Leak-proof joints:**

Simple butt fusion or electrofusion welding creates strong, 100% leak-proof joints.



### **Cost-saving advantage:**

Lightweight means easier transport, telescopic loading and lower handling costs.

## Range of Sizes, Grades & Pressure Ratings

- **Sizes available:** From **32 mm OD to 400 mm OD**, suitable for a wide variety of applications.
- **Grades:** Available in **PE-63, PE-80 and PE-100** for different strength and performance needs.
- **Pressure ratings:** Designed to handle pressure from **PN 2 up to PN 20** making them versatile for different water supply systems.

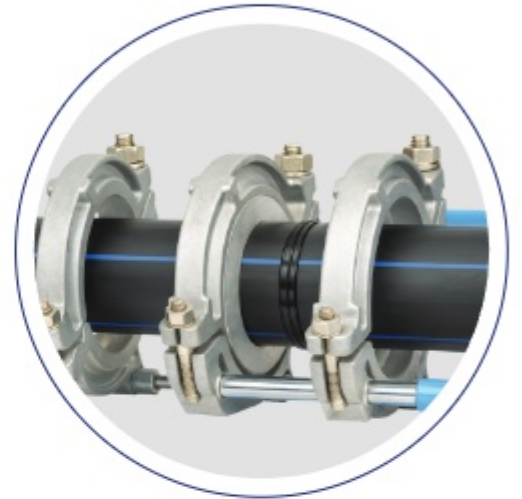


# Types of Fittings & Methods of Jointing

## HDPE Pipes – Jointing Methods

### • Butt Fusion

Butt Fusion (also called butt welding) is the simplest and most space-saving method to join PE pipes and fittings. It creates a strong, seamless connection for long-lasting performance.

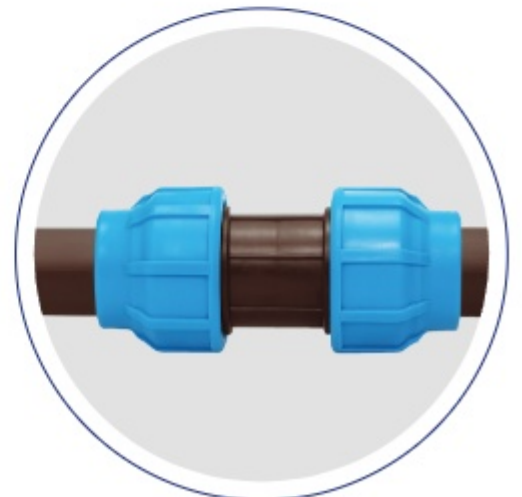


### • Electrofusion Welding

Electrofusion is a **quick and reliable method** to join HDPE pipes and fittings. The coupling has built-in heating wires. When connected to a welding unit, these wires heat up and melt the pipe surface, creating a **rigid, durable and leak-proof joint**.

### • Compression Fitting Joint

A simple method where two HDPE pipes are joined by **tightening a threaded nut**, creating a **secure and reliable connection** without the need for special equipment.



## Transition Joint

**1. Transition Coupler** is used to connect **pipes made of different materials** like HDPE to metal or PVC to metal, ensuring a **secure and leak-proof connection**.



**2. PE Adapter Joint** allows you to **connect existing pipes** like Cement, MS or DI with **newly installed HDPE pipes**, creating a **strong and leak-proof connection**.

**3. Flange Adapter Joint** lets you **connect PVC or HDPE pipes** with **MS or DI pipes**, ensuring a **secure and leak-proof connection**.



# Storage of HDPE Pipes

**IS: 7634** (Part 2) provides guidance for Handling, Transportation & Storage of Polyethylene Pipes.

## Handling

Polyethylene is a tough resilient material which may be handled easily. Since it is softer than metals, it is prone to damage by abrasion & objects with cutting edge & hence dragging pipes over rough ground should be avoided. If handling equipment are not used, then techniques which are not likely to damage the pipes are to be chosen.

### • Straight Pipes

Handling & storage of straight polyethylene pipes should be such so as to avoid penetration by sharp objects. Loading & Unloading of >160 mm, it is preferable to use mechanical equipment. Unloading of larger OD pipes from trucks & trailers should be rolled smoothly & not dumped from a high ground.



## • Coil Pipes

Individual coils must not be rolled off the edge of the loading platforms or trailers. These coils should be slung individually when off-loading with a crane. Uncoiling the pipe requires trained personnel. If due to improper storage or handling, a pipe is damaged or kinked, the damaged portion should be cut out completely.



## Transportation

When transporting straight polyethylene pipes, use flat bedded vehicles. The bed shall be free from nails & other projections. The pipes shall rest uniformly in the vehicle over their long length.

The vehicle shall have side supports approximately spaced 2 meters apart & the pipes shall be secured effectively during the transportation. All posts shall be flat with no sharp edges. Strapping the pipe bundles during transit may be required to avoid excessive movement in the truck.

Polyethylene pipes shall not be transported with other metallic items in the same vehicle.

Coiled pipes with OD <63 mm may be supplied on pallets. Coiled pipe with OD ≥63 mm, should be supplied individually.

To save on transport cost, nesting of straight lengths can be considered.

## Storing

Polyethylene pipes conforming to IS: 4984 may be stored either under cover or in the open as the pipes are suitably protected from ageing due to sunlight by the addition of the appropriate quantity & the type of carbon black. Other non-black polyethylene pipes however, should be stored under cover & protected from direct sunlight.

Polyethylene pipes shall be stored in the manner to prevent damage from elevated temperature, contact with harmful chemicals. Prolonged exposure to direct sunlight shall not balter the pipe performance, but the pipe may bend because of the heat during summer months. Precautions are to be taken accordingly.



## Gas Pipes



Polyethylene Pipes for the Supply of Gaseous Fuels.

Sintex Gas Pipes are made of Pre-compounded MDPE because of its inherent characteristic such as corrosion resistance, flexibility and crack resistance and toughness. The MDPE Gas Pipes are used since decades in the Gas Distribution Network. It is the safest way to transfer Natural Gas/LPG, Biogas, etc. from one point to another.

### Applications

- Natural Gas/LPG Distribution
- Biogas & Propane
- Industrial Gas Distribution
- Landfill & Leachate Gas Extraction and Conveyance



### Features & Benefits

- Long life
- Easy to handle and transport
- Smooth internal and outer surface
- Excellent ESCR and resistance to rapid crack propagation
- Resistance to extreme heat and cold temperatures
- Joined using conventional electrofusion and butt fusion techniques
- Fully compatible with approved electrofusion and spigot fitting

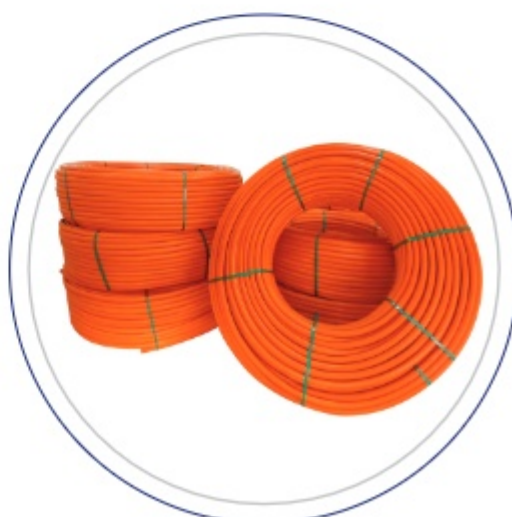
### Gas Pipes Range as Follows

**Material Grades:** PE-80 (Yellow) & PE-100 (Orange)

**Pressure Ratings:** SDR 9, SDR 11, SDR 13.6 & SDR 17

Designed to handle pressure from PN 2 up to PN 16, making them versatile for different gas supply systems.

**Diameter:** 32 mm to 315 mm



## Our Vision

At Sintex, our mission is to deliver water to Indian homes that is

**SAAF, SAFE & SAHI.**

### • SAAF

Clean water for your home. **Lead-free, rust-free and free from encrustation.** Unlike traditional pipes, our pipes stay **tuberculation-free** and last longer.

### • SAFE

Made from **100% virgin raw material** with advanced technology, our pipes are **built to last** and ensure safe, reliable water delivery.

### • SAHI

The **right choice.** A blend of **global expertise and Indian excellence, Sintex's** polymer legacy combined with Welspun's engineering prowess.



Because your family deserves nothing less.



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