



# HDPE PIPES FOR CABLE PROTECTION

Double Wall Corrugated Pipes



**Hebeish Group** is the mother company of 4 subsidiary companies, completing each other to provide our customer with full HDPE piping solutions. Our aim is to deliver the highest quality in order to ensure the best outcome for our customers.

We manufacture comprehensive plastic piping & hoses solutions for the building, civil, mining, and industrial market. Our products range from high density polyethylene (HDPE) piping systems for Pressure, Non pressure, Cable Protection, and Micro Ducts to polyvinyl chloride (PVC) hoses. We aim to provide our customers with a full fledged service from the pipes to all the welding and technical support that might be needed for them to achieve the best results for their projects.

We produce our own HDPE pipes, segmented fittings and manholes. We complement our range by being the official distributors for **Widos** Germany HDPE pipe welding machines, **NTG** HDPE PE 100 injection fittings, **Akatherm** Netherlands special drainage fittings, **Camozzi**, **Italy**, **Microduct accessories** & **GAO** China BMC manhole covers.

Our manufacturing unit of PE pipes and accessories have been accredited by The National Organization for Potable and Sanitary Drainage of Egypt.

Besides our manufacturing and importation departments, we provide technical and welding support for the actual execution of the projects.

All our products are manufactured according to international standards using extrusion technology, and we ensure that all our production goes through stringent quality assurance systems and extensive testing to ensure that the highest quality standards are met.

**Our Vison** is to elevate the standard of living in Egypt and North Africa by providing infrastructural solutions to raise the quality of potable sewage systems, wastewater treatments and telecommunication networks.

Our Mission is to achieve our vision by providing the market with the most reliable and efficient products that guarantee long life, as well as maintaining satisfied and loyal clients.

We are fully equipped to undertake any project involving HDPE pipes with our comprehensive piping system and experience. Partnering with Hebeish Group will ensure the delivery of best results for your projects while experiencing the highest level of client satisfaction.

WHEN YOU BUY A CABLE,

the last thing you want, is to dig it up again for repairs ...

THE RIGHT CONDUIT

from the start protects your investment ..



## **DOUBLE WALL CORRUGATED PIPES**

## PRODUCT OVERVIEW

High density double wall corrugated polyethylene pipe for underground cable protection conduits, are mainly being used in application of underground electrical, optical systems - power and telecommunication networks.

The pipe is composed of two mutually co-extruded layers, a corrugated outside layer and a smooth inside layer.



## MATERIAL

The pipes are made of high density polyethylene (HDPE), which is characterized for its good mechanical and chemical properties. It does not only provide economical benefits and solutions of the existing problems during installation, but is also environmentally friendly.

## ADVANTAGES

- · Very light and are therefore easier to assemble and transport
- Smooth internal surface makes it easy to insert the cables into the pipes
- Excellent mechanical and physical features
- Resistant to impact and impermeable to both water and dust
- Long lasting with no need for maintenance
- Available in flexible standard coils of 50m and 100m. Moreover, other lengths can be supplied upon request
- Flexible pipes make continuous placing possible and are very adaptable to the demands of the terrain
- Used at temperature ranging from -40°C to 80°C
- Highly resistant to corrosion
- Cost effective





## Why HDPE DOUBLE WALL CORRUGATED PIPES 7

| Property               | HDPE (DWC) Pipes  | PVC Pipes   |  |
|------------------------|---|---|--|
| Flexibility            | <ul><li>Flexible and versatile</li><li>Suitable for various applications</li></ul>  | <ul><li>Rigid</li><li>Not flexible</li><li>Limited application</li></ul>  |  |
| Transport and Handling | <ul><li>Handling is easy (lighter than PVC)</li><li>Low transport cost</li></ul>  | Easy to handle  |  |
| Structural             | <ul> <li>Can bear heavy overloading</li> <li>Can be laid in minimum soil cover (2-1 feet) and doesn't crack due to earth adjustments</li> </ul> | Cracks due to soil settlement and tectonic movements                      |  |
| Joints                 | <ul> <li>Fewer joints</li> <li>Can be supplied in coils of 500 m or more</li> <li>Easy coupling jointing method</li> </ul>                      | <ul> <li>Higher Joints, as supply length is up<br/>to 6 meters</li> </ul> |  |
| Durability             | <ul><li>Excellent chemical and abrasion resistance</li><li>Very long life</li></ul>   | <ul><li>Average resistance</li><li>Shorter life</li></ul>                 |  |



## **FLEXIBLE CONDUIT PIPE 450N**

HDPE double wall corrugated cable protection PE halogen free conduit pipe (Flexible 450N), with main application protection of low tension electrical and telephone underground cables. It is available in coils of various standard length.

- \* Product dimensions are according to EN 61386-24.
- \* Compression test > 450N vertical deflection equivalent 5% of the original diameter.
- \* Impact strength Normal
- \* Can be used in temperatures ranging from -10°C to 60°C.
- \* Minimum bending radius 8 times the external diameter.

## SIZE/DIMENSIONS

| Dimension<br>(OD) | ID Tolerence<br>(mm) | OD Tolerence<br>(mm) | Coils Length<br>(m) |
|-------------------|----------------------|----------------------|---------------------|
| 50                | 41.00 + 0.20         | 50.00 + 1.20         | 50 / 100            |
| 63                | 51.00 + 0.20         | 63.00 + 1.20         | 50 / 100            |
| 75                | 62.00 + 0.20         | 75.00 + 1.20         | 50 / 100            |
| 90                | 75.00 + 0.25         | 90.00 + 2.00         | 50 / 100            |
| 110               | 92.00 + 0.25         | 110.00 + 2.00        | 50 / 100            |
| 125               | 108.00 + 0.3         | 125.00 + 3.00        | 50                  |
| 160               | 138.00 + 0.3         | 160.00 + 3.00        | 25                  |

- \* Any other lengths are available upon request
- \* Standard color Black
- \* Any other colors are available upon request



## ACCESSORIES

## **Coupling**Coupling provides joints



#### **Spacer**







### **RIGID CONDUIT PIPE 750N**

HDPE double wall corrugated cable protection PE halogen free conduit pipe in 6m bars, with excellent compression strength and very high impact resistance due to the advanced combination of the corrugated outside layer and the smooth inside layer.

The 750N series pipe is the best solution to apply when high ground tension and constant vehicular load is persistent factor.

- \* Product dimensions are according to EN 61386-24.
- \* Compression test > 750N vertical deflection equivalent 5% of the original diameter.
- \* Impact strength Normal
- \* Can be used in temperatures ranging from -10°C to 60°C.

## SIZE/DIMENSIONS

| Dimension<br>(OD) | ID Tolerence<br>(mm) | OD Tolerence<br>(mm) | Coils Length<br>(m) |
|-------------------|----------------------|----------------------|---------------------|
| 50                | 41.00 + 0.20         | 50.00 + 1.20         | 6                   |
| 63                | 51.00 + 0.20         | 63.00 + 1.20         | 6                   |
| 75                | 62.00 + 0.20         | 75.00 + 1.20         | 6                   |
| 90                | 75.00 + 0.25         | 90.00 + 2.00         | 6                   |
| 110               | 92.00 + 0.25         | 110.00 + 2.00        | 6                   |
| 125               | 108.00 + 0.3         | 125.00 + 3.00        | 6                   |
| 160               | 138.00 + 0.3         | 160.00 + 3.00        | 6                   |

- \* Any other lengths are available upon request
- \* Standard color Black
- \* Any other colors are available upon request



## **ACCESSORIES**

## **Coupling**Coupling provides joints



#### **Spacer**







## STORAGE RECOMMENDATION

- Coils and bars must be stored in horizontal position, maximum storage height 2 Mtr.
- Coils and bars must be stored in the shade, under a roof, preventing direct sun exposure.
- Coils and bars must be placed next to open trenches and their storage areas must be clean and free from any foreign bodies such as sharp stones that could cause damage.

## COMPRESSION TEST

(Acc. to ISO 9969)

| Resistance to Compression |                           |  |  |  |
|---------------------------|---------------------------|--|--|--|
| Classification            | Compression Strength (Nt) |  |  |  |
| Type 250                  | ≥ 250                     |  |  |  |
| Type 450                  | ≥ 450                     |  |  |  |
| Type 750                  | ≥ 750                     |  |  |  |





## FOR INQUIRIES

**Factory:** El-Prince st. Plot 142/143 First industrial area, 6th of October - Egypt Tel.: +202 38200882/3/4 Fax: +202 38200885 Mob.: +2 01221714913

Head Office: 18 Shagaret El Dor st., El Zamalek - Cairo - Egypt

Tel.: +202 27364613/4 - +2 01223987343 Fax: +202 27364615 - +202 27355774

Website:www.hebeishgroup.com E-Mail:info@hebeishgroup.com