





Data-sheet

## **CULVERT PRODUCT**





The product is manufactured by factory Q019204,

Ref. certificate No.: 00110Q26689R0M/3600

Quality Management System has been awarded this certificate for compliance with the standard ISO9001:2008 GB/T 19001-2008

### **ABOUT CULVERT**





Culverts are commonly used both as cross-drains to relieve drainage of ditches at the roadside, and to pass water under a road at natural drainage and stream crossings. A culvert may be a bridge-like structure designed to allow vehicle or pedestrian traffic to cross over the waterway while allowing adequate passage for the water.



Culverts come in many sizes and shapes including round, elliptical, flat-bottomed, open-bottomed, pear-shaped, and box-like constructions. The culvert type and shape selection is based on a number of factors including requirements for hydraulic performance, limitations on upstream water surface elevation, and roadway embankment.

#### HDPE STEEL BELT REINFORCED CORRUGATED PIPE

#### About HDPE material:

High-density polyethylene (HDPE) or polyethylene high-density (PEHD) is a thermoplastic polymer produced from the monomer ethylene. It is sometimes called Alkathene or "polythene" when used for HDPE pipes.[1] With a high strength-to-density ratio, HDPE is used in the productimi of plastic bottles, corrosion-resistant piping, geomembranes and plastic lumber. HDPE is commonly recycled, and has the number 2 as its resin identification code.





# HDPE STEEL BELT REINOFRCED CORRUGATED PIPE



The U-shaped steel strip composite PE material is adopted, so that the pipe rigidity can be greatly improved without increasing the cost, and the strength of the wound pipe and the carat tube is greatly improved under the same weight. It can solve a series of problems such as heavy load. The advantages of large-diameter pipe are more obvious. The diameter of the production pipe is from DN300mm to DN2400mm, and the ring stiffness is kept above 8KN/m2, which is lighter and stronger than cement pipes and other plastic pipes.

- Municipal drainage and sewage pipe system
- Apartment drainage and drain sewage
- Freeway and gym
- Irrigation
- Chemicals, mines fluid transport
- \* Agriculture
- Protive casing for underground pipe line and communication cables.







## PERFORMENCE PAREMETER

| Project                          |                                    | Indicators  |  |  |
|----------------------------------|------------------------------------|---|--|--|
| Ring stiffness                   | SN8                                | ≥8  |  |  |
|                                  | SN12.5                             | ≥12.5   |  |  |
|                                  | SN16                               | ≥16   |  |  |
| Impact strength                  |                                    | TIR≤10%   |  |  |
| Dina flavilaility                |                                    | The sample was originally smooth and had no reverse |  |  |
| Ring flexibility                 |                                    | bending. No cracking, no separation on both walls   |  |  |
| Oven experiment                  |                                    | No bubbles, no delamination, no cracking            |  |  |
| Creep ratio                      |                                    | ⊴   |  |  |
| The tensile strength of the weld | diameter                           | Tensile force                                       |  |  |
|                                  | 300≤ID≤500                         | 600   |  |  |
|                                  | 600≤ID≤800                         | 840   |  |  |
|                                  | 900≤ID≤1200                        | 1020  |  |  |
|                                  | 1200\(\leq\text{ID}\leq\text{2000} | 1460  |  |  |
|                                  | >2000                              | 1600  |  |  |

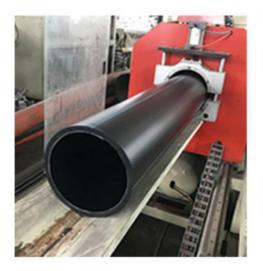
| DN/ID | DIAMTERE.min | IN THICKNESS.min | OUT THICKNESS.min | PITCH.max | STEEL BELT.min | Anti-corrosion layer.min |
|-------|--------------|------------------|-------------------|-----------|----------------|--------------------------|
| 300   | 294          | 2.5              | 4                 | 75        | 0.4            | 2.2                      |
| 400   | 392          | 3                | 4.5               | 85        | 0.4            | 2.2                      |
| 500   | 490          | 3.5              | 5                 | 100       | 0.5            | 2.5                      |
| 600   | 588          | 4                | 6                 | 110       | 0.5            | 2.5                      |
| 700   | 685          | 4                | 6                 | 115       | 0.5            | 2.5                      |
| 800   | 785          | 4.5              | 7.5               | 120       | 0.7            | 3                        |
| 900   | 885          | 5                | 7.5               | 135       | 0.7            | 3                        |
| 1000  | 985          | 5                | 8                 | 150       | 0.7            | 3                        |
| 1100  | 1085         | 5                | 8                 | 165       | 0.7            | 3                        |
| 1200  | 1185         | 5                | 8                 | 180       | 0.7            | 3                        |
| 1300  | 1285         | 5                | 8                 | 210       | 1              | 3                        |
| 1400  | 1385         | 5                | 8                 | 210       | 1              | 3                        |
| 1500  | 1485         | 5                | 8                 | 220       | 1              | 3                        |
| 1600  | 1585         | 5                | 9                 | 230       | 1              | 3.5                      |
| 1800  | 1785         | 5                | 9                 | 230       | 1              | 3.5                      |
| 2000  | 1985         | 6                | 9                 | 235       | 1              | 3.5                      |
| 2200  | 2185         | 6                | 9                 | 235       | 1.2            | 3.5                      |
| 2400  | 2385         | 6                | 10                | 235       | 1.2            | 3.5                      |
| 2600  | 2585         | 6.5              | 10                | 240       | 1.2            | 3.5                      |

















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