# HDPE Raw material and pipe test methods

Quality assurance and testing should be started before, within and after the production process, to confirm that the final product is complying with the international standards, following are important standard methods of testing:

Specifications	Standards
Density	ISO 1183
Melt Mass-flow	ISO 1133
Tensile Properties	ISO 527
Thermal Stabilities	ISO 10837
Internal Pressure Resistance	ISO 1167
Carbon Black contents	ISO 6964
Assessment of the degree of Carbon black dispersion	ISO 11420
Longitudinal Reversion	ISO 2505
Environmental Stress Cracking Resistance	ASTM D1693



# Profiled Pipes

The discovery of Plastics which is considered as the biggest invention of the 20th century, has resulted in a comprehensive solution of contemporary societies problems faced in this field, by providing excellent material specifications.

As Germany one of the leading countries in the field of plastic technology, Krah GmbH Co. has developed the spiral pipe technology, especially for the bigger diameter pipes.

## Advantages

High durability and expected service life of 100 years.

Low maintenance and cleaning costs.

Safe and field approved pipe system.

Safe and perfect joint tightness.

Best chemical resistance.

Best mechanical resistance (abrasion and impact

resistance, low fractures).

Best hydraulic due to smooth inner surface.

No infiltration or exfiltration. No root penetration.

High flexibility.

Easy to handle (low weight).

High temperature resistance (-40° c - 80° c).

#### Material

High Density Polyethylene grade PE 80 and PE 100.

#### Structure

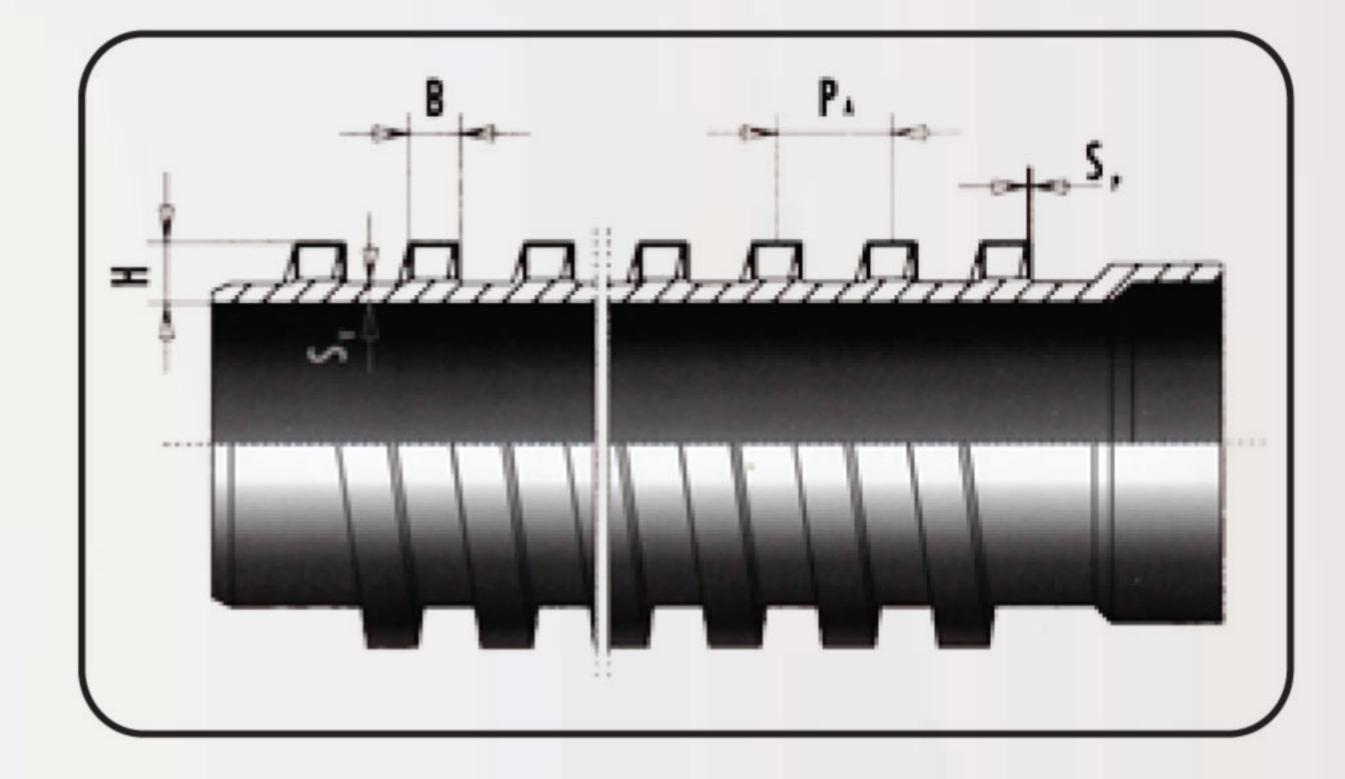
The pipe structure consists of thin base liner surrounded by hollow profile according to DIN 16961.

Applications

Pressure and non-pressure applications, for water, sewers, surface water drainage, gas chemicals.

### **Ring Stiffness**

4000, 8000, 10000 and 15000 kn/m<sup>2</sup> according to ISO 9969.



Sv: Base liner thickness
B: Profile dimension
H: Pipe thickness

PA: Distance between profiles SP: Profile wall thickness

#### Sizes

(400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3500, 3600) mm.

# Length

Available length up to 12000mm.

### **Jointing**

Electro-fusion welding method.
Butt welding method.
Socket/spigot for extrusion welding.
Socket/spigot with EPDM rubber sealing.
Flange connection method.

