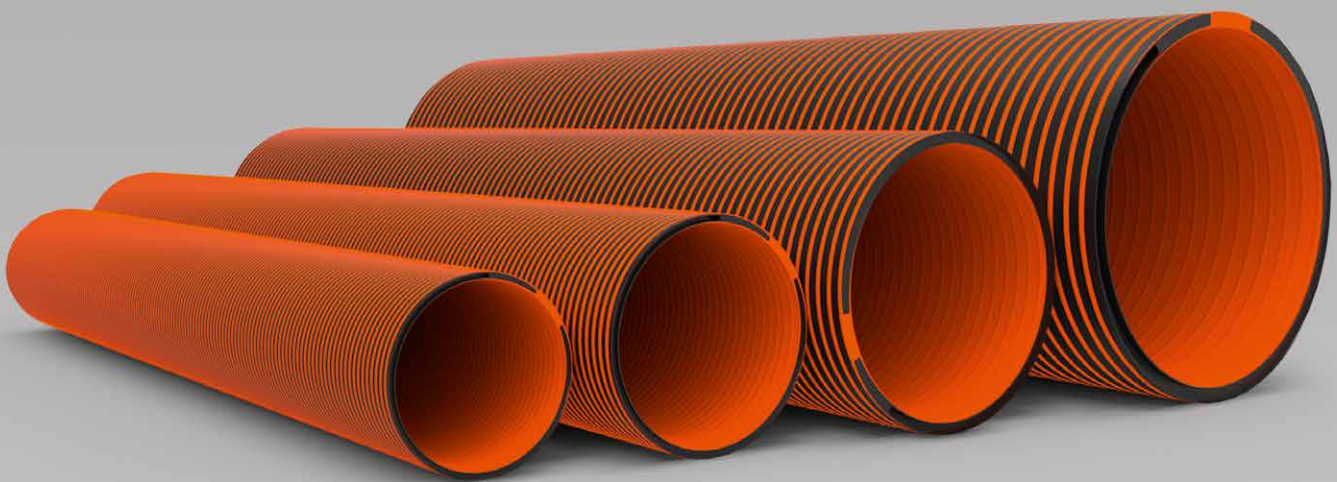


**IWS STRONG**

# SEWAGE AND CULVERT PIPES



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**Product range, Pg. 2**

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## PRODUCT RANGE



### AREA OF USE

STRONG pipes are made of PE (polyethylene) material. The pipes have double wall and are smooth on the inside and the outside.

STRONG pipes are used for gravity-flow pipe systems:

1. Sewerage
2. Stormwater
3. Culverts
4. Industry
5. Ventilation

Thanks to our manufacturing method, we can manufacture pipes to customers' needs in terms of diameters, lengths and ring stiffness values.

### SELECTION OF PIPES

Internal diameter	Ring stiffness class (kN/m <sup>2</sup> )
365 mm	SN4, SN8
500 mm	SN2, SN4, SN8
520 mm	SN2, SN4
600 mm	SN2, SN4, SN8, SN16
700 mm	SN2, SN4, SN8, SN16
800 mm	SN2, SN4, SN8, SN16
1000 mm	SN2, SN4, SN8, SN16
1200 mm	SN2, SN4, SN8, SN16
1250 mm	SN2, SN4, SN8, SN16
1400 mm	SN2, SN4, SN8, SN16
1600 mm	SN2, SN4, SN8
2000 mm	SN2, SN4
2200 mm	SN2, SN4
2400 mm	SN2, SN4

The length of the pipes up to 13.5 m.

### CONNECTION METHODS

There are four methods for watertight connection of pipes:

- PE electricity welded band,
- Mechanical connection socket,
- handweld extruder,
- heat-shrinkable tape.

The most convenient and most common connection method is to use the mechanical connection socket. The connection socket is made of a rubber sleeve and a stainless steel fixation and tensioning band.



## TECHNICAL CHARACTERISTICS

PE material is a very wear-resistant and elastic material. Under normal usage conditions, PE material is chemically

inert i.e. pipes made of PE material do not rot, rust or corrode due to chemical or electrical reactions underground and

nothing will emit or dissolve into the environment from them.

### PHYSICAL PROPERTIES

PROPERTY	UNIT	VALUE	STANDARD
Density	kg/m <sup>3</sup>	>950	ISO 1183
Elastic modulus short-term	N/mm <sup>2</sup>	1000	ISO 527
Thermal expansion rate	mm/m °C	0.18	
Ring stiffness	kN/m <sup>2</sup>	2–16	ISO 9969
Thermal conductivity	W/m °C	0.40	
Temperature resistance	°C	max +45	long-term
Temperature resistance	°C	max +80	short-term



100% reusable PE material



Resistant to Nordic climate



Safe to maintain



Resistant to mechanical damage



The PE material's guaranteed lifetime is 50 years



STRONG pipes are determined by EN 13476. The pipes have Nordic Poly Mark, INSTA-CERT approval for dimensions ID600–2000 mm.

We perform a ring stiffness test for every product batch.

Ring stiffness test pursuant to the relevant standard EVS-EN ISO 9969 (Thermoplastics pipes – Determination of ring stiffness).



Pipes are marked according to the standard as follows:

- approval mark
- dimensions (ID)
- manufacturer
- ring stiffness (kN/m<sup>2</sup>)
- raw material
- production data

## INSTALLATION

STRONG pipes are installed pursuant to the guide RIL 77-1990 "Plastic pipes installed underground and into water. Installation guide."

