**SPIRALLY WOUNDED PE + PP PIPE SYSTEMS FOR INFRASTRUCTURAL SEWERAGE TYPE PRAGNUM OR SIMILAR**

1. Application: according the actual “Sewage systems design standards”: thermoplastic pipe system for gravity water drainage of domestic, industrial or rain wastewater.
2. **Product description – spirally wounded thermoplastic sewer pipe with ribbed outer surface and smooth inner surface made of PE (polyethylene) + PP (polypropylene) according to EN13476-3 and DIN16961.**
3. **A system of quality control of inputs in construction materials: Quality Mark of BWA or equivalent. In connection with the implementation of BWA quality control materials are provided recalls of specimen pipes on a construction site. Seizure of the samples will be carried out without prior warning and for the account of the manufacturer (a representative) of the seized materials.**
4. Raw material used to manufacture the product - virgin material, primary certified by independent institution.
5. Production technology – spiral wounding and thermal gluing of a hot-extruded profile around a steel cylinder.
6. **Socket, an integral part of each pipe with integrated copper wire allowing electric fusion welding.**
7. **Type of coupling – by electrofusion welding according to DVS2207.**
8. **Pipe material - PE (polyethylene) + PP (polypropylene).**
9. Effective **standard** length of the pipe without socket - 6m.
10. **Nominal ring stiffness (SN): SN ≥ 12 kN/m2.**
11. **Ring flexibility ≥30% proven by test protocol.**
12. **Water tightness of the joints - proven by test protocol, tested under pressure of 0.5bar and under vacuum of -0.3bar.**
13. **Diameter nominal DN: ID (inside diameter) - ID 700, ID 900, ID 1100, ID1200, ID 1300, ID 1400, ID 1500, ID 1600, ID 1800, ID 2000, ID 2200, ID 2500, ID 2800, ID 3000.**
14. System - complete system of pipes, fittings and manholes.
15. **Readable and durable marking, according to the Standard EN 13476-3 and DIN 16961.**
16. **Standards – EN 13476-3 and DIN 16961 for pipes, ATV127 and ISO 9699 for static measurements and calculations, АТV А110 for hydraulic dimensioning and calculations, DIN1610 for sewer pipeline installation and DVS 2207 for coupling the pipes by welding.**
17. **Software for hydraulic (АТV А110) and static (ATV127) calculations of the sewage pipes.**
18. Technical specification:

