**SIDE MANHOLES TYPE PRO-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:**
	1. **Manhole base made of spirally wounded PE according to DIN 16961 – compact profile**
	2. **Riser rings – injection molded elements made of PP with ribbed outer surface, according to EN 13598-2.**
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, certified by independent institution.
5. **Type of coupling with sewerage – by electrofusion welding according to DVS2207.**
6. **Installation depth to 8 meters.**
7. **Connection angles:**
	1. **In the base – each angle from 90 to 270 degrees (clockwise) into the base zone**
	2. **Along the height – each angle from 0 to 360 degrees (clockwise) in the zone above the base**
8. **Ladder steps integrated in the riser rings.**
9. **Installation at underground water level up to 2 meters above the manhole bottom.**
10. Nominal ring stiffness (SN) of the riser ring - **SN ≥ 2 kN/m2.**
11. Ability to adjust the design height by reducing the riser rings.
12. Guaranteed water-tightness of the manhole and its joints with the sewerage system.
13. **Solutions against "buoyancy", deformation and cracking in high underground water or other unfavorable conditions: yes.**
14. **Software for static calculations of an installed manhole according to ATV127 and according to the standards of the product and the way of installation.**
15. Compatibility with corrugated and smooth pipes.
16. **Maximum diameter of coupling – ID 2000.**
17. **Standard: DIN 16961, EN 13598-2 and DVS 2207 for pipes coupling by welding.**