

## SEWAGE MANHOLES

# **DN 600**

## external sewer systems

#### **MATERIAL**

polyethylene (PE)

### **WELL TYPES**

- reinforced (including the reinforced elements – WZ)
- standard (made of standard elements – ST)
- optimal (combination of standard and reinforced elements)

#### **PURPOSE**

- for sewage:
  - gravity (sanitary and rainwater)
  - pressure
  - with flat bottom for water installations
- used as: inspection, expanding, sump wells, waste pumping stations

Wells are used both on surfaces without high loads and road lanes.

#### **VALUES**

- low weight of elements
- high mechanical strength
- construction stiffness
- resistance to chemical corrosion
- very high resistance to aggressive sewage, aggressive or contaminated ground water and contaminated soil
- 100% tightness, non-toxic for
- the environment, do not emit any substances
- during the operation

highest resistance to abrasion (many times higher than the resistance of concrete, GRP, PVC)

- low investment cost
- easy and quick assembly, especially in hard terrain conditions
- possibility of making narrow trenches with dimensions adapted to the wells
- possibility of assembling the wells without the use of heavy equipment, which lowers the investment cost





The well elements are ribbed, which increases their rigidity and counteracts the buoyancy in unstable soils and soils with high level of ground water. The wells may be monolithic (individual elements are welded together) or with elements connected with gaskets.

**CATALOGUE CARD** 

The maximum foundation depth of the well is 6 m, while the constructions with foundation depth over 5.3 m require contact with the manufacturer.

Depending on the design and operation requirements the wells should be equipped with a proper type of cover and crown.

For the wells located in green areas  $\emptyset$  600 polyethylene covers produced by ELPLAST+ can be used.

WZ elements have thicker walls than the ST elements, and thus better strength parameters.

In the case of wells meeting the requirements of PN-EN 13598-2 standard, the elements can be connected by extrusion welding or with rubber gaskets.

The well wall thickness can also be adapted individually by the guidelines of the system user or designer, depending on the ground conditions (production on special request).

#### **CONSTRUCTION:**

- base sump with profiled ducts for the connection of inlet and outlet pipes
- turret that ensures proper height of the well
- base with flat bottom for pumping-station tanks
- connecting gaskets for the well elements that ensure tightness
- inlet gasket to connect the pipe with a sump

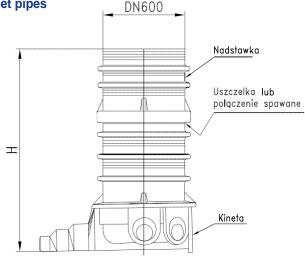
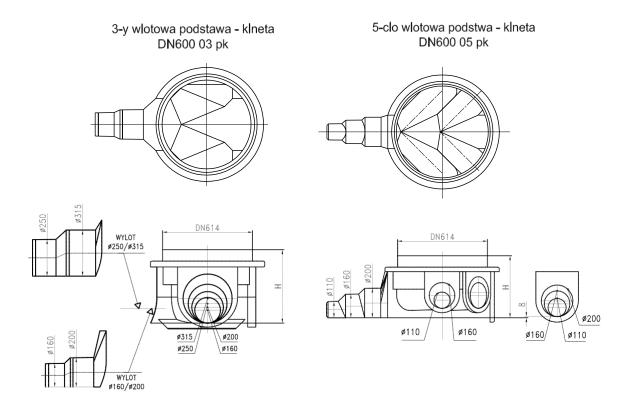


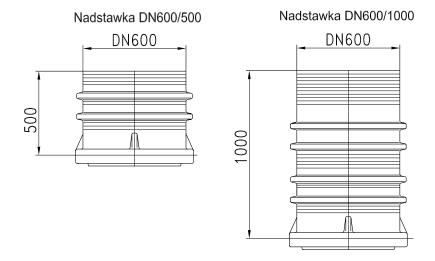
TABLE 1 DN 600 sewer well elements

ELEMENT	MARKING	DESC RIPTI	HEIGHT [MM]	VERSION
Turret	N 600/500		500	ST
				WZ
	N 600/1000		1000	ST
				WZ
Sump	5Pk 200/600/1000	5 inlets, diameter Ø 200	1000	ST
				WZ
	3Pk 250/600/1060	3 inlets, diameter Ø 250	1060	ST
				WZ
	3Pk 315/600/1060	3 inlets, diameter Ø 315	1060	ST
				WZ
	03Pk 200/600/500	corner with "0" level, 3 inlets, diameter Ø 200	500	ST
				WZ
	03Pk 315/600/500	corner with "0" level, 3 inlets, diameter Ø 315	500	ST
				WZ
Base with flat bottom	Pp 600/560		560	WZ
	Pp 600/560 water metre	for water metre wells	560	ST



## Ø 600 WELL ELEMENTS - DRAWINGS:





## **APPENDICES:**

- Technical brochure EL-06
- Technical approval IBDiM AT/2007-02-2237
- Declaration of conformity no. 12 (complete wells)
- Declaration of conformity no. 13 (well elements)
- Declaration of conformity no. 12a (wells conformable with PN-EN 13598-2 standard)
- · GiG opinion that allows for the use of wells at the mining areas of damage
- CSK price list