

# magnoplast

CATALOGUE

SC

**SEWAGE  
MANHOLES**



## TABLE OF CONTENTS

<i>Introduction</i>	<i>4</i>
<i>Inspection chamber, type 315</i>	<i>7</i>
<i>Inspection chamber, type 400</i>	<i>10</i>
<i>Inspection chamber, type 425</i>	<i>14</i>
<i>Assembly instruction</i>	<i>19</i>
<i>Catch basins</i>	<i>20</i>
<i>- Construction of a catch basin</i>	<i>20</i>
<i>- Installation of an in situ gasket</i>	<i>20</i>
<i>Backdrop chambers</i>	<i>21</i>
<i>Complete systems of sewage manholes</i>	<i>22</i>

## INTRODUCTION

Inspection chambers are widely used in gravity sewerage systems, wellpoint systems and drainage systems.

Inspection chambers allow cleaning and other works to be carried out on storm water drainage systems or sanitary sewage systems using suitable equipment, while catch basins fitted with a sump (blind or drainage) are used as chambers or tanks. They are easy to install and they supplement the external sewerage system.

A chamber comprises 3 basic elements:

- a chamber base (multi-inlet or straight-through),
- rising pipe (smooth or corrugated, depending on the system),
- cast iron telescope or concrete cone with concrete cover.

Magnaplast offers 3 types of inspection chamber: 315, 400, and 425.

Magnaplast chamber bases are made by injection moulding (PP), while rising pipes are made by extrusion moulding (PVC or PP).

As the chamber bases are made of PP, they are exceptionally resistant to mechanical impact, even at low temperatures, which increases their usefulness significantly.

Thanks to the internal smoothness of the chamber bases, the possibility of channel clogging has been eliminated.

Sewerage system inspection chambers made of plastic have many advantages, both in the economic and technical sense, taking into account environmental protection both in the area of sewerage exfiltration to the ground and underground water infiltration into the sewerage system.

The design of the Magnaplast chamber bases includes full compatibility with KG pipes, as well as the Magnacor system of corrugated pipes.

A rising pipe can be a smooth sewerage pipe, type 400, or corrugated pipe, type 315 or 425, depending on the type of chamber. They may be cut to the required size at the construction site with the use of a hand saw or a chainsaw.

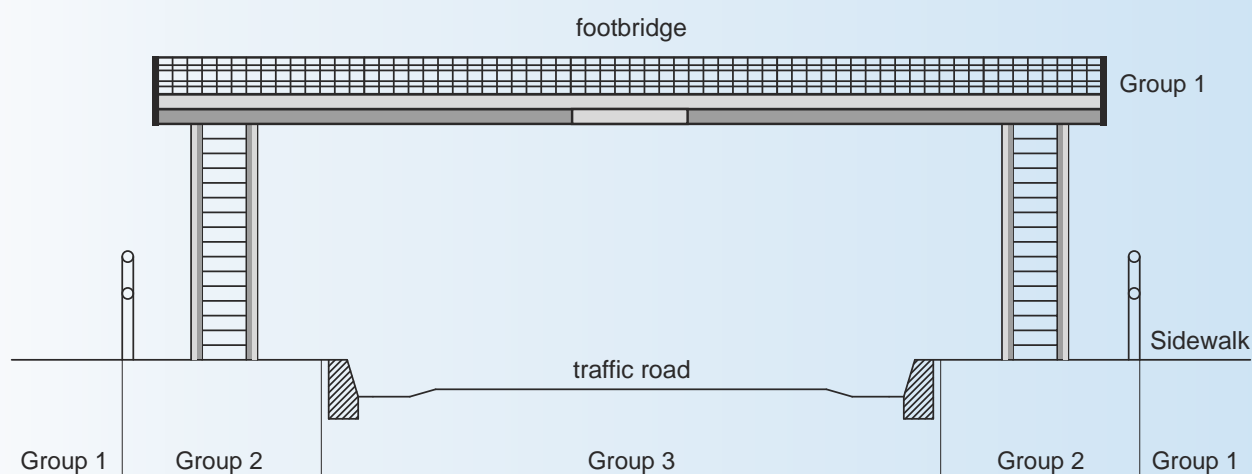
## Inspection chamber covers - area of application

Depending on the inspection chamber location, a suitable cover is selected according to the needs of the technical design.

Magnaplast offers 3 classes of covers:

- A – 1.5T - surfaces intended for pedestrian and cycle traffic only - group 1,
- B – 12.5T - low intensity vehicle traffic (pavements, squares, car parks) - group 2,
- D – 40T - high intensity vehicle traffic (roads, driveways) - group 3.

For green areas and places not exposed to loads, it is permissible to use a non-class cover, e.g. a PP cover.



## Benefits:

- wide range,
- quick and easy mounting of elements,
- compatibility with other systems,
- internal smoothness of walls to prevent the build up of deposits,
- high resistance.

## Quality control

All Magnaplast products, including inspection chambers, undergo a strict quality inspection and must meet all the requirements of the relevant standards. The high quality of the products is additionally confirmed by the quality management system, implemented according to ISO 9001.

## Standards and approvals

### PN-EN 13598-2:2009

Plastics piping systems for non-pressure underground drainage and sewerage. Unplasticized poly(vinyl chloride) (PVC-U), polypropylene (PP) and polyethylene (PE). Specifications for manholes and inspection chambers in traffic areas and deep underground installations

### PN-EN 124:2000

Gully tops and manhole tops for vehicular and pedestrian areas – Design requirements, type testing, marking, quality control.

### PN-EN 681-1:2002/A3:2006

Elastomeric seals - Materials requirements for pipe joint seals used in water and drainage applications - Part 1: Vulcanized rubber

### Technical Approval ITB AT-15-8030/2009

Inspection chambers without steps MAGNAPLAST made of elements of thermoplastic plastics, issued by Construction Technology Institute in Warsaw, Poland.

### Technical Approval AT/2008-03-2345

Inspection chambers Magnaplast made of polypropylene (PP), Unplasticized poly(vinyl chloride) (PVC-U) and polyethylene (PE) issued by Road and Bridge Research Institute in Warsaw, Poland

### Technical Approval AT/07-2012-0250-00

Inspection chambers without steps MAGNAPLAST made of elements of thermoplastic plastics, issued by Railway Institute in Warsaw, Poland

## Magnaplast Inspection chamber, type 315

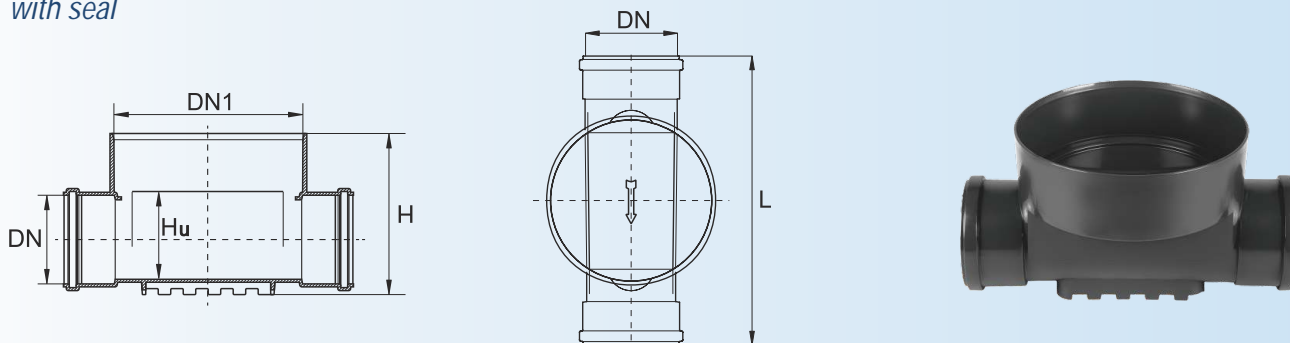
The Magnaplast type 315 inspection chamber consists of:

- a chamber base with seal (base of the inspection chamber), with a specially profiled bottom and branches, if fitted. It can be connected to a rain water sewerage system or a sanitary sewerage system;
- corrugated rising pipe (dia. 338 mm);
- telescope (telescope pipe with cast iron cover);
- seal for telescope.

The Magnaplast range includes:

### Chamber base type 315 straight

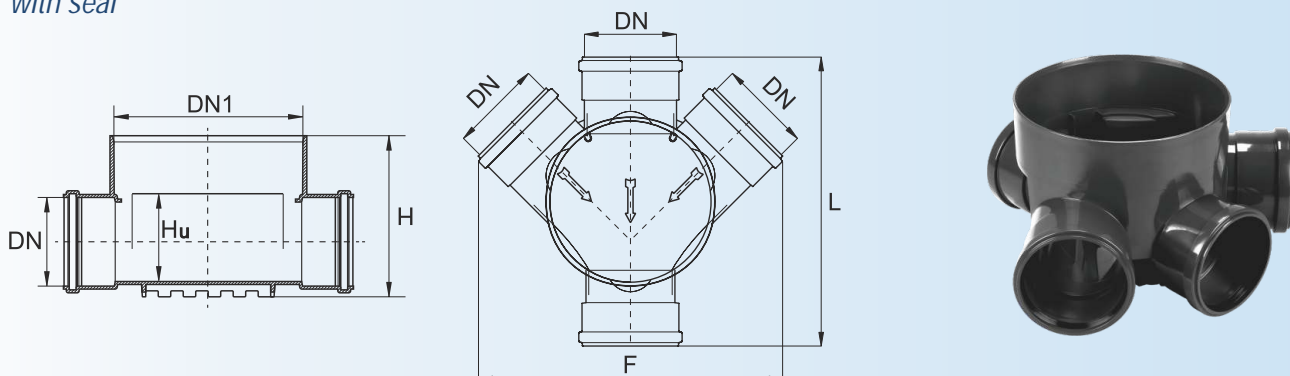
*with seal*



DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	Product code
160	341	290	165	521	33116
200	341	336	200	513	33216

### Chamber base type 315 3 inlets

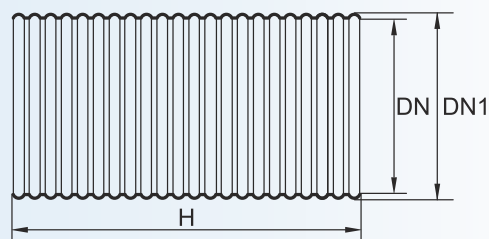
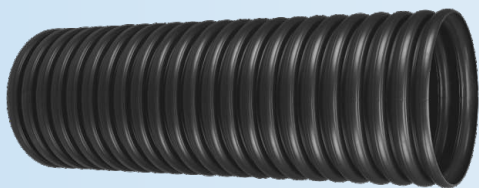
*with seal*



DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product code
160	341	310	185	521	650	33111
200	341	356	220	513	680	33211



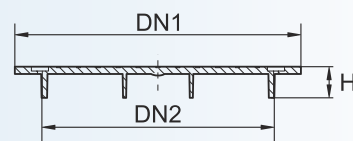
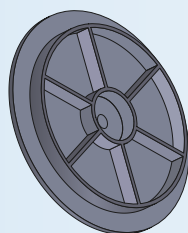
## Corrugated rising pipe RCP 315



DN [mm]	DN1 [mm]	H [mm]	Product code
300	338	1000	33011
300	338	2000	33021
300	338	3000	33031
300	338	6000	33061

## PP cover A15 – 1.5T type 315

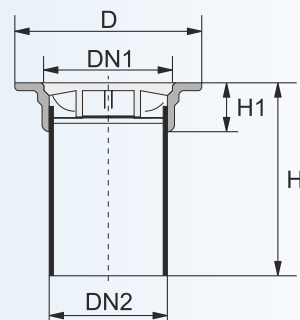
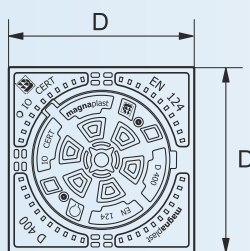
mounted directly on rising pipe RCP 315



DN1 [mm]	DN2 [mm]	H [mm]	Product code
360	297	39	33400

## Telescopic cover

telescope pipe with cast iron cover

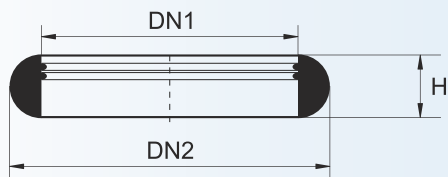


	D [mm]	DN1 [mm]	DN2 [mm]	H [mm]	H1 [mm]	Product code
A15 – 1.5T cover without ventilation	342	310	295	475	50	666450
B125 – 12.5T cover without ventilation	342	255	295	495	90	666400
D400 – 40T cover without ventilation	342	255	295	495	90	666420

B125 – 12.5T cover with ventilation	342	255	295	495	90	666410
D400 – 40T cover with ventilation	342	255	295	495	90	666430

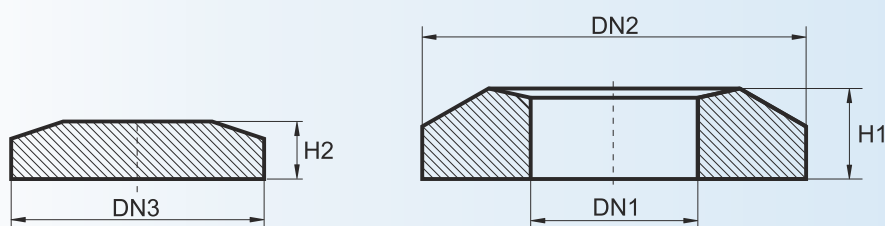


## Seal for telescope for rising corrugated pipe RCP 315



DN1 [mm]	DN2 [mm]	H [mm]	Product code
292	342	26	661320

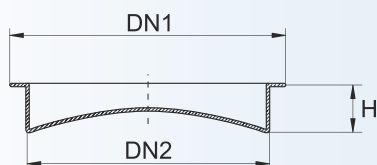
## Concrete cone with cover type 315 and 400



DN1 [mm]	DN2 [mm]	DN3 [mm]	H1 [mm]	H2 [mm]	Product code
410	700	640	110	70	34512

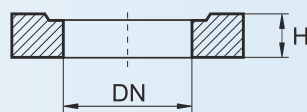
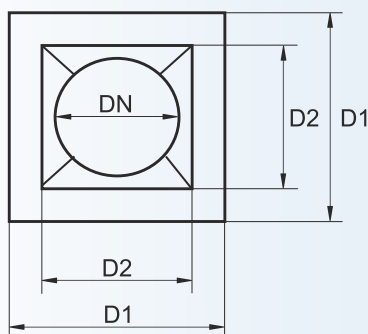
## PP bottom

for corrugated rising pipe RCP 315



DN1 [mm]	DN2 [mm]	H [mm]	Product code
331	297	58	30300

## Concrete frame for cover



D1 [mm]	D2 [mm]	DN [mm]	H [mm]	Product code
440	350	330	100	34520

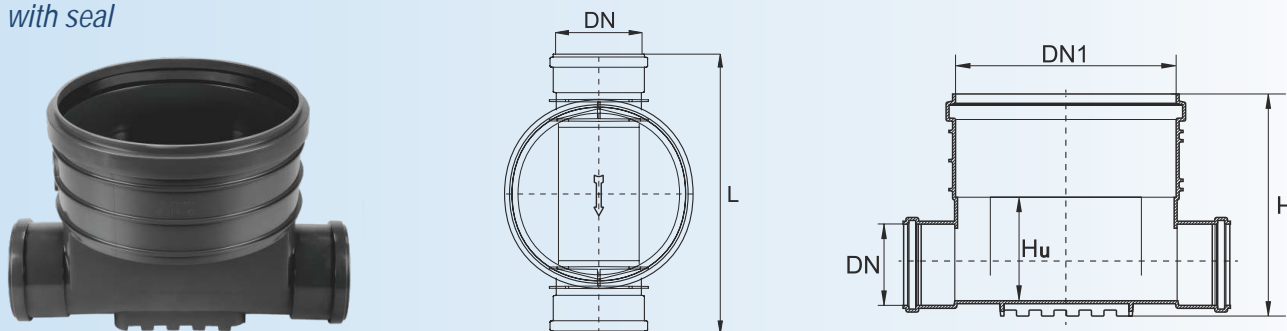
## Magnaplast Inspection chamber, type 400

The Magnaplast type 400 inspection chamber consists of:

- a chamber base with seal (base of the inspection chamber), with a specially profiled bottom and branches, if fitted. It can be connected to a rain water sewerage system or a sanitary sewerage system;
- smooth rising pipe (dia. 400 mm);
- telescope (telescope pipe with cast iron cover);
- rubber reducing ring for telescope.

### Chamber base type 400 straight

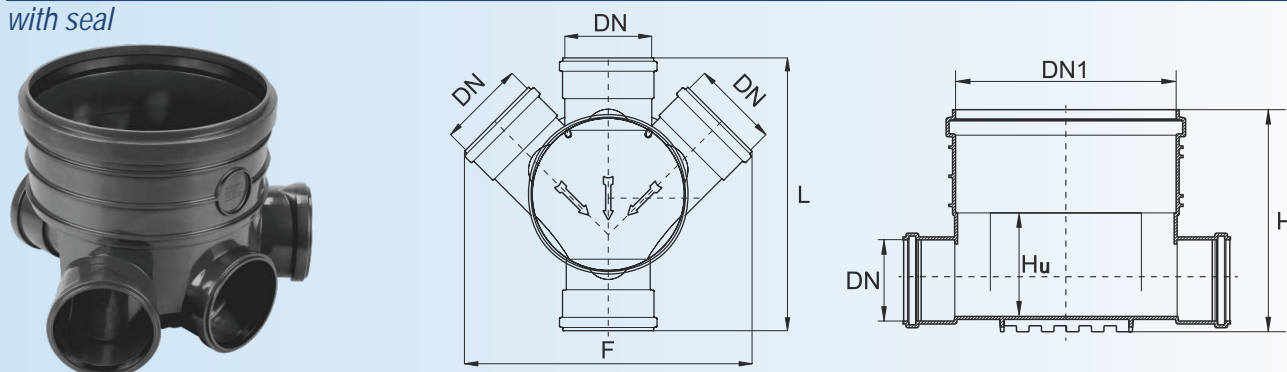
with seal



DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	Product code
110	400	351	355	456	34100
160	400	432	205	590	34130
200	400	401	410	509	34215
250	400	530	293	710	34235
315	400	800	540	1080	34325

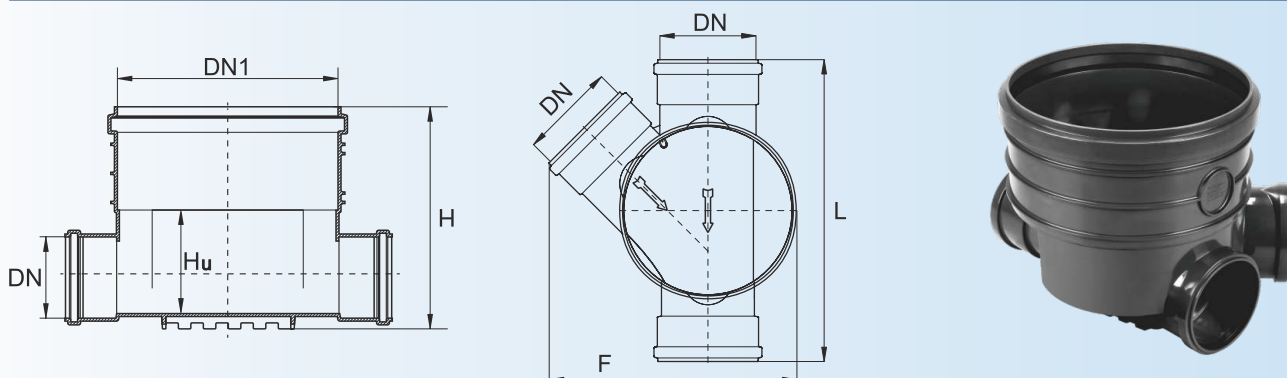
### Chamber base type 400 3 inlets

with seal



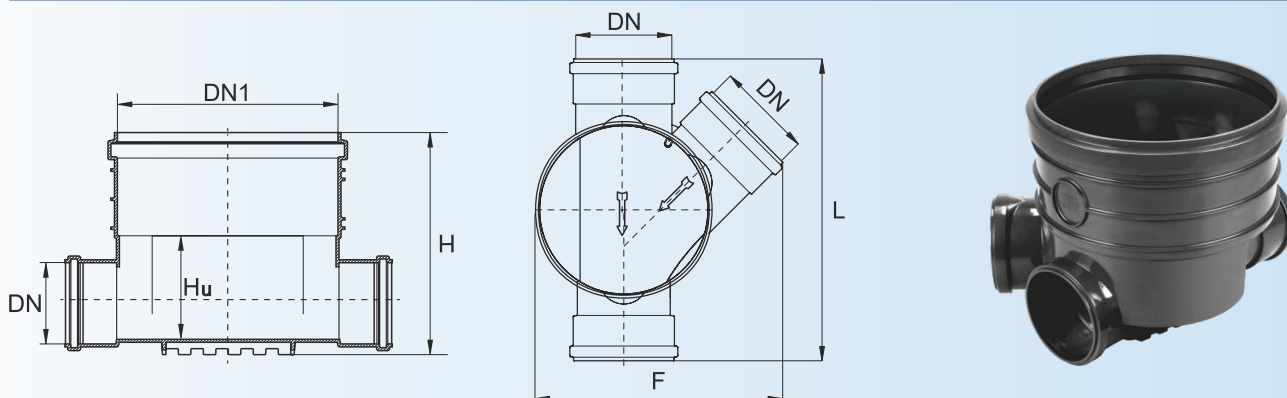
DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product code
110	400	352	335	456	550	34110
160	400	432	205	536	600	34115
200	400	402	410	509	660	34210
250	400	800	545	1130	1130	34220
315	400	800	545	1080	1130	34310

### Chamber base type 400 left inlet



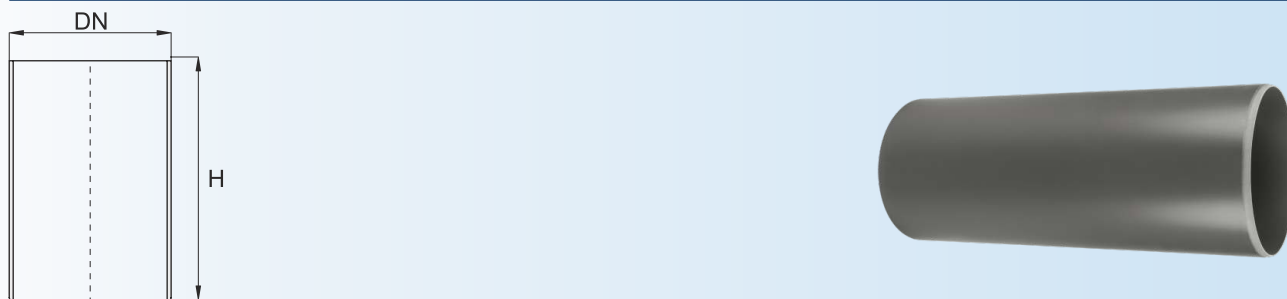
DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product code
250	400	810	540	1130	860	34230
315	400	910	545	1080	880	34320

### Chamber base type 400 right inlet



DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product code
250	400	910	540	1130	860	34225
315	400	910	545	1080	880	34315

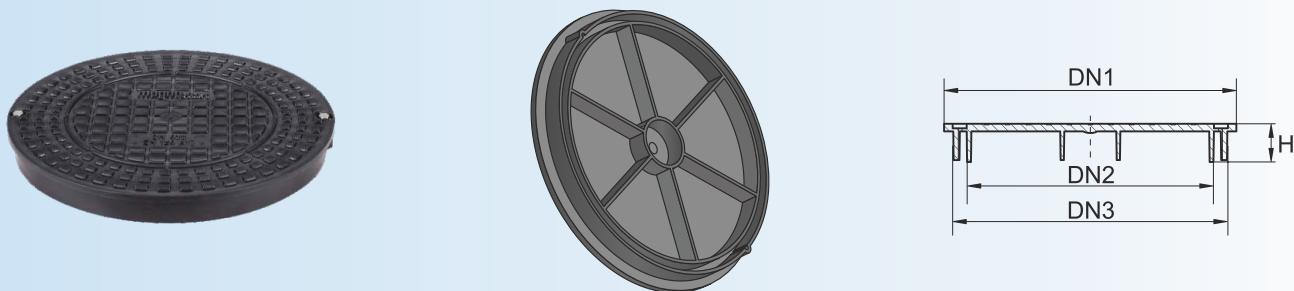
### Smooth rising pipe RSP 400



DN [mm]	H [mm]	Product code
400	1000	34010
400	2000	34020
400	3000	34030
400	6000	34060

## PP cover A15 – 1.5T type 400

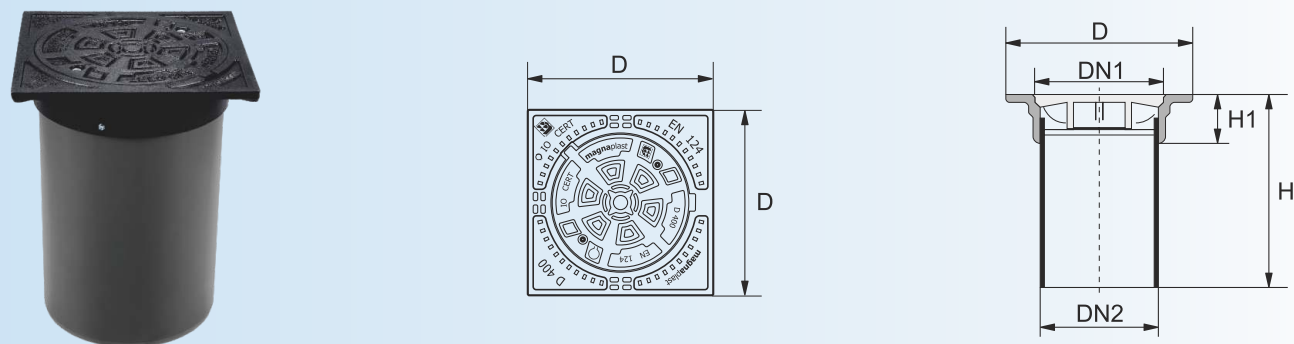
*mounted directly on rising pipe RSP 400*



DN1 [mm]	DN2 [mm]	DN3 [mm]	H [mm]	Product code
448	379	426	45	34400

## Telescopic cover

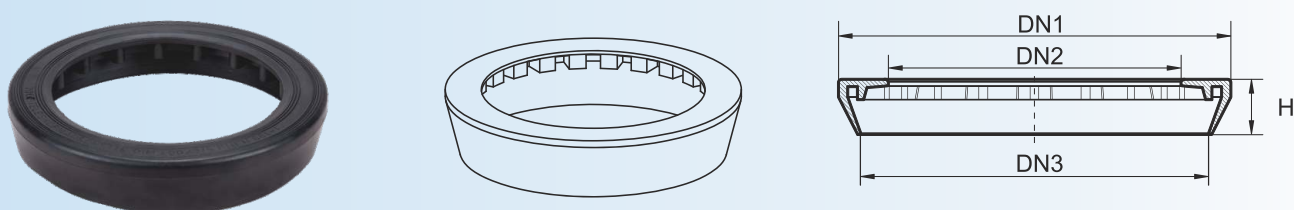
*telescope pipe with cast iron cover*



	D [mm]	DN1 [mm]	DN2 [mm]	H [mm]	H1 [mm]	Product code
A15 – 1.5T cover without ventilation	342	310	295	475	50	666450
B125 – 12.5T cover without ventilation	342	255	295	495	90	666400
D400 – 40T cover without ventilation	342	255	295	495	90	666420

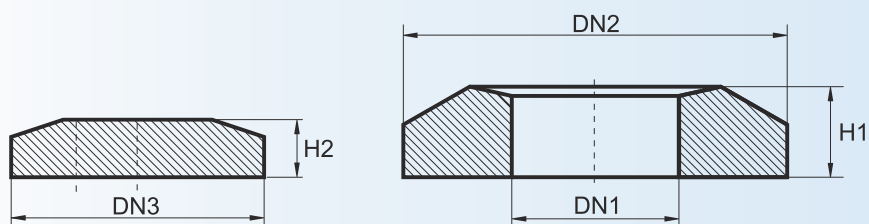
B125 – 12.5T cover with ventilation	342	255	295	495	90	666410
D400 – 40T cover with ventilation	342	255	295	495	90	666430

## Rubber reducing seal for telescope RSP 400



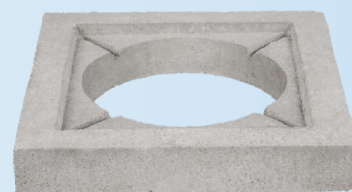
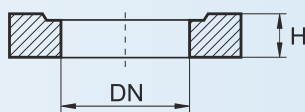
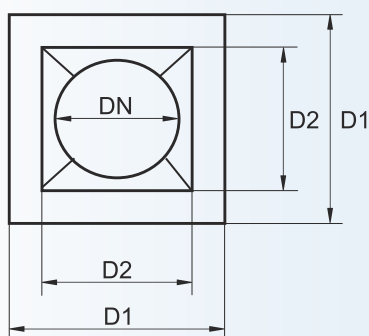
DN1 [mm]	DN2 [mm]	DN3 [mm]	H [mm]	Product code
404	277	366	73	34611

## Concrete cone with cover type 315 and 400



DN1 [mm]	DN2 [mm]	DN3 [mm]	H1 [mm]	H2 [mm]	Product code
410	700	640	110	70	34512

## Concrete frame for cover



D1 [mm]	D2 [mm]	DN [mm]	H [mm]	Product code
440	350	330	100	34520

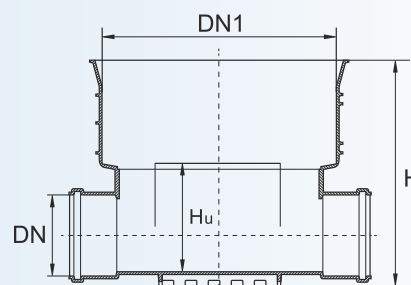
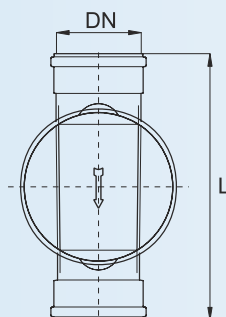
## Magnaplast Inspection chamber, type 425

The Magnaplast type 425 inspection chamber consists of:

- a chamber base with seal (base of the inspection chamber), with a specially profiled bottom and branches, if fitted. It can be connected to a rain water sewerage system or a sanitary sewerage system;
- corrugated rising pipe (dia. 451mm);
- telescope (telescope pipe with cast iron cover);
- rubber reducing seal / seal for telescope (depends on cover type)

### Chamber base type 425 straight

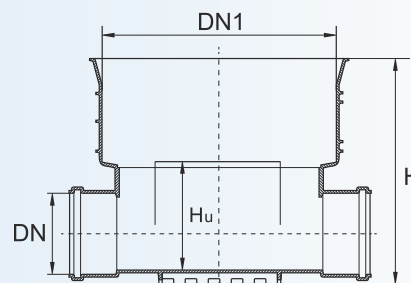
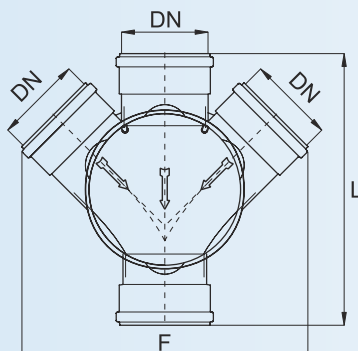
with seal



DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	Product code
110	455	335	200	460	35100
160	455	441	210	590	35130
200	455	384	240	515	35215
250	455	780	515	1130	35235
315	455	780	520	1080	35325

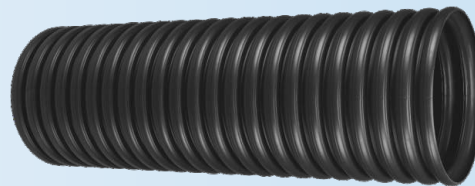
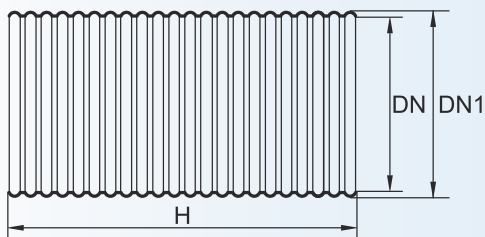
### Chamber base type 425 3 inlets

with seal



DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Kod artykułu
110	455	334	200	460	550	35110
160	455	432	210	536	600	35115
200	455	384	240	515	620	35210
250	455	780	515	1130	1130	35220
315	455	780	520	1080	1130	35310

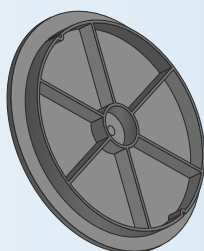
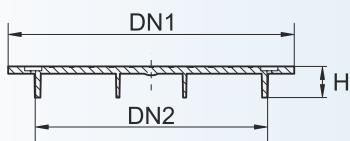
## Corrugated rising pipe RCP 425



DN [mm]	DN1 [mm]	H [mm]	Product code
400	451	2000	35020
400	451	3000	35030
400	451	6000	35060

## PP cover A15 – 1.5T type 425

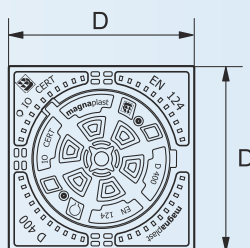
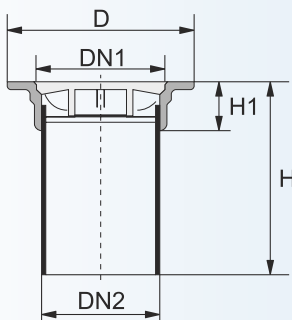
*mounted directly on rising pipe RCP 425*



DN1 [mm]	DN2 [mm]	H [mm]	Product code
448	396	48	35400

## Telescopic cover

*telescope pipe with cast iron cover*



	D [mm]	DN1 [mm]	DN2 [mm]	H [mm]	H1 [mm]	Product code
A15 – 1.5T cover without ventilation	342	310	295	475	50	666450
B125 – 12.5T cover without ventilation	342	255	295	495	90	666400
D400 – 40T cover without ventilation	342	255	295	495	90	666420

B125 – 12.5T cover with ventilation	342	255	295	495	90	666410
D400 – 40T cover with ventilation	342	255	295	495	90	666430


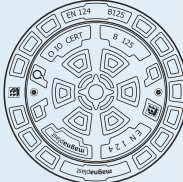
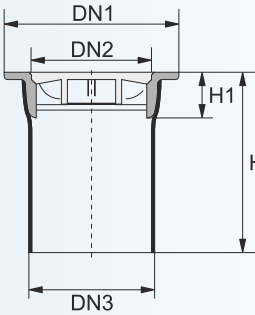






DN1 [mm]	DN2 [mm]	DN3 [mm]	H [mm]	Product code
466	277	444	63	35611


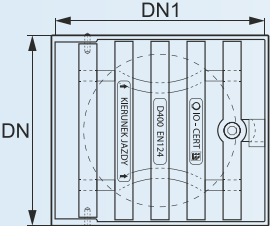
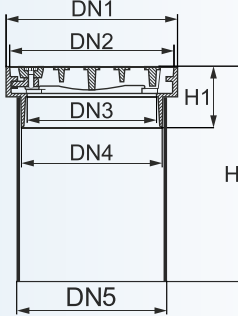
### Telescopic cover 425 without ventilation

	DN1 [mm]	DN2 [mm]	DN3 [mm]	H [mm]	H1 [mm]	Product code
B125-12.5T / TL-400	530	418	392	625	141	35411
D400-40T / TL-400	530	418	392	625	141	35426


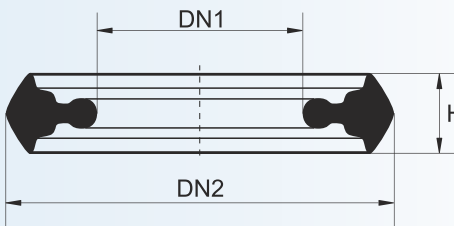
### Street rain inlet – TL-400 for RCP 425

telescope pipe with cast iron cover with hinge D400-40t/TL-400

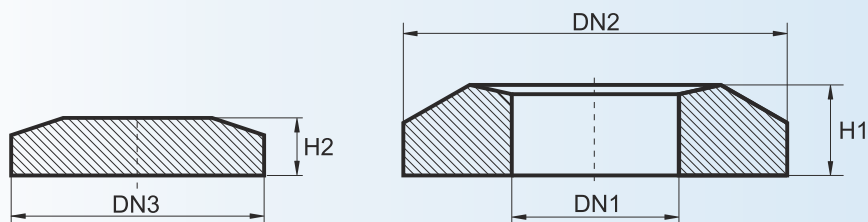
	DN[mm]	DN1[mm]	DN2 [mm]	DN3 [mm]	DN4 [mm]	DN5 [mm]	H1 [mm]	H [mm]	Product code
D400-40t/TL-400 (grille)	406	450	432	340	370	392	160	680	35436

### Seal for telescope TL-400 RCP 425

DN1 [mm]	DN2 [mm]	H [mm]	Product code
377	450	31	35620

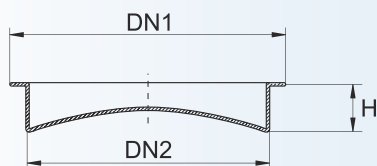
## Concrete cone with cover type 425



DN1 [mm]	DN2 [mm]	DN3 [mm]	H1 [mm]	H2 [mm]	Product code
470	700	640	110	70	35512

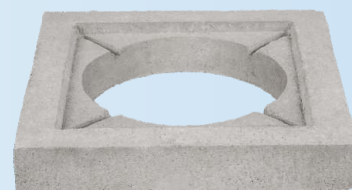
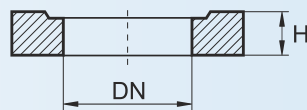
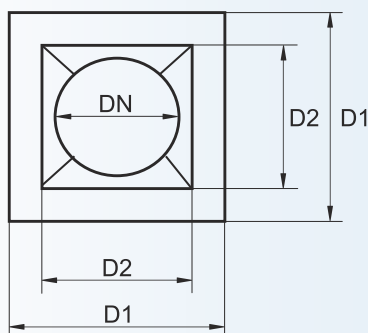
## PP bottom

for corrugated rising pipe RCP 425



DN1 [mm]	DN2 [mm]	H [mm]	Product code
460	393	75	661600

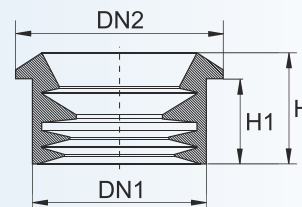
## Concrete frame for cover



D1 [mm]	D2 [mm]	DN [mm]	H [mm]	Product code
440	350	330	100	34520

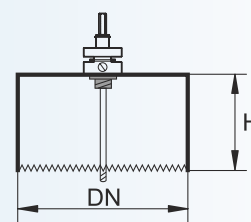
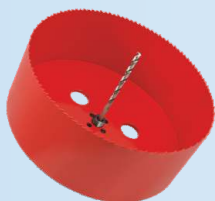
## Accessories

### In situ gasket



	<b>DN1</b> [mm]	<b>DN2</b> [mm]	<b>H</b> [mm]	<b>H1</b> [mm]	<b>Product code</b>
DN 110	134	151	55	48	34615
DN 160	190	205	64	48	34620
DN 200	230	250	59	49	34625

### Hole saw for in situ



	<b>DN</b> [mm]	<b>H</b> [mm]	<b>Product code</b>
DN 110	138	89	39900
DN 160	186	89	39920
DN 200	228	89	39930

### Drain bucket

### Drain bucket TL-400


**Product code**

33536


**Product code**

35536

## Assembly instruction

The inspection chambers should be mounted according to the technical design for the sewerage system, in a properly prepared and drained excavation.

1. Before mounting the inspection chamber, remove any large or sharp stones from the excavation and prepare a coarse-sand bed (min. 10 cm thick).
2. Place the chamber base on the excavation bottom (remember it should already be levelled with a bottom slope of 1.5%) and connect to the sewerage system pipes. To prevent movement of the chamber base, backfill the trench to 10 cm over the pipe level.
3. Cut the rising pipe to the required length (in the case of a corrugated pipe - the cut is made on the notch and seal is installed in the concave section after the first notch).
4. Remove any dirt from the chamber base. Smear the chamber base internals and the seal on the rising pipe with a lubricant, and then install it in the chamber base socket. Having prepared the inspection chamber this way, backfill it with easily-compacted soil. Each layer of the backfill should not exceed 30 cm.
5. a) in the version with a corrugated rising pipe (type 315 or 425), install a seal inside the pipe, in its last concave section; then, install the telescopic cover;  
b) in the version with a smooth rising pipe (type 400), install the cover. The rubber reducing seal is to be ordered separately.



An inspection chamber combined with the Magnacor corrugated pipe system.

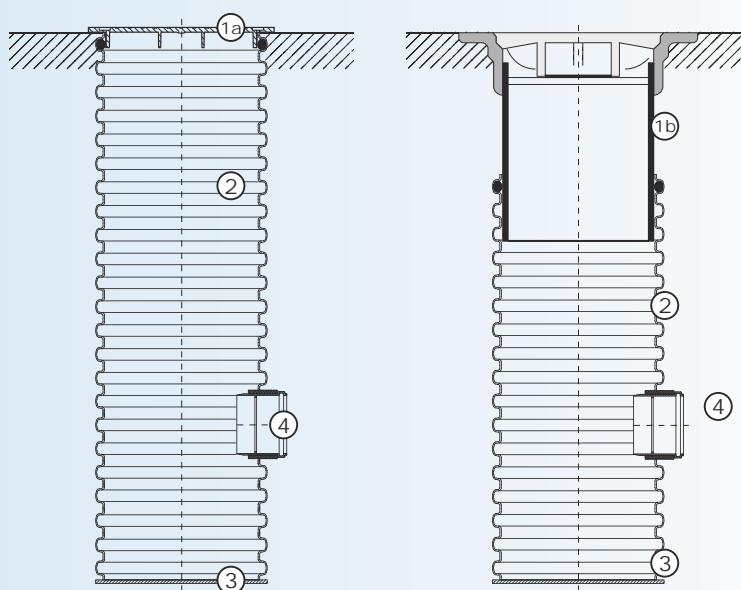


## CATCH BASINS

It is possible to construct a catch basin on the basis of a Magnaplast corrugated rising pipe. In this case, instead of a chamber base at the bottom, install an end plug and cover the rising pipe with a suitable top, following the mounting instructions (see section 5 page 19). In situ gaskets give the possibility of making an extra connection between the channel and the shaft. The drain line from the inspection chamber may be installed at any level by installing the in situ gasket.

### Construction of a catch basin.

- 1a. PP cover
- 1b. Telescopic cover
- 2. Rising pipe
- 3. PP bottom
- 4. In situ gasket



### Installation of an in situ gasket

1. bore a hole at the required level and clean it of chips,
2. install the in situ gasket in the hole and apply the lubricant,
3. connect the sewerage system pipe.

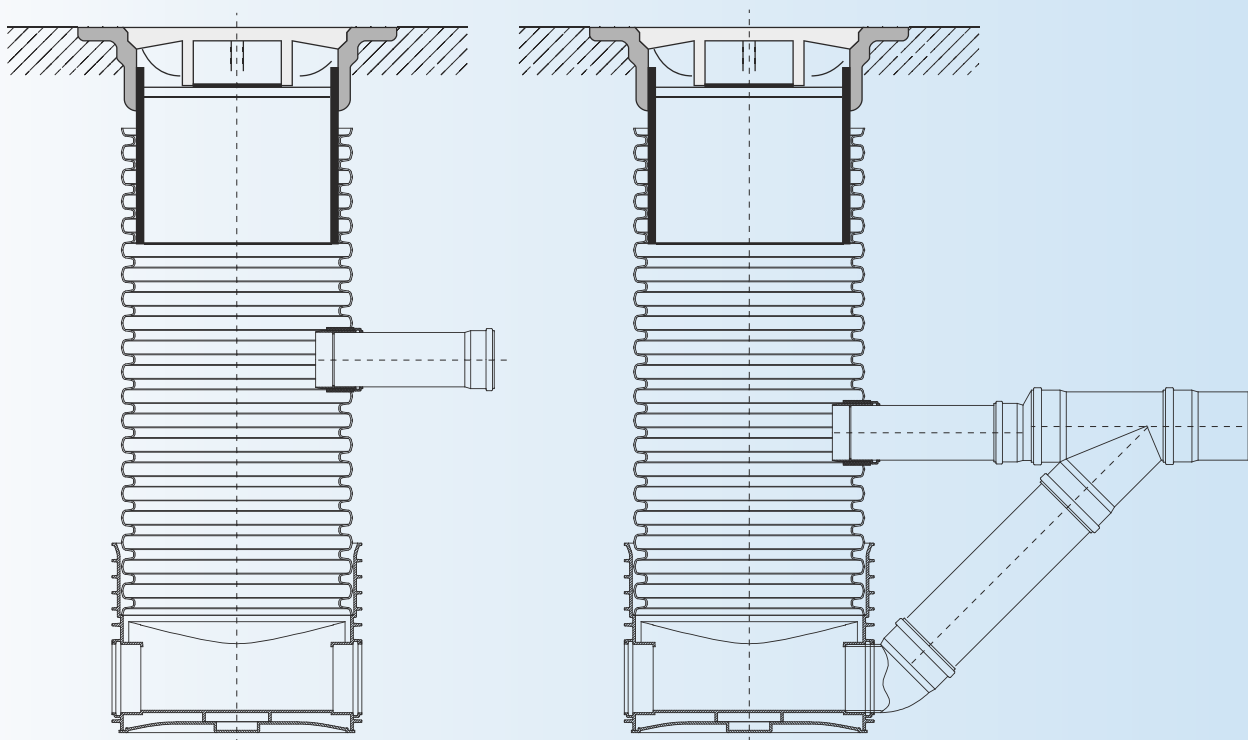


## BACKDROP CHAMBERS

If it is necessary to connect a sewerage pipe to a chamber above the chamber base, use a backdrop chamber.

PN-B-10729 reads as follows: "the backdrop chambers for channels 0.4 m diameter and a drop height of 0.5 - 4 m may be made with a downcomer pipe located outside or inside the chamber.

In the case of an inspection chamber without steps, it is not necessary to use a downcomer pipe since a connection to the rising pipe is enough. Such a connection is made using the in situ gasket, but this is possible only in the case of a channel having a diameter not larger than Ø 160. For a diameter of Ø 200 or more, it is necessary to use a downcomer pipe connected to the chamber base. This is achieved using a double branch and a reducer (see below).







TYPE 315

TYPE 400

TYPE 425

product code	Pipe diameter [mm]	Chamber type 315		Chamber type 400				Chamber type 425	
		straight	3 inlets	straight	3 inlets	connection on left	connection on right	straight	3 inlets
	110	-	-	34100	34110	-	-	35100	35110
	160	33116	33111	34130	34115	-	-	35130	35115
	200	33216	33211	34215	34210	-	-	35215	35210
	250	-	-	34235	34220	34230	34225	35235	35220
	315	-	-	34325	34310	34320	34315	35325	35310







HTPLUS INDOOR SEWAGE SYSTEM



ULTRA dB LOW-NOISE INDOOR SEWAGE SYSTEM



SKOLAN-dB THICK-WALLED, LOW-NOISE SEWAGE SYSTEM



KG PVC OUTDOOR SEWERAGE SYSTEM



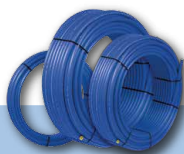
PP OUTDOOR SEWERAGE SYSTEM MAGNACOR



PP KG 2000 OUTDOOR SEWERAGE SYSTEM



SEWERAGE CHAMBERS SYSTEM



POLYETHYLENE (PE) PRESSURE PIPES



DRAINAGE (DR) SYSTEMS