## Magnast



INSPECTION CHAMBERS

## **CONTENTS**:

Introduction	5
Inspection chamber, Type 315	10
Inspection chamber, Type 400	14
Inspection chamber, Type 425	18
Installation instructions	24
Catch basins	25
- Catch basin construction	<b>25</b>
- In-situ seal installation	<b>26</b>
Comprehensive inspection chamber systems	<b>27</b>





INSPECTION CHAMBERS SC



## INTRODUCTION

Inspection chambers based on plastics are commonly used for waste and storm water sewers, water drainage solutions and subdrainage systems. Inspection chambers allow operating sewage and drainage systems to be maintained with service tools and equipment designed for inspection chambers without manhole access. Catch basins and drainage chambers are highly functional additions to storm water sewers and subdrainage systems.

#### A complete Magnaplast inspection chamber comprises three main components:

- Inspection chamber base unit
- Smooth or corrugated rising pipe (depending on the inspection chamber system)
- Chamber top

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

Magnaplast **chamber base units** are made from injection-moulded polypropylene (PP). The use of PP means the chamber base units are extremely durable and highly resistant to damage from impact, including at extremely low temperatures. The surface finish of each chamber base unit is very smooth and greatly reduces the risk of blockages forming. The high manufacturing precision of the chamber base units and their elastomer seals minimises the risk of black or grey water exfiltration and ground water infiltration.

The **rising pipe** can be a type 400 smooth-walled drainage pipe or a type 315 / 425 corrugated drainage pipe – the choice depends on the chamber base unit. The rising pipe can be trimmed to size on site – this requires a manual or power saw.

The design of Magnaplast chamber base units is fully compatible with Magnaplast KG piping and the Magnacor system of corrugated pipes.

INTRODUCTION SC

### Combination of an inspection chamber with the Magnacor corrugated pipe system:







#### CHAMBER TOPS

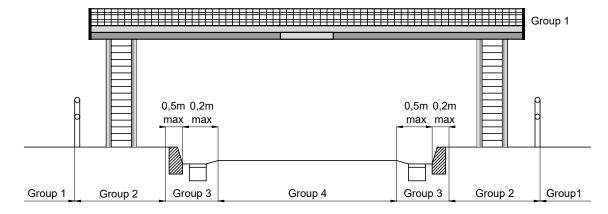
The chamber top class depends on the location of the inspection chamber and is defined in the engineering plans. Magnaplast carries chamber tops, the classification depending on the installation location and are broken down into the groups defined in **PN-EN 124**.

**Group 1** (min. class A15), 1.5 ton load capacity: installation in surfaces open to pedestrian and bicycle traffic only;

**Group 2** (min. class B125), 12.5 ton load capacity: light vehicular traffic areas (pedestrian pavements, yards and parking lots);

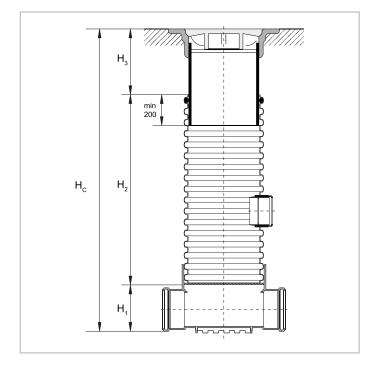
**Group 4** (min. class D400), 40 ton load capacity: heavy vehicular traffic (roads, streets and driveways).

For green lands and areas not exposed to loads from traffic, non-classified inspection chamber tops can be used, including PP chamber covers.



SC INTRODUCTION

**Group 3** (min. class C 250): this applies to the chamber tops located beside kerbs, in areas which extend 0.5 m maximum into the vehicular traffic lane and 0.2 m maximum into the pedestrian traffic lane (measured from the kerb upright side).



## Choosing the inspection chamber height

Hc = H1 + H2 + H3

where:

**Hc** - overall inspection chamber height

**H1** - inspection chamber service height

H2 - rising pipe height

H3 - telescope service height

#### **QUALITY CONTROL**

All Magnaplast products, including inspection chambers, must pass strict quality inspections and comply with all mandatory standards. The first-class quality of the products is also certified by the ISO 9001 quality management system maintained at Magnaplast.





PRODUCT SC CATALOGUE



# MAGNAPLAST INSPECTION CHAMBER



**TYPE 315** 

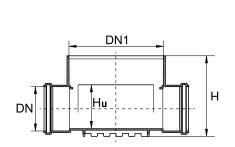
#### **INSPECTION CHAMBER COMPONENTS:**

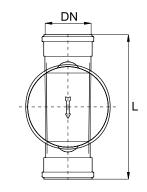
- Chamber base unit with seal, profiled bottom, and branch ports (if any)
- Rising pipe
- Telescope (extendible pipe complete with a cast-iron chamber cover)
- Seal

#### Magnaplast product range:

#### **CHAMBER BASE TYPE 315 STRAIGHT**

**WITH SEAL** 



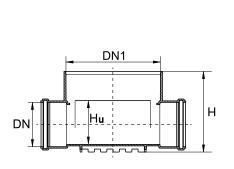


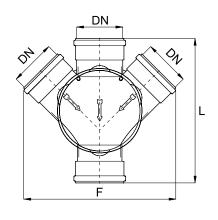


N [mm]	Dn1 [mm]	H [mm]	Hu [mm]	L [mm]	Product no.
160	341	290	165	521	33116
200	341	336	200	513	33216

#### **CHAMBER BASE TYPE 315 3 INLETS**

WITH SEAL



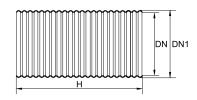




DN [mm]	Dn1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product no.
160	341	310	185	521	650	33111
200	341	356	220	513	680	33211

#### **CORRUGATED RISING PIPE RCP 315**



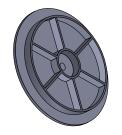


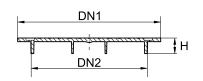
DN [mm]	DN1 [mm]	H [mm]	Product no.
300	338	1250	33013
300	338	2000	33021
300	338	3000	33031
300	338	6000	33061

#### **PP COVER, A15 - 1.5 T TYPE 315**

**INSTALLED DIRECTLY ON THE RCP 315 RISING PIPE** 





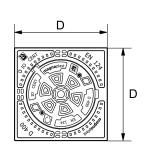


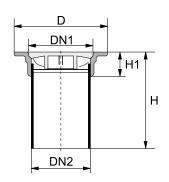
DN1 [mm]	DN2 [mm]	H [mm]	Product no.
360	297	39	33400

#### **TELESCOPIC COVER**

TELESCOPE PIPE WITH CAST IRON COVER



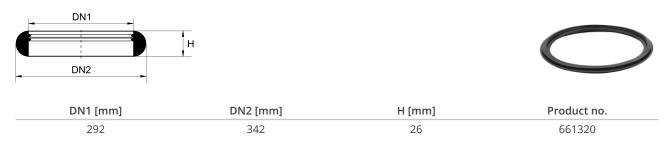




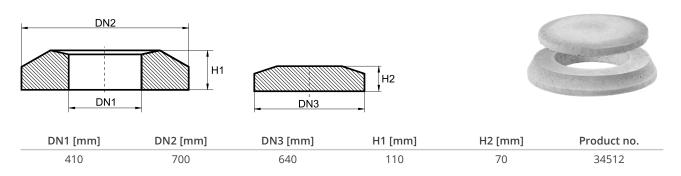
	D [mm]	DN1 [mm]	DN2 [mm]	H [mm]	H1 [mm]	Product no.
A15 - 1.5 t cover without ventilation	342	310	295	475	50	666450
B125 - 12.5 t cover without ventilation	342	255	295	495	90	666400
D400 – 40 t cover without ventilation	342	255	295	495	90	666420
B125 - 12.5 t cover with ventilation	342	255	295	495	90	666410
D400 – 40 t with grate	342	255	295	495	90	666430

#### **TELESCOPE SEAL**

#### FITS THE RCP 315 CORRUGATED RISING PIPE

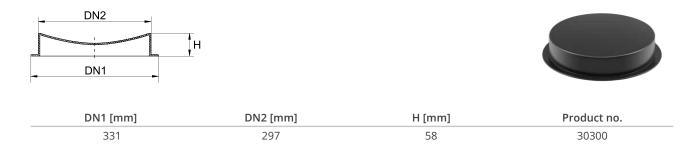


#### **CONCRETE CONE WITH COVER TYPE 315 AND 400**

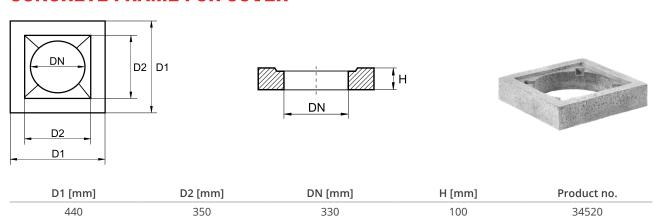


#### PP BOTTOM

#### FITS THE RCP 315 CORRUGATED RISING PIPE



#### **CONCRETE FRAME FOR COVER**



# MAGNAPLAST INSPECTION CHAMBER



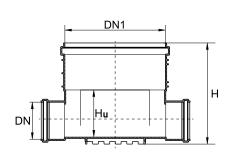
TYPE 400

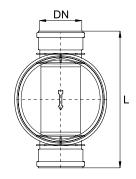
#### **INSPECTION CHAMBER COMPONENTS:**

- Chamber base with seal, profiled bottom, and branch ports (if any)
- Rising pipe
- Telescope (telescopic pipe complete with a cast-iron chamber cover)
- Casing end seal

#### **CHAMBERS BASE TYPE 400 STRAIGHT**

#### WITH SEAL



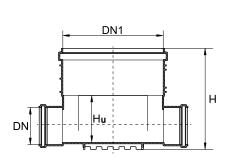


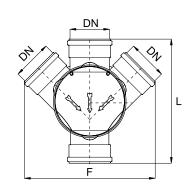


DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	Product no.
110	400	351	355	456	34100
160	400	432	205	590	34130
200	400	401	410	509	34215
250	400	530	293	710	34235
315	400	800	540	1080	34325

#### **CHAMBER BASE TYPE 400 3 INLETS**

#### WITH SEAL



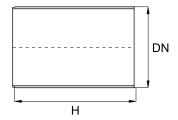




DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product no.
110	400	352	335	456	550	34110
160	400	432	205	536	600	34115
200	400	402	410	509	660	34210
250	400	800	545	1130	1130	34220
315	400	800	545	1080	1130	34310

#### **SMOOTH RISING PIPE RSP 400**





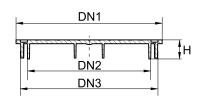
DN [mm]	H [mm]	Product no.
400	2000	34020
400	3000	34030
400	6000	34060

### **PP COVER, A15 - 1.5 T TYPE 400**

INSTALLED DIRECTLY ON THE RSP 400 RISING PIPE





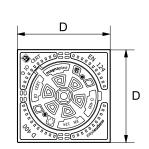


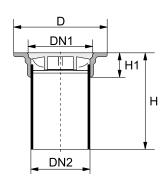
DN1 [mm]	DN2 [mm]	DN3 [mm]	H [mm]	Product no.
448	379	426	45	34400

#### **TELESCOPIC COVER**

TELESCOPE PIPE WITH CAST IRON COVER

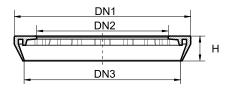


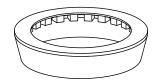




	D [mm]	DN1 [mm]	DN2 [mm]	H [mm]	H1 [mm]	Product no.
A15 - 1.5 t cover without ventilation	342	310	295	475	50	666450
B125 - 12.5 t cover without ventilation	342	255	295	495	90	666400
D400 - 40 t cover without ventilation	342	255	295	495	90	666420
B125 - 12.5 t cover with ventilation	342	255	295	495	90	666410
D400 – 40 t cover with ventilation	342	255	295	495	90	666430

#### TELESCOPE CASING END SEAL FOR RSP 400 SMOOTH RISING PIPES

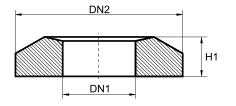


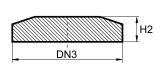




DN1 [mm]	DN2 [mm]	DN3 [mm]	H [mm]	Product no.
404	277	366	73	34611

#### **CONCRETE CONE WITH COVER TYP 400 AND 315**

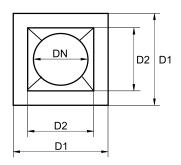


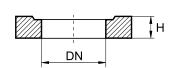




DN1 [mm]	DN2 [mm]	DN3 [mm]	H1 [mm]	H2 [mm]	Product no.
410	700	640	110	70	34512

#### **CONCRETE FRAME FOR COVER**







D1 [mm]	D2 [mm]	DN [mm]	H [mm]	Product no.
440	350	330	100	34520





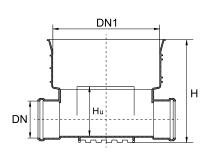
**TYPE 425** 

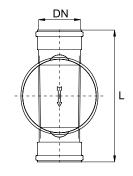
#### **INSPECTION CHAMBER COMPONENTS:**

- Chamber base with seal, profiled bottom, and branch ports (if any)
- Rising pipe
- Telescope (telescopic pipe complete with a cast-iron chamber cover)
- Casing end seal / seal for telescope

#### **CHAMBERS BASE TYPE 425 STRAIGHT**

#### WITH SEAL



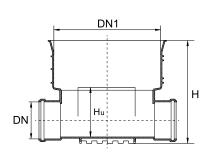


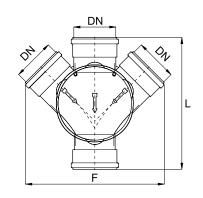


DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	Product no.
110	455	335	200	460	35100
160	455	441	210	590	35130
200	455	384	240	515	35215
250	455	780	515	1130	35235
315	455	780	520	1080	35325

#### **CHAMBERS BASE TYPE 425 3 INLETS**

#### WITH SEAL



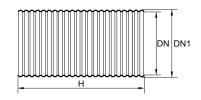




DN [mm]	DN1 [mm]	H [mm]	Hu [mm]	L [mm]	F [mm]	Product no.
110	455	334	200	460	550	35110
160	455	432	210	536	600	35115
200	455	384	240	515	620	35210
250	455	780	515	1130	1130	35220
315	455	780	520	1080	1130	35310

#### **CORRUGATED RISING PIPE RCP 425**



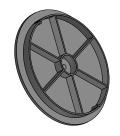


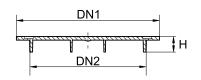
DN [mm]	DN1 [mm]	H [mm]	Product no.
400	451	2000	35020
400	451	3000	35030
400	451	6000	35060

### **PP COVER, A15 - 1.5 T TYPE 425**

**INSTALLED DIRECTLY ON THE RCP 425 RISING PIPE** 





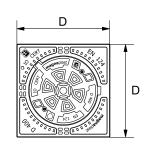


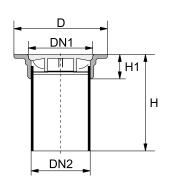
DN1 [mm]	DN2 [mm]	H [mm]	Product no.
448	396	48	35400

#### **TELESCOPIC COVER**

TELESCOPE PIPE WITH CAST IRON COVER

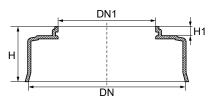






	D [mm]	DN1 [mm]	DN2 [mm]	H [mm]	H1 [mm]	Product no.
A15 - 1.5 t cover without ventilation	342	310	295	475	50	666450
B125 - 12.5 t cover without ventilation	342	255	295	495	90	666400
D400 – 40 t cover without ventilation	342	255	295	495	90	666420
B125 - 12.5 t cover with ventilation	342	255	295	495	90	666410
D400 – 40 t cover with ventilation	342	255	295	495	90	666430

## ADAPTER PP RCP 425 WITH 295 SEAL FOR THE RCP 425 CORRUGATED RISER PIPE



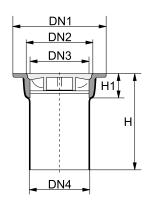


DN	[mm]	DN1 [mm]	H [mm]	H1 [mm]	Product no.
	455 P 425	295	160	28	35612

Seal for RCP 425 required. See p. 22

#### **TL-400 TELESCOPE WITH COVER FOR RCP 425**

WITH TELESCOPIC PIPE AND SOLID CAST-IRON COVER





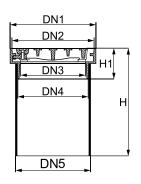


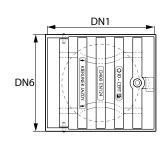


	DN1 [mm]	DN2 [mm]	DN3 [mm]	DN4 [mm]	H [mm]	H1 [mm]	Product no.
B125 - 12.5 t / TL-400	524	414	325	392	650	110	35411
D400 – 40 t / TL-400	524	414	325	392	650	110	35426
D400 – 40 t / TL-400 (with grate)	524	414	325	392	650	110	35425

#### **TL-400 STREET INLET FOR RCP 425**

WITH TELESCOPIC PIPE AND HINGED CAST-IRON GRATE





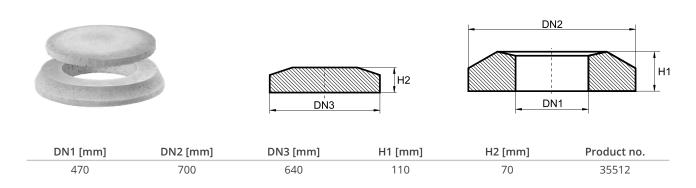


	DN1 [mm]	DN2 [mm]	DN3 [mm]	DN4 [mm]	DN5 [mm]	DN6 [mm]	H1 [mm]	H [mm]	Product no.
D400 – 40 t / TL-400 (with grate)	450	432	340	370	392	406	160	685	35436

## TL-400 TELESCOPE SEAL FOR RCP 425 / FOR INSTALLATION INSIDE THE RCP OR ADAPTER SEAL FOR RCP 425 / FOR INSTALLATION OUTSIDE THE RCP

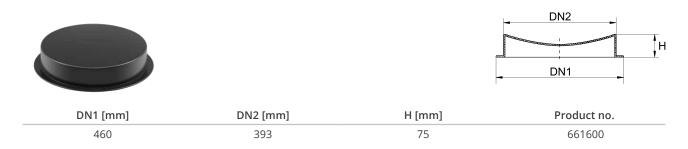


#### **CONCRETE CONE WITH COVER TYPE 425**

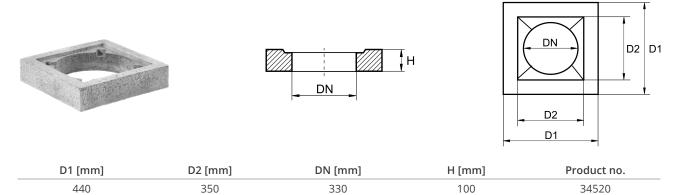


#### PP BOTTOM

#### FITS THE RCP 425 CORRUGATED RISING PIPE



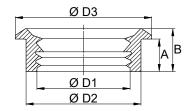
#### **CONCRETE FRAME FOR COVER**



SC ACCESSORIES

## **ACCESSORIES**

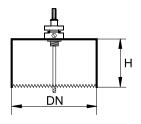
#### **IN-SITU SEAL**





	D1 [mm]	D2 [mm]	D3 [mm]	A [mm]	B [mm]	Product no.
DN 110	110	140	157	48	61	34615
DN 160	160	190	205	50	65	34620
DN 200	200	230	250	50	60	34625

#### **HOLE SAW FOR IN-SITU**





	DN [mm]	H [mm]	Product no.
DN 110	138	89	39900
DN 160	186	89	39920
DN 200	226	89	39930

#### **LUBRICANTS**

Capacity	Product no.
250g	13110
500g	13120



## INSTALLATION INSTRUCTIONS

The inspection chamber must be installed in a properly prepared and drained earth pit and according to the engineering plans of the drainage system.



**1.** Remove all large and sharp stones or other hard objects from the pit, and create a bedding layer (at least 10 cm thick) of coarse sand.



2. Position the chamber base unit on the sand bedding (remember to level it properly and consider the base unit base slope of 1.5%), connect the drainage pipes, and bury the chamber base unit to approximately 10 cm above the pipe height to secure the base unit against shifting.



**3.** Cut the rising pipe to length and mount (corrugated rising pipes must be cut in the valley and not on the ridge, followed by installation of the seal in the first valley from the trimmed edge).

SC CATCH BASINS



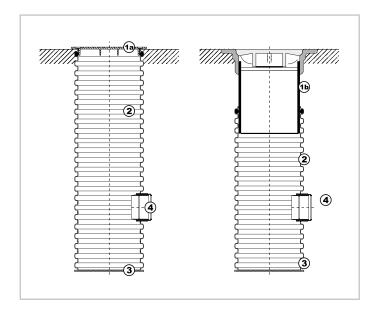
**4.** Clean the chamber base unit. Apply a lubricant to the inside of the chamber base unit and the seal on the rising pipe. Install the rising pipe securely, with the seal towards the chamber base units. The inspection chamber is ready to be buried in easily compactable soil. Bury the inspection chamber in layers, each up to 30 cm deep.



5. Install the chamber top

## **CATCH BASINS**

Magnaplast rising pipes can be combined to construct a catch basin. Instead of a chamber base unit, a PP bottom or a blind plate is installed. The catch basin is closed with a suitable chamber top. Follow the installation instructions (see Section 5 on p. 27).



#### Design of a catch basin

1a. PP cover

**1b.** Telescopic cover

2. Rising pipe

3. PP bottom

4. In-situ seal

CATCH BASINS SC

The in-situ seals allow the addition of another connection to the rising pipe. The chamber outlet port can be installed at any height along the rising pipe, and sealed with the insitu seal.

#### In-situ seal installation



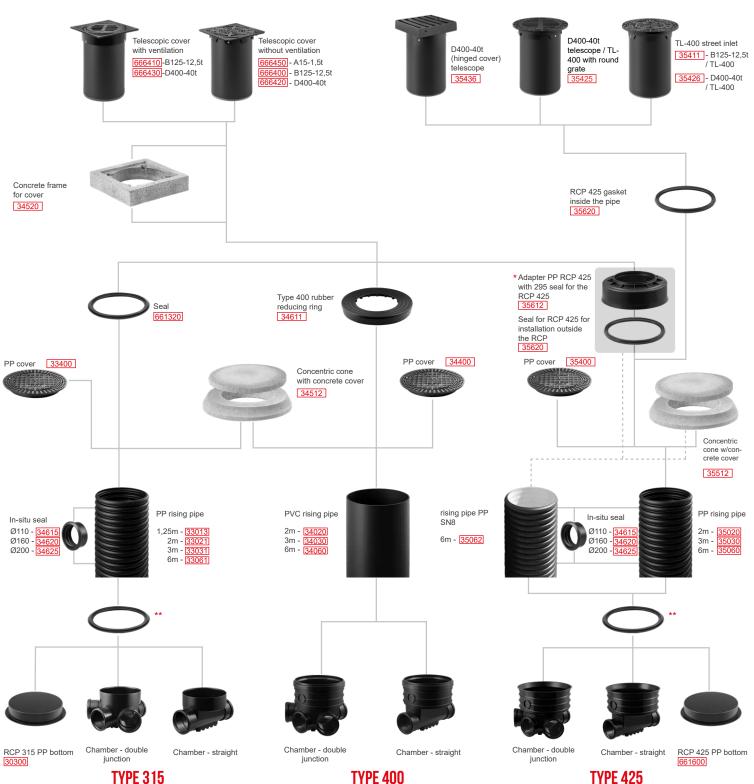
**1.** Cut a hole at the required height on the rising pipe and deburr it completely.



**2.** Install the in-situ seal in the opening and apply a lubricant.



**3.** Connect the drain pipe.



Pipe O.D.		Type 315 base unit		Type 400 base unit		Type 425 base unit	
	[mm]	Straight	Double junction	Straight	Double junction	Straight	Double junction
Product no.	110	-	-	34100	34110	35100	35110
	160	33116	33111	34130	34115	35130	35115
	200	33216	33211	34215	34210	35215	35210
	250	-	-	34235	34220	35235	35220
	315	-	-	34325	34310	35325	35310

NOTES:		

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## **magna**plast



HTPLUS INDOOR LOW- NOISE SEWAGE SYSTEM



**ULTRA dB SOUNDPROOF INDOOR SEWAGE SYSTEM** 



SKOLAN dB THICK-WALLED, SOUNDPROOF SEWAGE SYSTEM



KG PVC-U OUTDOOR SEWERAGE SYSTEM



PP OUTDOOR SEWAGE SYSTEM MAGNACOR



KG 2000 PP SN10 / SN16 OUTDOOR SEWAGE SYSTEM



**SEWERAGE CHAMBERS SYSTEM (SC)** 



POLYETHYLENE (PE) PRESSURE PIPES



**DRAINAGE (DR) SYSTEMS** 

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