





# WELL COMPONENTS

## STEEL Division

### CARBON

WATER WELLS  
DRAINAGE

### INOX

WATER WELLS  
ENVIRONMENTAL  
REMEDIATION  
GEOTHERMAL

## PLASTIC Division

### PVC

GEOTECHNICS  
WATER WELLS

### HDPE

BIOGAS  
DRAINAGE  
ENVIRONMENTAL  
REMEDIATION

We have always believed that water is a precious resource, and that the best way to enhance its value is by ensuring safe, reliable, and long-lasting solutions. This is why we design and manufacture pipes and filters for artesian wells, filtering systems, and pipelines intended for water and gas collection, as well as specialized components for environmental monitoring and remediation.

Our mission is clear: to create high-quality products that enable our customers to work with maximum efficiency and safety. We do not carry out field operations; instead, we focus on the quality of materials and the reliability of components, because we believe that a successful project begins with the right technical choices. With a complete range of products available in stock, we are able to provide tailored solutions quickly and meet the needs of both domestic and international markets.

Every day, we invest in new technologies, research, and training to offer cutting-edge products that comply with the strictest European standards and current sanitary regulations. Choosing GTS means relying on a trustworthy and competent technical partner, combining innovation, quality, and genuine passion for our work.



WATER  
WELLS



GEOTECHNICS



GEOTHERMAL



BIOGAS  
CAPTURE



DRAINAGE



ENVIRONMENTAL  
REMEDIATION

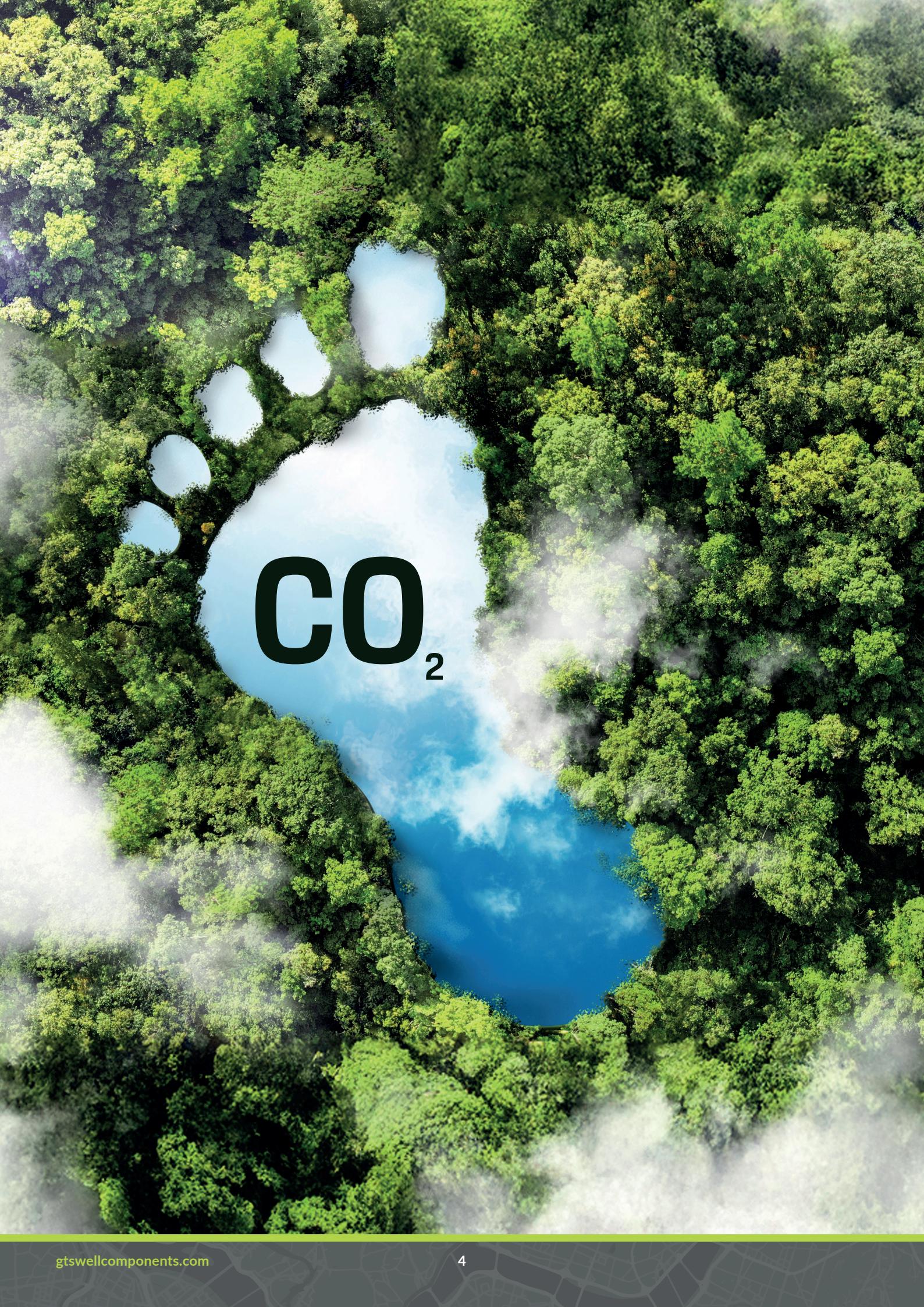


BRIDGES AND  
INFRASTRUCTURE



TUNNEL

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**CO<sub>2</sub>**

# We Measure Our Impact. You See the Value.

## CFP Systematic approach ISO 14067

To tackle climate change, it is essential to measure the carbon footprint.

ISO 14067 provides a scientific methodology based on life-cycle assessment (ISO 14040/44).

GTS Well Components adopts the CFP Systematic Approach to reduce the carbon footprint of its products.

- Standardized internal procedures
- Definition of life-cycle boundaries
- Collection and verification of primary and secondary data
- Application of LCA analysis according to ISO 14040/44
- Documentation ensuring traceability and compliance

**Next step:**  
certification of the calculation system by a body accredited under ISO 14067.

**CFP Systematic Approach  
according to ISO 14067  
sustainability takes shape,  
step by step, data by data.**



ENVIRONMENTAL  
REMEDIATION



WATER  
WELLS



GEOTECHNICS



GEOTHERMAL



BIOGAS  
CAPTURE



DRAINAGE

## MATERIAL

### STAINLESS STEEL

- AISI 304 1.4301

- AISI 316 1.4404



## CONTINUOUS SPIRAL FILTERS

### Spiroscreen® - The range of continuous spiral screens

The Spiroscreen® line represents the excellence of continuous spiral screens, entirely designed and manufactured in-house by GTS.

Each screen is produced through continuous winding—at a controlled pitch—of a triangular-section profile over robust round support rods.

Every intersection between the profile and the rod is resistance-welded (RW), ensuring maximum strength and long-term durability.

The spiral design provides a large open area, allowing high flow rates while maintaining low inlet velocity.

This balance is key to optimal well development, ensuring superior performance and greater operational efficiency.

With Spiroscreen®, innovation and reliability work together to deliver a high-performance filtration solution designed to ensure concrete and long-lasting results.

### ADVANTAGES

- Minimal hydraulic resistance
- Reduced scaling and lower maintenance requirements
- Less entry of impurities (sand and fine particles)
- Longer pump service life
- Fast and complete removal of drilling fluids
- Available from DN60 to DN600
- Slot size configurable to the tenth of a millimeter based on the grain-size curve

## JOINTS

BUTT  
WELDING



WELDING  
COLLAR



BOLTED  
COLLAR



FLANGED

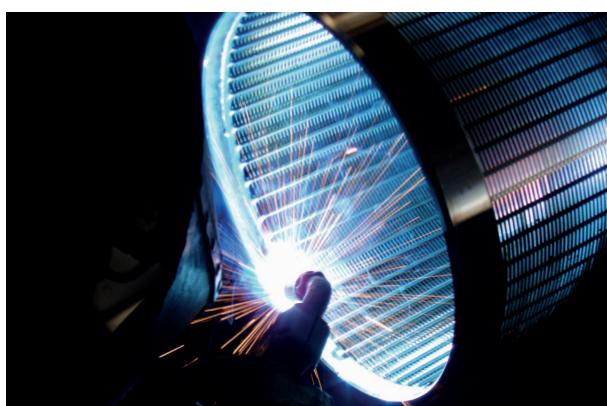
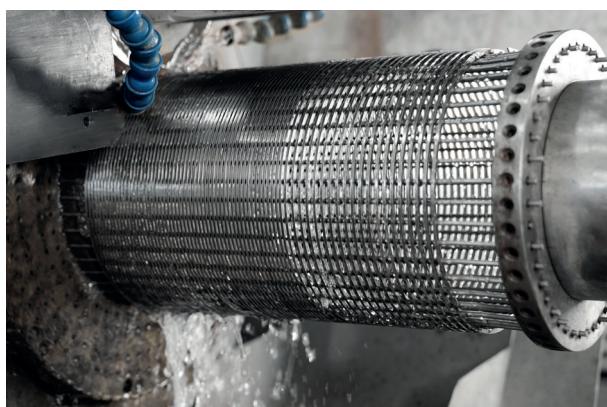


THREADED





TECHNICAL  
DATA



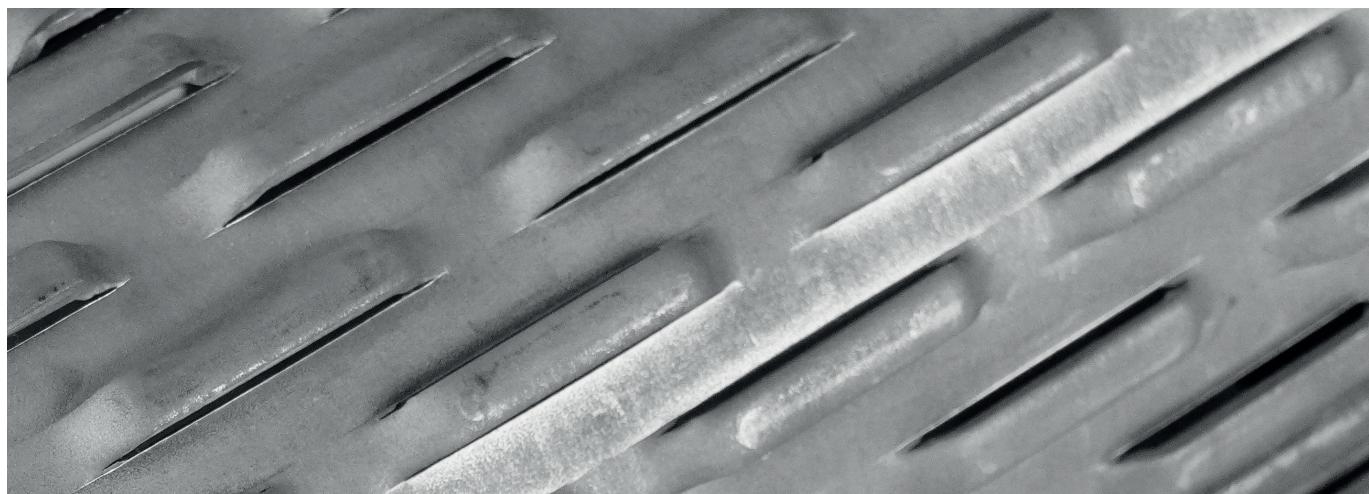


## MATERIAL

CARBON STEEL

- AISI STANDARD

Thickness from 6.0 to 8.0 mm, on request up to 12.0 mm



## BRIDGE-SLOT SCREENS

### Strength and Reliability

The range of bridge-slot screens, entirely manufactured by GTS, is produced by punching carefully selected steel sheets.

Thanks to this technology, the screens achieve a unique geometry and a wide open area, designed to ensure proper water flow without compromising structural strength.

The result is a product that maintains its collapse resistance unchanged over time, providing stability and reliable performance even under the most demanding operating conditions.

With GTS bridge-slot screens, construction quality, safety, and durability come together to offer a strong, long-lasting, and high-performance solution.

### ADVANTAGES

- Robust structure with long-term stability
- High collapse resistance
- Uniform and controlled filtering surface
- Suitable for large-diameter wells
- Selected materials for durability and environmental compatibility

## JOINTS

BUTT  
WELDING



WELDING  
COLLAR



FLANGED



THREADED





TECHNICAL  
DATA



**Thickness** 3,0-8,0

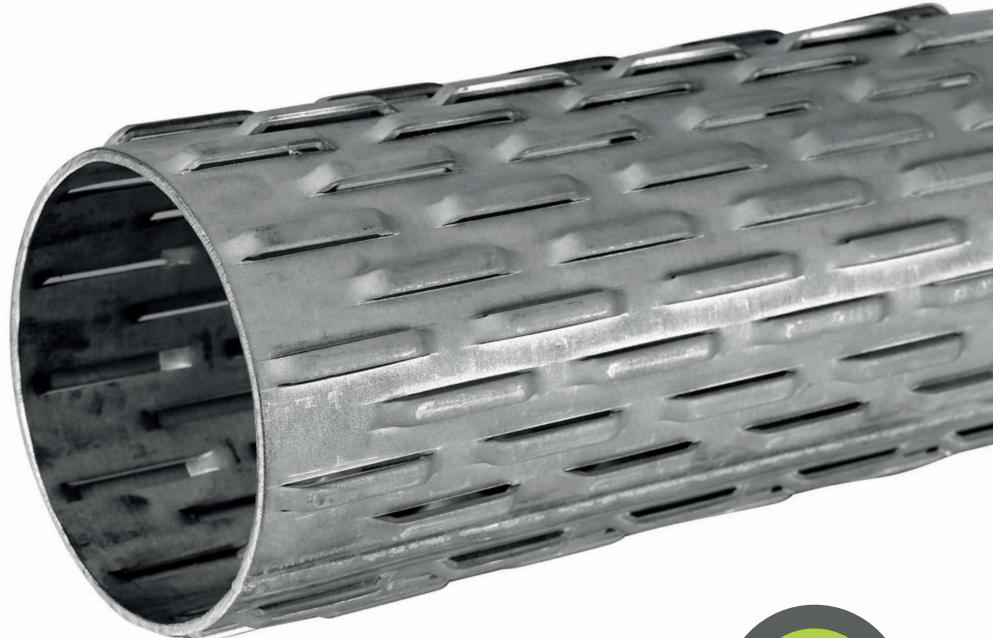
**Punch:** 33x8 mm  
x=60 mm  
y=22 mm

**Thickness** 10-12

**Punch:** 33x8 mm  
x=70 mm  
y=25 mm

Slot (mm)	Open Area (%)
0,5	2,40
0,7	3,30
1,0	4,80
1,5	7,20
2,0	9,60
2,5	12,00
3,0	14,40

Slot (mm)	Open Area (%)
1,0	2,80
1,5	4,20
2,0	5,60
2,5	7,00
3,0	8,40





## MATERIAL

CARBON STEEL

STAINLESS STEEL

- AISI STANDARD - BLACK STEEL

Thickness from 3 to 10 mm, on request up to 12.0 mm



## PUNCHED-SHEET SCREENS

### Flow Capacity and Versatility

The range of punched-sheet screens, entirely manufactured by GTS, is produced from high-quality perforated steel sheets. These screens are particularly suitable in applications requiring high flow rates and for dewatering or drainage operations.

The regular hole geometry ensures a constant flow and low head loss while maintaining a strong and durable structure.

For drainage applications, through-slot screens can be further wrapped with a geotextile (TNT), providing enhanced efficiency and superior protection against the entry of fine particles.

With GTS punched-sheet screens, reliability and versatility come together to offer a robust, practical solution suitable for a wide range of applications.

### ADVANTAGES

- High filtering surface and excellent flow capacity
- Simple and robust structure
- Option to add TNT geotextile wrapping
- Wide choice of perforations and thicknesses
- Strong material with excellent weldability

## JOINTS

BUTT  
WELDING



WELDING  
COLLAR



BOLTED  
COLLAR

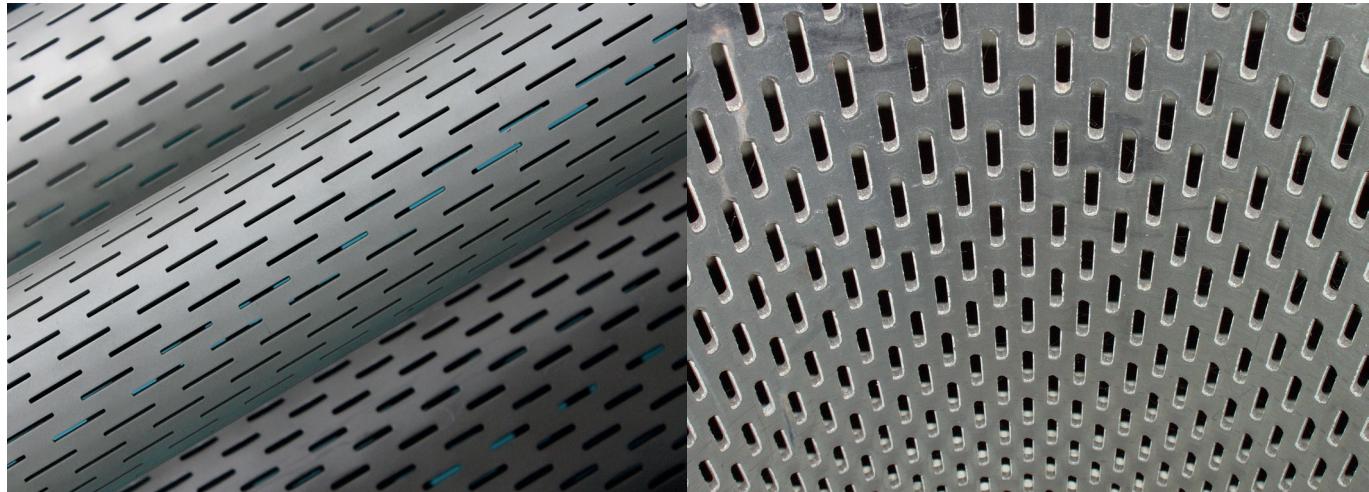


THREADED



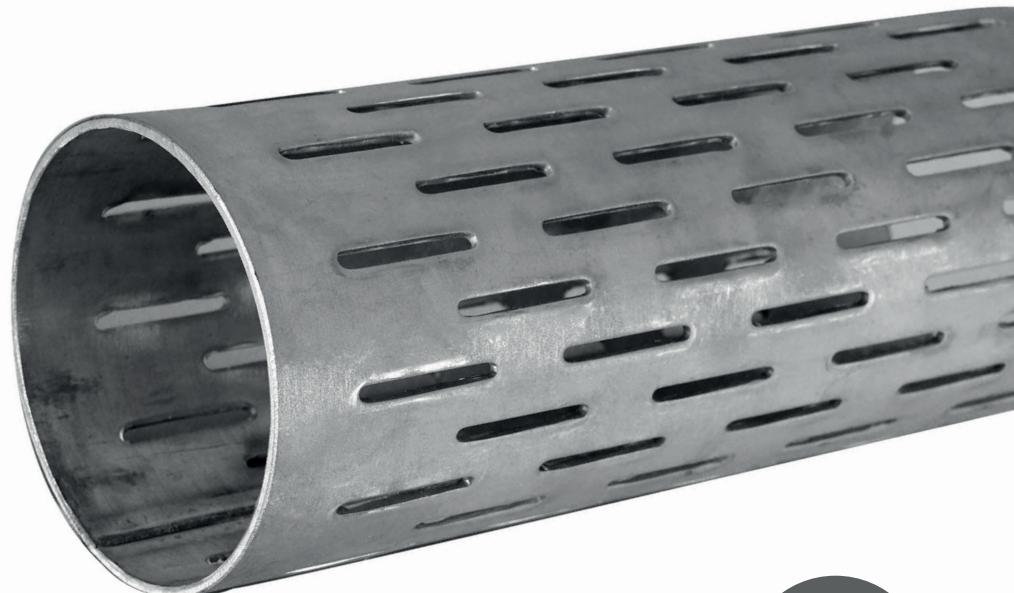


TECHNICAL  
DATA



		Wall Thickness						
A x B (mm)	X - Y (mm)	S - Th (mm)	3x40	4x40	5x40	6x40	8x40	10x40
3 x 40	60 -15	3,0	o	o	o	o	o	o
4 x 40	60 -15	4,0		o	o	o	o	o
5 x 40	60 -15	5,0		o	o	o	o	o
6 x 40	60 -20	6,0			o	o	o	o
8 x 40	60 -20	8,0					o	o
10 x 40	60 -20	10,0						

		Open Area					
Asola - Ob. Hole	%	3x40	4x40	5x40	6x40	8x40	10x40
		13,33	17,78	22,22	20	26,67	33,33





## CASING PIPES

### Carbon Steel – Stainless Steel

Steel pipes and screens suitable for welding are manufactured with longitudinal welds executed in full penetration using the PLASMA (PAW) process, while circumferential welds are produced using an automatic MIG process, ensuring a minimum penetration of 90% of the wall thickness.

The welding procedures have been selected to guarantee maximum mechanical integrity and optimal corrosion protection, preventing the formation of oxides or structural defects.

All welded joints, both in carbon steel and stainless steel, undergo non-destructive testing and procedure qualification tests (WQR) issued by TÜV Italia, a certified body.

#### ADVANTAGES

- Excellent mechanical strength
- High long-term reliability
- Perfect hydraulic sealing
- Compliance with UNI and ISO standards

## JOINTS

BUTT  
WELDING



WELDING  
COLLAR



BOLTED  
COLLAR



FLANGED



THREADED



STAINLESS STEEL

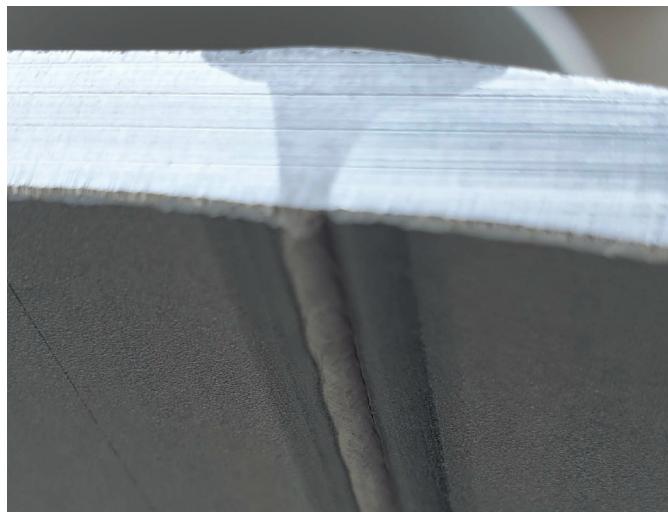
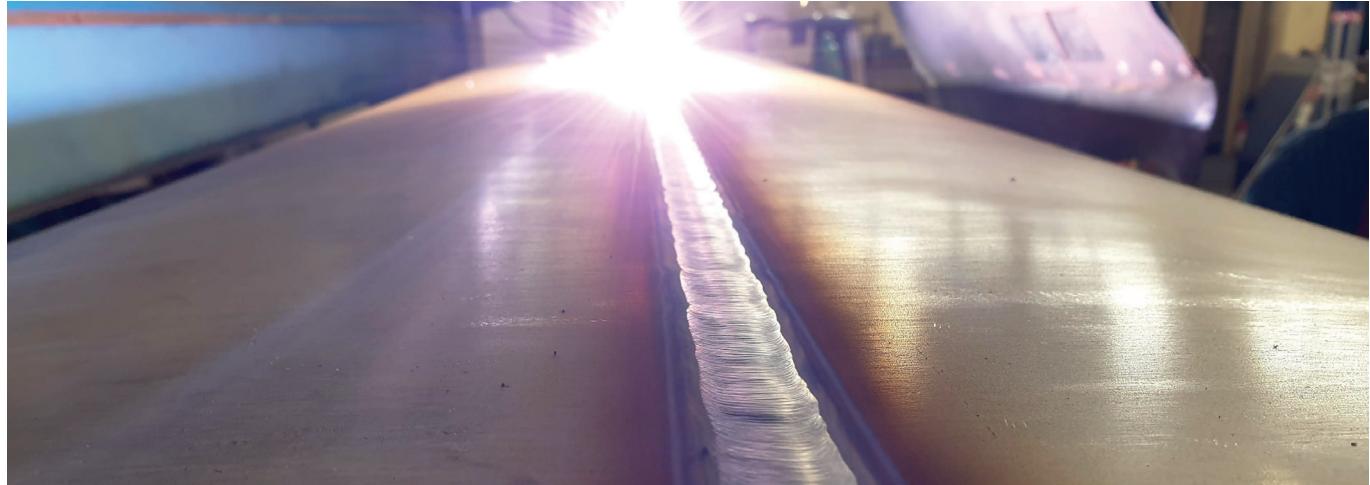
- EN 1.4016 / AISI 430 FERRITIC
- EN 1.4301 / AISI 304
- EN 1.4307 / AISI 304L

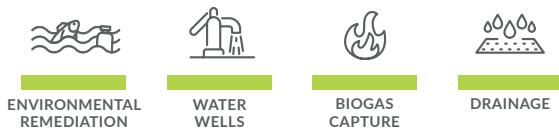
**MATERIAL**

- EN 1.4401 / AISI 316
- EN 1.4404 / AISI 316L
- EN 1.4571 / AISI 316 TI



TECHNICAL  
DATA





## MATERIAL

HIGH-DENSITY POLYETHYLENE - PE100

- Compliant with UNI EN 12201-2 standards



## HIGH-DENSITY POLYETHYLENE PIPES (HDPE)

### Threaded and Slotted

High-density polyethylene pipes (HDPE) are designed to ensure high mechanical and hydraulic performance in civil, industrial, and agricultural applications. Manufactured from high-resistance thermoplastic material, they offer excellent dimensional stability, outstanding impact and tensile strength, and a service life exceeding 50 years under standard operating conditions.

The threaded version allows quick and secure coupling without the need for welding, simplifying installation and maintenance operations. The slotted configuration makes the pipe particularly suitable for drainage, filtration systems, and piezometers, ensuring excellent intake capacity and uniform flow distribution.

### ADVANTAGES

- High mechanical and chemical resistance
- No corrosion (PE100 is immune to the oxidative and corrosive phenomena typical of metals)
- Excellent resistance to chemicals, acids, and solvents
- Long service life even in contaminated soils or aggressive water conditions
- Flexibility and light weight, facilitating transport and installation
- Compatibility with standard fittings and GTS couplings
- Joint integrated directly into the pipe

## JOINTS

MF  
THREADING





### PN6 SDR26

DN*	TH (mm)	ID ø	Weight
63	-	-	-
75	-	-	-
90	-	-	-
110	-	-	-
125	-	-	-
140	-	-	-
160	6,2	147,6	2,85
180	6,9	166,2	3,56
200	7,7	184,6	4,42
225	8,6	207,8	5,55
250	9,6	230,8	6,89
280	10,7	258,6	8,60
315	12,1	290,8	10,94
355	13,6	327,8	13,86
400	15,3	369,4	17,57
450	17,2	415,6	22,22
500	19,1	461,8	27,41
560	21,4	517,2	34,40
630	24,1	581,8	43,58
710	27,2	655,6	55,43
800	30,6	738,8	70,27



### PN10 SDR17

DN*	TH (mm)	ID ø	Weight
75	4,5	66	0,95
90	5,4	79,2	1,36
110	6,6	96,8	2,04
125	7,4	110,2	2,60
140	8,3	123,4	3,26
160	9,5	141	4,27
180	10,7	158,6	5,41
200	11,9	176,2	6,68
225	13,4	198,2	8,46
250	14,8	220,4	10,39
280	16,6	246,8	13,05
315	18,7	277,6	16,54
355	21,1	312,8	21,03
400	23,7	352,6	26,62
450	26,7	396,6	33,73
500	29,7	440,6	41,69
560	33,2	493,6	52,20
630	37,4	555,2	66,15
710	42,1	625,8	83,92
800	47,4	705,2	106,47

### PN16 SDR11

DN*	TH (mm)	ID ø	Weight
63	5,8	51,4	0,99
75	6,8	61,4	1,38
90	8,2	73,6	2,00
110	10	90	2,98
125	11,4	102,2	3,87
140	12,7	114,6	4,83
160	14,6	130,8	6,34
180	16,4	147,2	8,01
200	18,2	163,6	9,88
225	20,5	184	12,51
250	22,7	204,6	15,40
280	25,4	229,2	19,30
315	28,6	257,8	24,45
355	32,2	290,6	31,02
400	36,3	327,4	39,40
450	40,9	368,2	49,94
500	45,4	409,2	61,60
560	50,8	458,4	77,20
630	57,2	515,6	97,79
710	-	-	-
800	-	-	-

### PN25 SDR7,4

DN*	TH (mm)	ID ø	Weight
63	8,6	45,8	1,40
75	10,3	54,4	1,99
90	12,3	65,4	2,85
110	15,1	79,8	4,28
125	17,1	90,8	5,51
140	19,2	101,6	6,92
160	21,9	116,2	9,03
180	24,6	130,8	11,41
200	27,4	145,2	14,11
225	30,8	163,4	17,85
250	34,2	181,6	22,03
280	38,3	203,4	27,63
315	43,1	228,8	34,98
355	48,5	258	44,37
400	54,7	290,6	56,37
450	61,5	327	71,31
500	-	-	-
560	-	-	-
630	-	-	-
710	-	-	-
800	-	-	-



**MATERIAL**  
HIGH-DENSITY POLYETHYLENE  
- 360° SLOTTING FOR UNIFORM INTAKE  
- PARTIAL SLOTTING TO DIRECT FLOW IN SPECIFIC DIRECTIONS



## BIOGAS CAPTURE SCREENS

### HDPE

Biogas capture screens are essential components in systems for collecting and managing gas generated from controlled landfills, waste treatment plants, and storage sites.

Their primary function is to ensure a constant and safe biogas flow, preventing blockages and promoting the separation of solids and liquids present underground.

Made of high-density polyethylene (PE100), they guarantee chemical and mechanical resistance even in highly aggressive or contaminated environments.

#### FEATURES

- Material: high-density polyethylene (PE100), resistant to corrosion, chemical agents, and aggressive leachates.
- Filtering structure: made of slots, configurable according to soil grain size and the required capture flow rate.
- Excellent mechanical stability and flexibility, ideal for installations in challenging environmental conditions.
- Service life exceeding 50 years under standard operating conditions.
- Joint integrated directly into the pipe.

### JOINTS

MF  
THREADING



### WELLS



### DRAINAGE WITH 120° SLOTTED CHANNEL





TECHNICAL  
DATA



SLOT 6 mm PITCH 15

SLOT 9 mm PITCH 18

SLOT 15 mm PITCH 24

SDR11

DN*
180
200
225
250
280
315
355
400

SDR17,6

DN*
180
200
225
250
280
315
355
400



## **FILTERS FOR DRAINS AND PIEZOMETERS**

### **HDPE**

High-density polyethylene (HDPE) screens are recommended for applications where soil conditions are corrosive or particularly aggressive, such as contaminated sites, landfills, and environmental remediation areas.

Thanks to their chemical and mechanical resistance, these screens ensure long operational life and excellent hydraulic performance even under challenging installation conditions.

Available in various lengths, they come in standard configurations or can be customized according to project requirements.

#### **SLOTTED SCREENS**

- Slotting can be fully configured according to the specific application.
- The slot size, ranging from 0.5 to 5 mm, can be arranged to provide 360° uniform intake or partial intake to direct flow in specific directions.

## **JOINTS**

MF  
THREADING





TECHNICAL  
DATA



PIEZOMETERS - DRAINAGE

A01	Dimensions	Length m
2" ø63x5,8 mm	1	
	2	
	3	
	6	
2"1/2 ø75x6,8 mm	1	
	2	
	3	
	6	
3" ø90x6,7 mm	1	
	2	
	3	
	6	
4" ø110x6,6 mm	1	
	2	
	3	
	6	
4"1/2 ø125x7,4 mm	1	
	2	
	3	
	6	
5" ø140x8,3 mm	1	
	2	
	3	
	6	
ø160x9,5 mm	1	
	2	
	3	
	6	

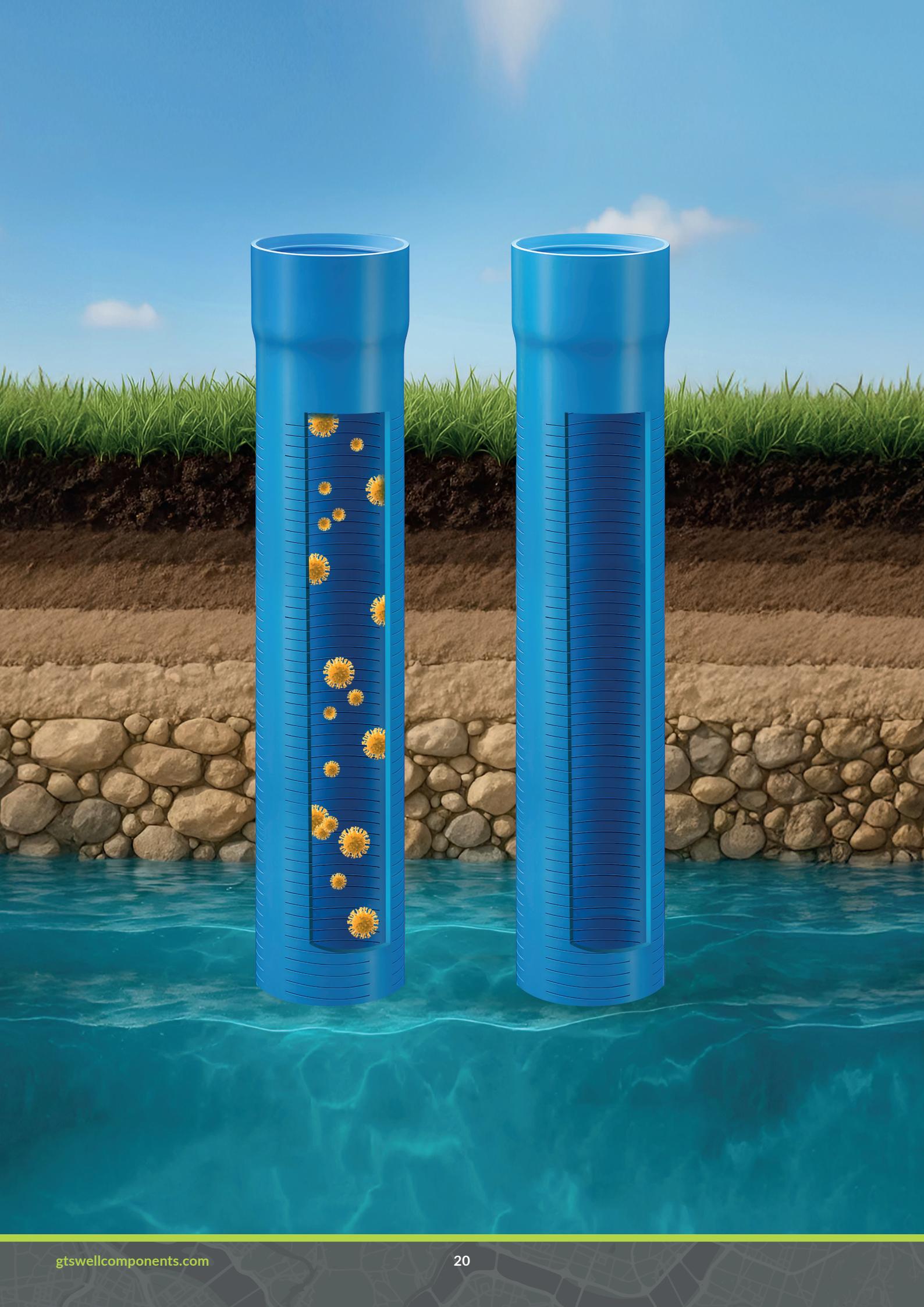
HDPE PE100 M/F TRAPEZOIDAL

WELLS



DRAINAGE WITH 120° SLOTTED CHANNEL



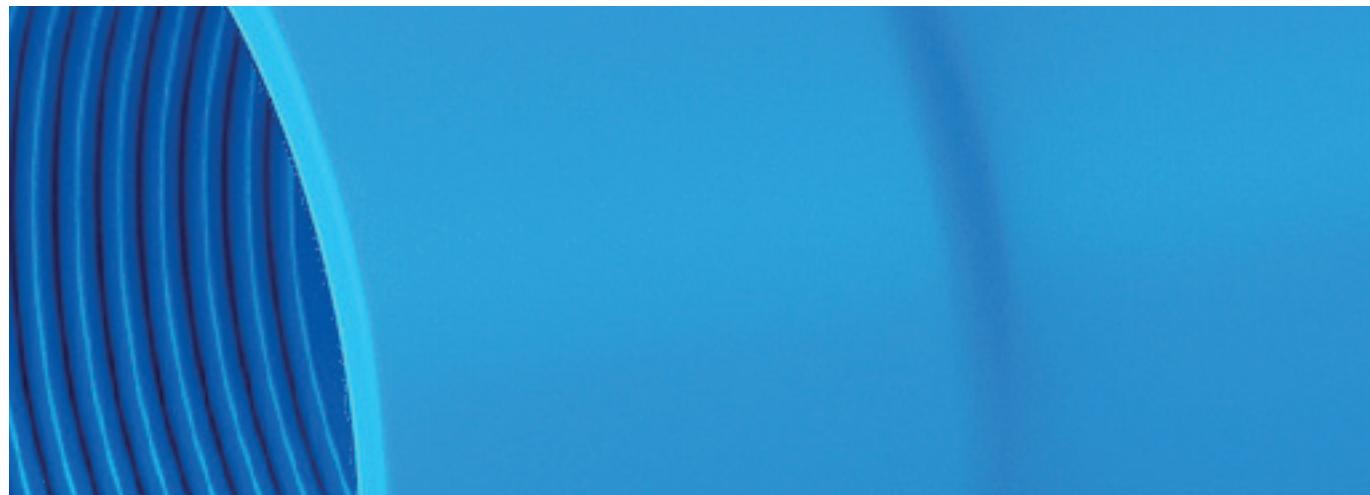


# GTS Pure Tech. Stop biofilm, maximum efficiency for your wells.

The formation of biofilm inside wells reduces screen permeability, obstructs water flow, and increases energy consumption.

PURE TECH is an antibacterial system integrated directly into the polymer, preventing the proliferation of microorganisms by up to 99.99%, without releasing hazardous substances.

- Prevents microorganism growth (99.99% reduction)
- Maintains screen permeability and pumping capacity
- Certified by ISO/IEC 17025 accredited laboratories
- Compliant with Ministerial Decree 174/2004 (safe materials for drinking water)
- No release of harmful substances



## U-PVC WELL PIPES

### U-PVC

GTS Pipe U-PVC pipes are the ideal solution for the construction of drinking-water wells, particularly for small and medium-sized installations designed for groundwater extraction.

Manufactured from rigid unplasticized polyvinyl chloride (U-PVC), with the addition of specific impact-resistant and stabilizing additives, they ensure high collapse and tensile strength, providing reliable and long-lasting performance over time.

The material used is suitable for contact with drinking water, compliant with Ministerial Decree 174/2004 and EU Regulation No. 10/2011, and is subject to continuous quality checks and laboratory certifications.

The threaded joints between elements are engineered to ensure tightness and ease of installation, available with trapezoidal M/F or Gas threading for diameters up to Ø114 mm (4").

U-PVC pipes offer light weight, dimensional stability, and corrosion resistance, making them ideal for artesian, piezometric, and industrial wells.

### FEATURES

- Material: rigid U-PVC, non-toxic and corrosion-resistant
- High mechanical strength and dimensional stability
- Precision trapezoidal threading for perfect hydraulic sealing
- Compliant with D.M. 174/2004 and EU Reg. 10/2011
- Available with male/female ends or plain ends for welding
- Wide range of diameters (from 60 to 630 mm)

### JOINTS

SOCKET  
TRAPEZOIDAL  
THREADING



PLAIN  
TRAPEZOIDAL  
THREADING



### ACCESSORIES

TOP PLUGS



BOTTOM PLUGS



CENTRALIZERS





Ø OD (mm)	Ø ID (mm)	Wall Thickness (mm)	Ø OD Socket (mm)	Weight (kg/m)	Collapse Resistance (bar)
60	51,6	4,2	65	1,1	17,4
75	66,0	4,5	81	1,5	10,7
89	79,0	5,0	95	2,0	8,7
114	103,4	5,3	120	2,7	4,9
125	113,0	6,0	131	3,4	5,4
140	126,6	6,7	149	4,2	5,3
160	144,6	7,7	170	5,5	5,4
180	162,8	8,6	191	6,9	5,3
200	180,8	9,6	214	8,6	5,4
225	203,4	10,8	240	10,9	5,4
250	226,2	11,9	268	13,4	5,2
280	253,2	13,4	302	16,8	5,3
315	285,0	15,0	335	21,2	5,2
400	376,6	11,7	415	21,4	1,2
400	369,4	15,3	422	27,7	2,7
400	361,8	19,1	430	34,3	5,3
500	461,8	19,1	528	43,3	2,6
630	591,8	19,1	660	55,0	1,3



**MATERIAL**  
POLIVINICLORURO RIGIDO  
NON PLASTIFICATO



## U-PVC WELL SCREENS

### U-PVC

U-PVC (unplasticized rigid polyvinyl chloride) screens are designed for use in artesian and piezometric wells where high mechanical strength, light weight, and ease of installation are required. Manufactured from high-quality extruded plain pipes, they are subsequently processed through precision mechanical cutting to create slots perpendicular to the pipe axis. The slot size is configurable according to the soil grain-size curve, ensuring excellent filtering capacity and uniform flow distribution. The number and arrangement of the slots are engineered to provide good hydraulic permeability while maintaining the mechanical strength of the screen column.

U-PVC screens are suitable for use in drinking-water wells, environmental monitoring wells, industrial wells, and geotechnical applications, and comply with UNI EN ISO 1452-2 standards.

#### FEATURES

- Material: rigid U-PVC, non-toxic and corrosion-resistant
- High mechanical strength and dimensional stability
- Calibrated slots with uniform spacing
- Customizable dimensions (diameter, slot size, pitch)
- Suitable for piezometric, artesian, and environmental monitoring wells

### JOINTS

SOCKET  
TRAPEZOIDAL  
THREADING



PLAIN  
TRAPEZOIDAL  
THREADING



### ACCESSORIES

TOP PLUGS

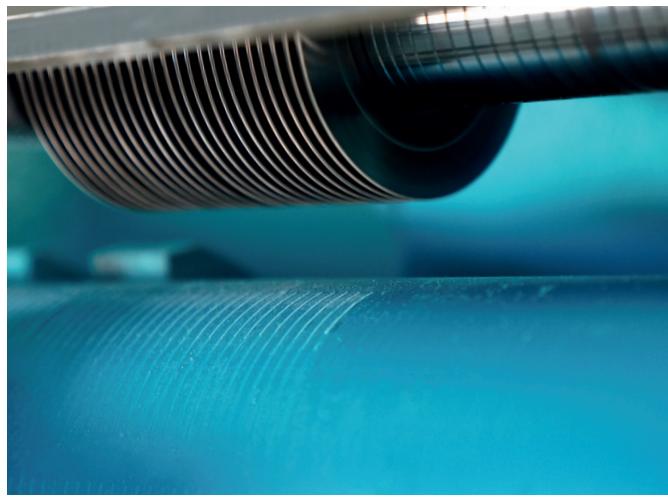


BOTTOM PLUGS



CENTRALIZERS





<b>Ø</b>	<b>Slot (mm)</b>	0,3	0,5	0,7	1,0	1,5	2,0	3,0
	Open area	2,5	4,5	6,2	6,5	7,6	9,2	11,5
60		0,14	0,25	0,35	0,37	0,43	0,52	0,65
75		0,18	0,32	0,44	0,46	0,54	0,65	0,81
88,9		0,21	0,38	0,52	0,54	0,64	0,77	0,96
114,0		0,27	0,48	0,67	0,70	0,82	0,99	1,23
125		0,29	0,53	0,73	0,77	0,89	1,08	1,35
140		0,33	0,59	0,82	0,86	1,00	1,21	1,52
160		0,38	0,68	0,93	0,98	1,15	1,39	1,73
180		0,42	0,76	1,05	1,10	1,29	1,56	1,95
200		0,47	0,85	1,17	1,22	1,43	1,73	2,17
225		0,53	0,95	1,31	1,38	1,61	1,95	2,44
250		0,59	1,06	1,46	1,53	1,79	2,17	2,71
280		0,66	1,19	1,64	1,71	2,00	2,43	3,03
315		0,74	1,34	1,84	1,93	2,26	2,73	3,41
400		0,94	1,70	2,34	2,45	2,86	3,47	4,33
500		1,18	2,12	2,92	3,06	3,58	4,33	5,42
630		1,48	2,67	3,68	3,86	4,51	5,46	6,82



WATER  
WELLS

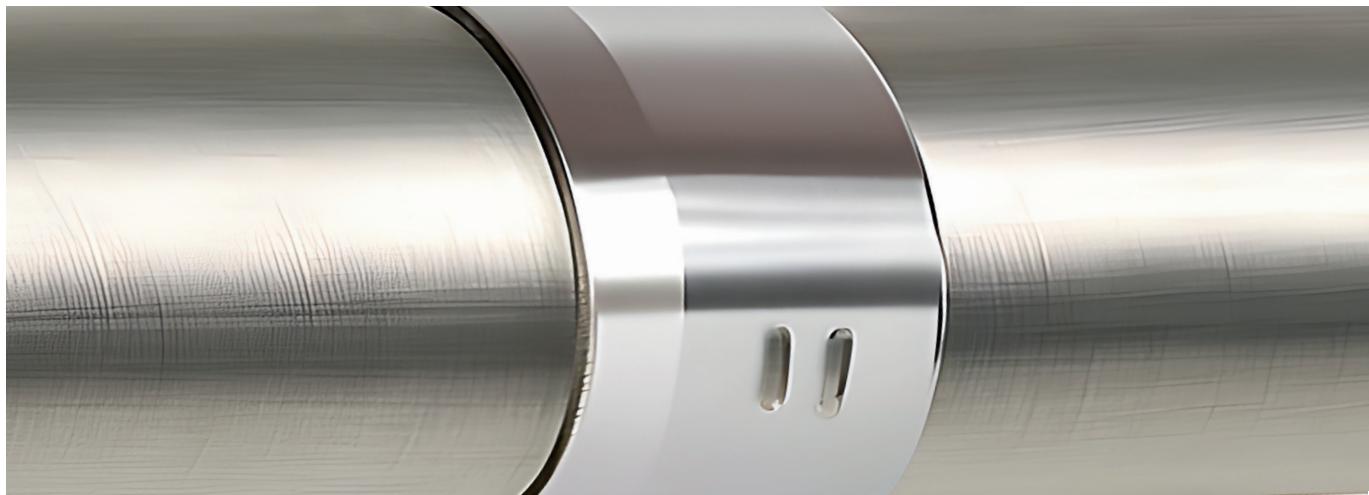


GEOTECHNICS

**MATERIAL**

CARBON STEEL

UNI EN 10025-2 - S235 / S275



## DELIVERY COLUMNS

### In steel for submersible pumps

Delivery columns are designed for lowering and supporting submersible pumps inside abstraction wells, ensuring maximum mechanical strength and long-term reliability.

The pipes are supplied in standard lengths of 3 or 6 meters and can be assembled using M/M threaded joints, UNI EN 1092-1 flanged joints, or ZSM quick couplings.

## JOINTS

M/M  
THREADED



COMMERCIAL  
FLANGES  
UNI EN 1092-1



ZSM  
QUICK COUPLINGS



- EN 1.4016 / AISI 430 ferritic  
- EN 1.4301 / AISI 304

- EN 1.4307 / AISI 304L  
- EN 1.4401 / AISI 316

## MATERIAL

STAINLESS STEEL

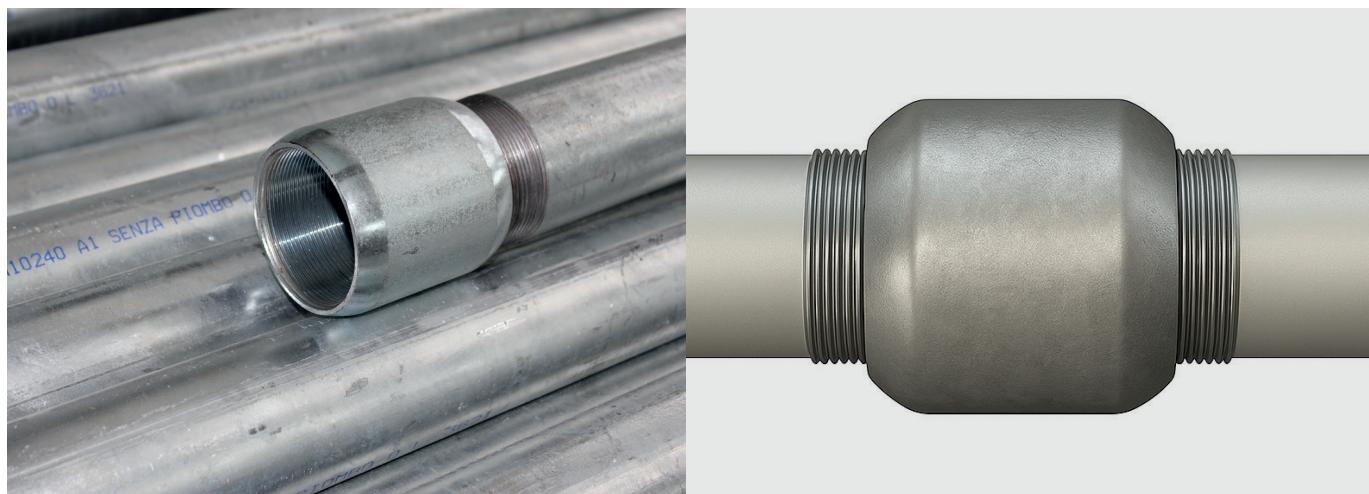
- EN 1.4404 / AISI 316L  
- EN 1.4571 / AISI 316 Ti



## M/M THREADED JOINTS

Delivery columns with Gas M/M threaded joints and reinforced coupling (olive type), designed to ensure high tensile strength and maximum coupling safety.

DN	Pipe OD (mm)	Coupling OD (mm)	Tensile Strength (ton)
40	48,0	55	8,0
50	60,3	82	13,0
80	88,9	95	13,0
100	114,3	122	18,0

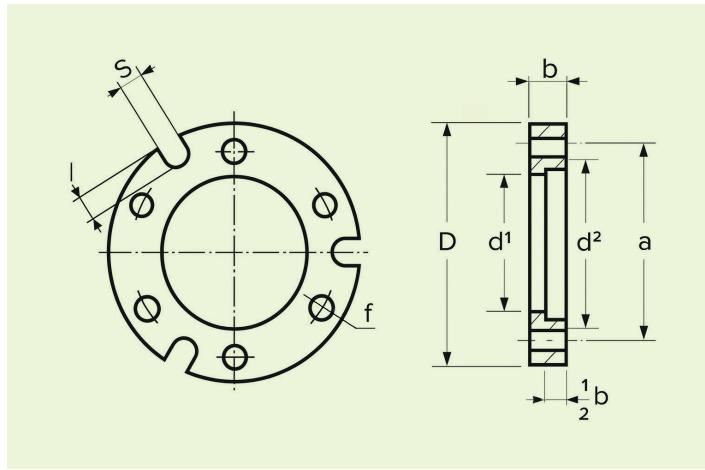


## FLANGED JOINTS

Flanged-joint delivery columns are supplied complete with NBR gasket, bolts in class 8.8, A2 or A4, and flanges compliant with UNI EN 1092-1. The flanges can be prepared for the passage of the pump power cable or drilled upon customer request.

### FLANGE TECHNICAL DATA

- Material: galvanized S235, AISI 304 or AISI 316
- Bolting: class 8.8 Zn - A2 - A4
- Cable hole diameter: Ø 30 mm
- Pipe length: 3-6 m

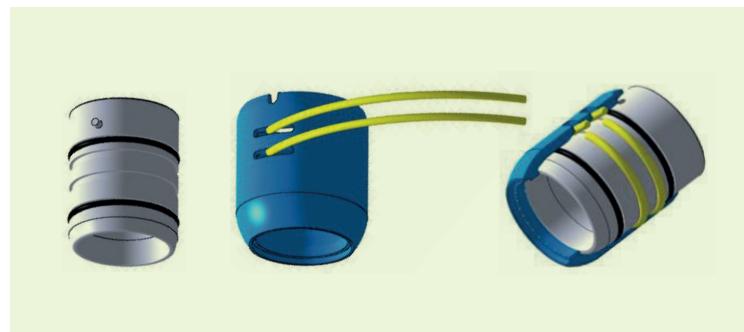


DN	D <sup>1</sup> Pipe OD (mm)	Thickness (mm)	D (mm)	b	a	f	N	L1
50	60,3	3	165	19	125	18	4	60
65	76,1	3	185	20	145	18	4/8	60
80	88,9	3	200	20	160	18	8	60
100	114,3	3	220	22	180	18	6	60
125	139,7	4	250	22	210	18	8	60
150	168,3	4	285	24	240	22	8	70
200	219,1	4	340	26	295	22	12	70

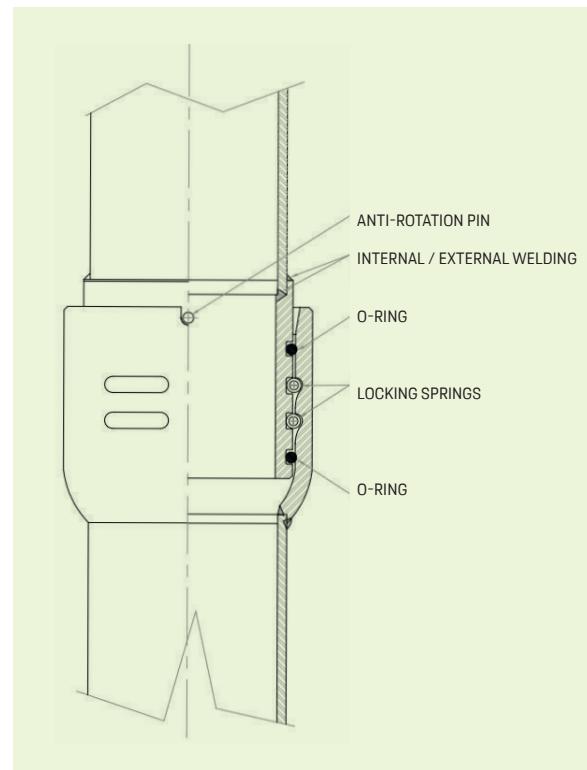
## ZSM QUICK COUPLINGS

ZSM quick couplings allow fast assembly and disassembly without rotating the components, making them ideal for installations in narrow wells and for major works intended for drinking-water extraction.

Manufactured in AISI 316 stainless steel, they ensure perfect hydraulic sealing and high mechanical strength even under heavy stress conditions.



DN	OD ZSM (mm)	Joint Length (mm)
32	72	100
50	85	110
65	106	110
80	118	112
100	140	112
125	170	112
150	199	118
200	244	126





## MATERIAL

PVC-O – ORIENTED POLYVINYL CHLORIDE  
- UNI EN 17176-2 (PVC-O piping systems for pressure water)  
- MINISTERIAL DECREE 174/2004 (Suitability for contact with drinking water)  
- EU REGULATION NO. 10/2011

# RISING MAINS FOR SUBMERSIBLE PUMPS

## PVC-O

Rising mains made of oriented PVC (PVC-O) are the optimal solution for lifting water from deep wells using submersible pumps, thanks to their excellent strength-to-weight ratio and long-term durability.

Manufactured using molecular orientation technology, PVC-O pipes ensure:

- Higher mechanical strength compared to traditional PVC
- Controlled elasticity that absorbs vibrations and dynamic stresses
- Reduced weight, simplifying installation and maintenance operations

The rising mains are compatible with submersible pumps up to 5", suitable for both civil and industrial wells, and approved for contact with drinking water according to Ministerial Decree 174/2004.

The joints are engineered to ensure perfect hydraulic sealing and high mechanical strength, featuring precision threading and EPDM gaskets suitable for drinking-water applications.

## FEATURES

- Material: oriented PVC (PVC-O)
- High pressure and tensile resistance
- Reduced weight for easy handling
- Excellent chemical and corrosion resistance
- Maintenance-free with long service life
- Suitable for wells from 1" 1/4 to 5" (DN32–DN125)
- Suitable for use with multistage submersible pumps

## JOINTS

HEAD CONNECTION



PUMP CONNECTION





Outer Diameter (mm)	1" 1/4 42	1" 1/2 48	2" 60	2" 1/2 75	3" 89	4" 114	5" 140
Inner Diameter (mm)	32,0	36,0	47,0	61,0	75,0	96	118,0
Operating Pressure (Bar)	21	21	21	16	16	16	14
Recommended Joint Load (Kg)	1100	1700	2100	3200	4900	5900	6000
Joint Diameter (mm)	61	68	85	102	114	136	170
Bar Weight (Kg)	2,0	3,0	4,0	5,4	5,7	10,7	16,2



## MONITORING CASAGRANDE CELLS

The Casagrande cell piezometer is an instrument used for monitoring groundwater levels and controlling pore-water pressures in soils.

It is generally installed in soils with medium to high permeability ( $K > 10^{-5}$  cm/s) to measure variations in the water table and its long-term behavior.

The porous cell consists of a filtering element made of polyethylene (PE) or microporous ceramic, which allows water to permeate and rise inside the piezometric tube.

This tube, connected to a measuring column, enables the detection of the water level using an electric water-level meter, traditional piezometric tubes, or digital multiparameter probes.

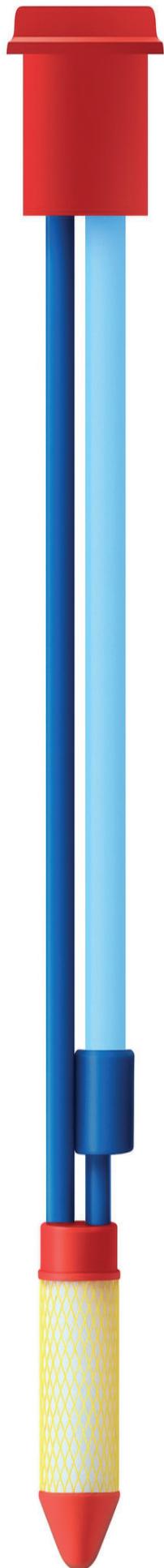
### FEATURES

- Filtering element in PE or microporous ceramic with high drainage capacity
- Structure resistant to chemical and mechanical agents present in the subsoil
- Compatible with GTS piezometer tubing (PVC, ...)
- Easy installation even in small-diameter boreholes
- Customizable upon request

## ACCESSORIES

SAFETY  
BOX

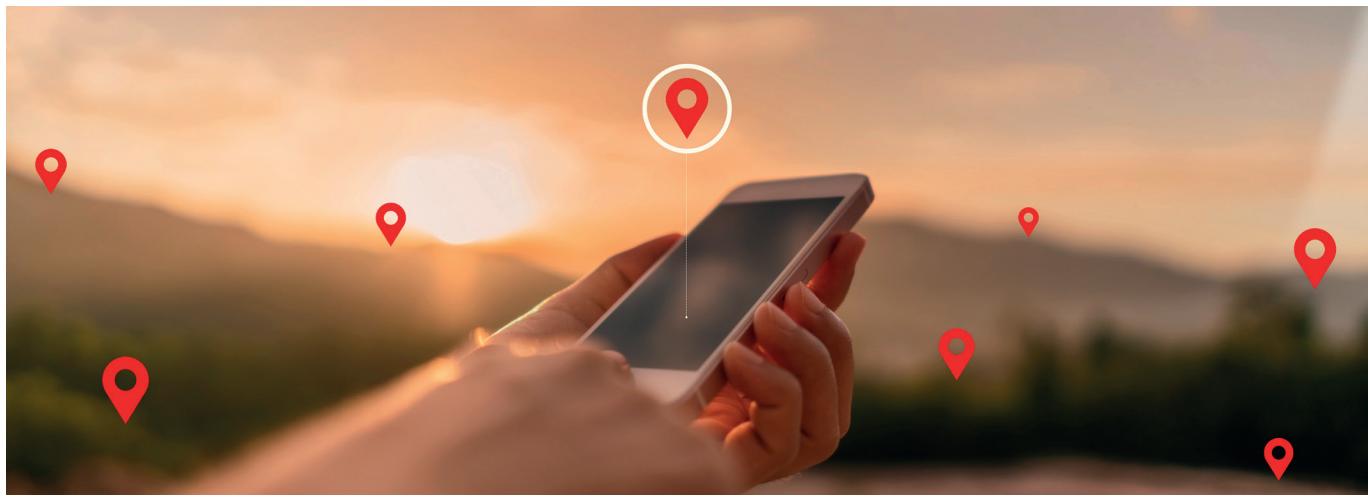




Length (mm)	Type	Inner Diameter ID (mm)	Guide Spacing (mm)	Wall Thickness (mm)	Coupling Clearance
580	Attacchi	49	54	2	62,6
870	Accessori	79	83	2	92,0

WATER  
WELLS

GEOTECHNICS



## LOCALIZATION

### GTS SYNC

The GTS Sync system is a digital monitoring and localization solution for wells and piezometric networks, developed by GTS Well Components to simplify field data collection, management, and sharing. Thanks to the use of an NFC module and a dedicated web interface, GTS Sync allows users to record, synchronize, and view in real time all key parameters of each installation: GPS position, depth, stratigraphy, drainage type, and technical specifications of the installed components.

Each well or measurement point is identified by a unique code that automatically links project data, material sheets, and maintenance reports.



- Digital archive with photo attachments and PDF documents
- Accessible from smartphone, tablet, or PC
- Multi-project management with restricted access levels

#### ADVANTAGES

- Reduced field survey and well-sheet compilation times
- Centralization of technical data in a single digital system
- Immediate remote access to the information of each installation
- Full traceability of materials, operators, and interventions
- Direct integration with the GTS database for analysis and reporting

#### FEATURES

- GPS geolocation of the installation point
- Recording of technical data

FUNCTION	DESCRIPTION	ACCESS MODE
GPS Geolocation	Registers the precise location of the measurement point	App / Mobile / Web
Material Archive	Displays installed components (pipes, screens, probes)	Web
Automatic Reports	Generates PDF sheets and Excel exports	Web
Attachment Upload/Download	Uploads site documents and photos	Mobile / Web
User Management	Reserved access for installers, designers, and clients	Web
Data Synchronization	Automatic synchronization with the GTS cloud	All platforms



TECHNICAL  
DATA

**Cantina di Quistello**

**INFO**

- Nome Cantina di Quistello
- Tipo Pozzo
- Geolocalizzazione 45.055834992182, 10.934192148366
- Ø Perforazione (mm) 323
- Profondità totale pozzo (m) 120
- Data di installazione 2025-05-22
- Note Concessione n.1000 del 20/04/2025

**CASING**

- I° Ø 219, Prof. 0 - 12 (m)
- II° Ø 168, Prof. 12 - 48 (m)
- III° Ø 168, Prof. 96 - 112 (m)
- IV° Ø 168, Prof. 118 - 120 (m)

**FILTRO**

- I° Ø 168, Prof. 48 - 96, Slot 0,5 (mm)
- II° Ø 168-6", Prof. 112 - 118, Slot 0,5 (mm)
- III° Ø -----, Prof. ----- - ----- (mm)
- IV° Ø -----, Prof. ----- - ----- (mm)

Tratto cieco di fondo 45.055834992182, 10.934192148366

**TIPO DI DRENAGGIO**

- Tipo di drenaggio Ghiaietto 107

**ALLEGATI**

- download
- upload

**Cantina di Quistello**

**INFO**

- Nome Cantina di Quistello
- Tipo Pozzo
- Geolocalizzazione 45.055834992182, 10.934192148366

**Profondità totale pozzo (m)**

**CASING**

- I° Ø 219, Prof. 0 - 12 (m)
- II° Ø 168, Prof. 12 - 48 (m)
- III° Ø 168, Prof. 96 - 112 (m)
- IV° Ø 168, Prof. 118 - 120 (m)

**Cantina di Quistello**

**INFO**

- Nome Cantina di Quistello
- Tipo Pozzo

**I° Profondità (diametro)**

**I° Profondità (da m)**

**I° Profondità (a m)**

- II° Ø 219, Prof. 0 - 12 (m)
- III° Ø 168, Prof. 96 - 112 (m)
- IV° Ø 168, Prof. 118 - 120 (m)

**Cantina di Quistello**

**INFO**

- Nome Cantina di Quistello

**I° Profondità (diametro mm)**

**Profondità filtro I (da m)**

**Profondità filtro I (a m)**

**Slot filtro (mm)**

- II° Ø 168, Prof. 96 - 112
- IV° Ø 168, Prof. 118 - 120

**Cantina di Quistello**

**INFO**

- Nome Cantina di Quistello

**I° Profondità (diametro mm)**

**Profondità filtro I (da m)**

**Profondità filtro I (a m)**

**Slot filtro (mm)**

- II° Ø 168, Prof. 96 - 112
- IV° Ø 168, Prof. 118 - 120



WATER  
WELLS



GEOTECHNICS

## MATERIAL

ALUMINIUM: EN AW 6060 T6 alloy, anti-corrosion anodized

ABS: High-toughness thermoplastic resin (acrylonitrile-butadiene-styrene)

GASKETS: EPDM suitable for contact with water



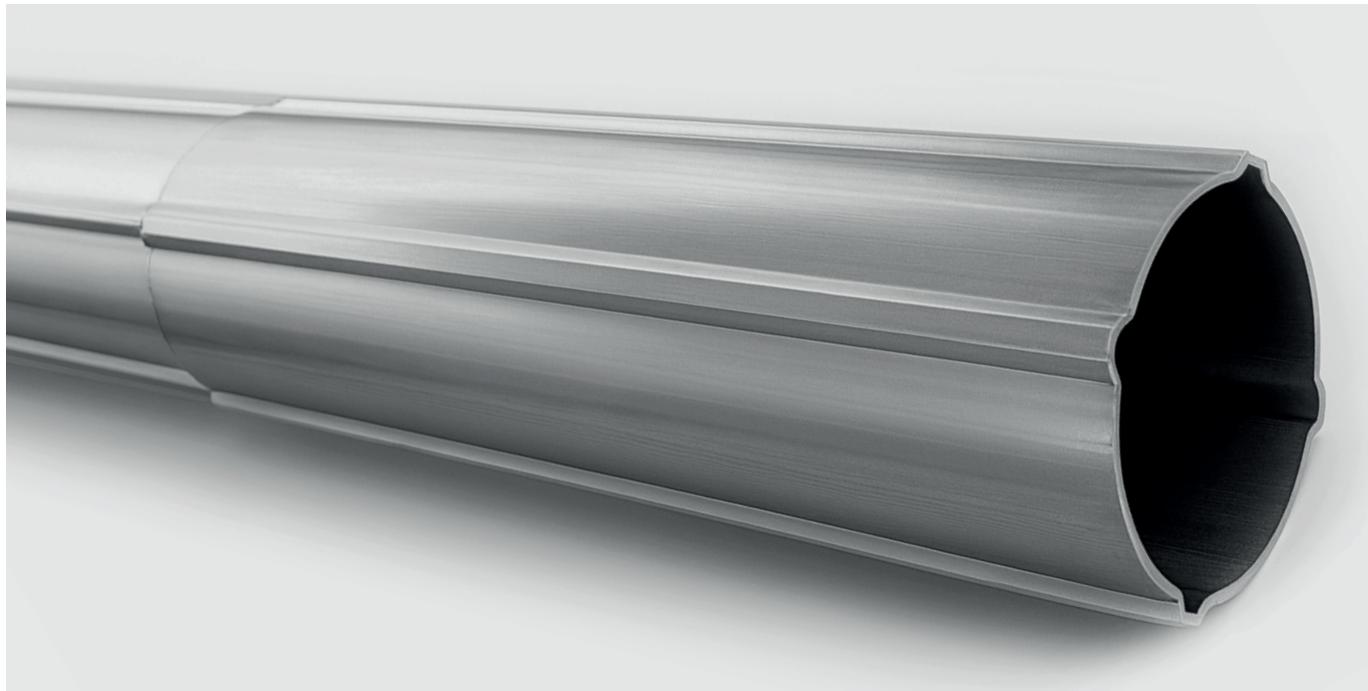
## INCLINOMETER TUBES

### Aluminium and ABS

Inclinometer tubes are used as guide casings for inclinometer probes, which are employed to detect and monitor horizontal ground movements or displacements in retaining structures. They are installed inside vertical or sub-vertical boreholes and allow long-term measurement of any lateral movements affecting landslides, slopes, dams, embankments, and retaining works.

The pipes, with a standard length of 3 meters, are coupled using aluminium or ABS couplings, fixed with blind rivets, and sealed with top and bottom caps to prevent water or debris from entering the tube.

The internal four-guide profile ensures precise probe alignment and enables high-accuracy measurements, guaranteeing long-term repeatability of readings.





## ALUMINIUM TUBES

Aluminium inclinometer tubes are recommended for applications in deep boreholes or in areas with significant temperature variations, where greater rigidity and dimensional stability are required. Made from EN AW 6060 T6 alloy, they provide high mechanical strength and excellent corrosion resistance.

- Lightweight and easy to assemble
- High dimensional stability and rigidity
- Couplings with aluminium sleeve and blind rivets
- Compatible with most inclinometer probes on the market
- Available in 60–80 mm diameters

## ABS TUBES

ABS inclinometer tubes are recommended for installations in soils with a high presence of corrosive agents or in areas affected by stray currents. ABS provides an excellent balance of mechanical strength, elasticity, and impact resistance, making it ideal for medium-depth boreholes.

- High chemical-resistance plastic material
- Excellent flexibility and mechanical strength
- Low weight and easy installation
- Available in 60–85 mm diameters

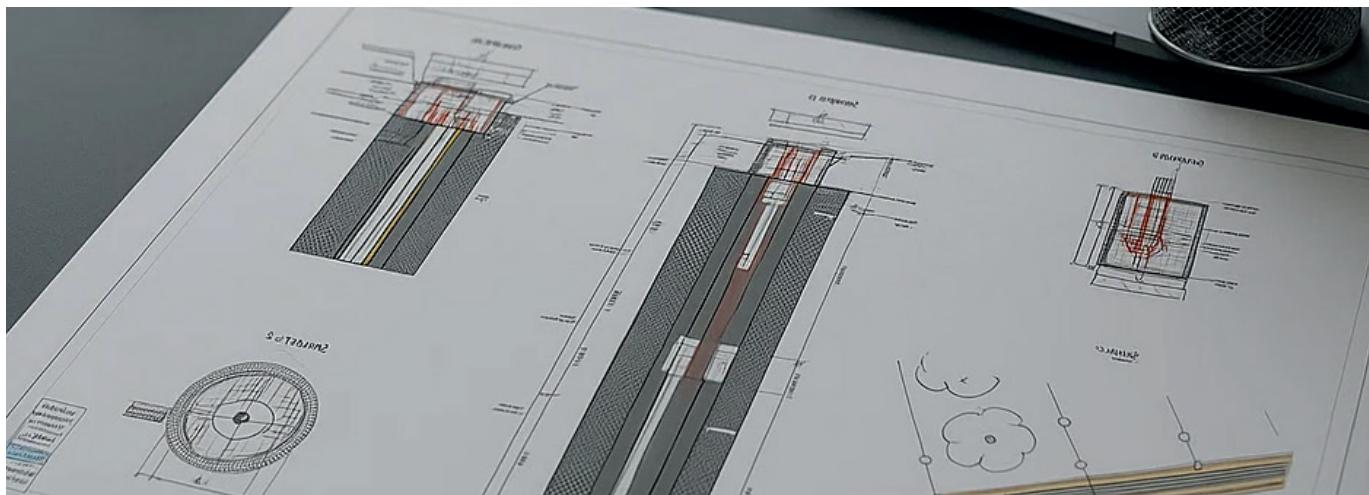




WATER  
WELLS



GEOTECHNICS



## WELLHEADS

### Polypropylene – Steel – Stainless Steel

Wellheads are an essential component for anyone who needs to ensure reliability, safety, and long-term durability for their water extraction system.

These devices are installed at the top of the well and play a key role in its management and protection, whether in domestic and civil installations or in agricultural and industrial contexts where continuity and quality of service are particularly important.

The primary function of a wellhead is to seal and protect the well opening, preventing external contamination and preserving water purity.

Thanks to high-quality sealing gaskets and resistant materials—such as polypropylene, galvanized steel, or stainless steel—wellheads prevent the ingress of dust, insects, rainwater, or pollutants that could compromise the quality of the extracted water.

In addition to sanitary protection, wellheads provide structural and functional safety: they are designed to support the weight of the rising main of the submersible pump, keep electrical cables properly positioned, and ensure correct handling of delivery pipes and any venting conduits.

This results in an orderly, well-organized installation that is more durable over time and less prone to failures.

Another significant advantage is ease of use: wellheads are equipped with dedicated passages and fittings that allow simple installation and convenient access for maintenance operations. This makes them ideal both for new installations and for renovation or upgrading of existing wells.

Available in various sizes and configurations, wellheads adapt easily to the most common casing diameters (such as DN 100, DN 125, DN 160 and larger), offering customizable solutions to meet a wide range of application needs.

On request, they can also be manufactured according to customer drawings, ensuring maximum flexibility and perfect integration with any type of system.

Choosing a high-quality steel wellhead means protecting a precious resource like water over time, optimizing system performance, and reducing the risks associated with infiltration, contamination, or malfunction.

Wellheads are not simple accessories: they are an investment in the safety, efficiency, and durability of the well—fundamental elements for anyone who works daily with water as a primary resource.



TECHNICAL  
DATA





WATER  
WELLS

GEOTECHNICS



## WATER LEVEL METER

### Portable instrument for measuring water levels in wells and piezometers

The water level meter consists of a graduated cable marked in meters and decimeters, wound on an ergonomic reel, and equipped with a compact stainless-steel probe.

When the probe comes into contact with water, an audible and visual signal indicates the detection, allowing a precise and immediate reading of the depth.

#### MAIN FEATURES

- Simple and reliable reading of the water level
- Corrosion-resistant stainless-steel probe
- High-strength graduated cable
- Practical and robust cable reel
- Battery powered

#### AVAILABLE LENGTHS

Cable length (meters) Notes

30 m	Standard
50 m	Standard
100 m	Standard
150 m	Standard
200 m	Standard

Other custom lengths available upon request



# MONITORING



GTS Well Components designs and supplies complete systems for geotechnical, environmental, and hydrogeological monitoring, ensuring reliability, precision, and long-term durability. The product range includes solutions for monitoring ground movements, groundwater levels, and structural behavior, used in civil, infrastructural, and environmental projects.



## Safety Box

Safety boxes are designed to protect and seal the heads of piezometric wells, piezometers, and monitoring pipes. They ensure mechanical strength, watertightness, and protection from external agents, preventing the ingress of surface water or contaminants. They are made of high-strength rigid PVC and equipped with a lockable lid for enhanced security.

Available in various standard diameters: Ø140 mm - Ø200 mm

### Technical features:

- Material: Polyethylene
- Lid: Polyamide locking lid
- Closure: Padlock-compatible
- Color: Signal red

## Expansion plugs

Expansion plugs are used to hermetically seal piezometric tubes, ensuring protection against infiltration and hydraulic tightness. They are equipped with an expandable NBR rubber gasket, resistant to hydrocarbons, which guarantees perfect adherence to the inner wall of the tube.

### Technical features:

- Body material: Polyamide
- Gasket: NBR or EPDM (resistant to oils and fuels)
- Expansion system: central stainless-steel screw
- Available diameters: Ø 60–125 mm



## Drive-Over Manhole

The drive-over manhole is made entirely of die-cast aluminium alloy, a material that combines high mechanical strength with light weight, making it ideal for installations in industrial, urban, or road environments. Its structure is designed to withstand vehicular loads up to 40 tonnes (class D400), in accordance with UNI EN 124 standards.

### Technical features:

- Material: Die-cast aluminium (corrosion-resistant alloy)
- Closure: Sealed cover with stainless-steel screws or bolts
- Gasket: Neoprene gasket ensuring a watertight seal and protection against water and dirt infiltration
- Inspection: Easily removable cover for quick access to the monitoring point
- Compression test: pressure resistance 29.64 kg/mm<sup>2</sup>



## Top and Bottom Plugs

Top plugs are installed on the upper end of the piezometric tube to protect the borehole from dust, rain, and foreign objects. They can also be used as temporary closures during installation or monitoring phases.

- Material: impact-resistant rigid PVC
- Color: light blue
- Available diameters: Ø 25–630 mm

Bottom plugs are used to seal the base of well or piezometric tubes, preventing the entry of fine material or sediment.

- Material: impact-resistant rigid PVC
- Resistant to chemical agents and temperature variations
- Available diameters: Ø 25 mm – Ø 630 mm

## Centralizers

Centralizers ensure the correct and centered positioning of piezometric tubing inside the borehole, preventing friction and deformation during installation.

Available in PVC, steel, or stainless steel, they are designed to keep the column perfectly aligned and promote a regular flow of water around the pipe.

### Technical features:

- Material: rigid PVC or galvanized steel / stainless steel
- System: flexible-blade or welded-blade design
- Diameters: available upon request
- Compatibility: suitable for GTS PVC, HDPE, and steel pipes





Drilling products and fluids play a fundamental role in excavation operations and in the construction of wells, geognostic boreholes, and environmental drilling.

Their primary function is to facilitate borehole advancement, stabilize the walls, cool and lubricate the drilling tools, and remove cuttings efficiently and safely.

## Washed siliceous gravel

Washed siliceous gravel is a natural filtering material used as a drainage backfill in abstraction wells, piezometric wells, and environmental monitoring wells.

It ensures uniform water-flow distribution and protects well screens from clogging and blockage.

It is carefully selected and washed to remove clays and fine fractions, ensuring high permeability and chemical purity.

### Technical features:

- Composition: siliceous quartz ( $\text{SiO}_2 > 97\%$ )
- Bulk density: 1,550–1,650 kg/m<sup>3</sup>
- Moisture: < 0.5%
- Standard grain sizes: 0.4–0.8 / 0.8–1.2 / 1.2–2.5 / 2.5–4 mm
- Packaging: 25 kg bags
- Use: abstraction wells, drainage systems, piezometers



## Bentonite

Bentonite is a natural drilling and sealing additive made from sodium clay with a high swelling capacity.

It is used for preparing drilling muds, as an impermeable barrier, and for the annular sealing of wells and piezometers.

During hydration, bentonite forms a viscous suspension that stabilizes borehole walls and prevents fluid migration between soil layers.

### Technical features:

- Natural sodium bentonite high hydration capacity (> 600%)
- Suspension density: 1.03–1.12 g/cm<sup>3</sup>
- Marsh viscosity: 35–50 sec/qt
- pH: 8–9
- Packaging: 25 kg bags
- Use: drilling, sealing, drainage, and geotechnical works

## Expandable clay pellets

Expandable clay pellets are a sealing and backfilling material used for the closure and annular sealing of piezometric and monitoring boreholes.

During hydration, the pellets expand uniformly until they completely fill the borehole volume, forming a waterproof and chemically inert barrier.

### Technical features:

- Material: 100% natural sodium clay
- Volumetric expansion: > 400%
- Dry density: 1,000–1,100 kg/m<sup>3</sup>
- Neutral pH
- Pellet size: 3–8 mm
- Packaging: 25 kg bags or 20 L buckets
- Use: sealing piezometric, environmental, and geotechnical boreholes



## Foaming

Foaming agent is a concentrated liquid additive used as a stabilizing and lubricating agent in drilling muds.

It facilitates cuttings removal, reduces drill-rod wear, and decreases water consumption during the drilling of sandy or gravelly soils.

### Technical features:

- Composition: biodegradable surfactants > 90%
- Dilution: 1–2% in water (10–20 L per m<sup>3</sup> of mud)
- pH: 7–9
- Color: light amber
- Packaging: 20 L containers or 200 L drums

# SAMPLERS



## Nesty Probe

Nesty Probes are filters designed for soil-gas sampling and for monitoring volatile compounds or biogas analysis in landfill sites and environmental remediation areas.

They can be manufactured in PVC or AISI 304 stainless steel, with the option to choose calibrated slot sizes (from 0.25 to 1.5 mm) and custom lengths based on site stratigraphy.

### Technical features:

- Standard diameters:  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1",  $1\frac{1}{4}$ ",  $1\frac{1}{2}$ ", 2"
- Material: rigid PVC or AISI 304 stainless steel
- Equipped with fitting for connection to Rilsan tube and ball valve
- Compatible with sampling pumps and purging systems
- Available with connection tube and protective cap

## Coring Samplers

Stainless-steel sampling tubes (AISI 304) are designed for collecting undisturbed soil samples for geotechnical and environmental analysis.

They are compatible with SHELBY / OSTERBERG heads and available in various diameters and lengths.

### Technical features:

- Available diameters: Ø 88.9 and Ø 101 mm
- Standard lengths: 600 – 700 – 1,000 mm
- Material: AISI 304 stainless steel
- Suitable for sampling cohesive and non-cohesive soils
- Compatible with manual or motorized sampling systems



## Disposable Samplers – Bailers

Disposable bailer samplers are designed for collecting water samples or recovering floating liquids inside piezometric wells. Available in HDPE or transparent PVC, they ensure maximum sample purity and are suitable for single-use applications in accordance with EPA procedures.

### Technical features:

- Diameters: Ø 11 – 19 – 38 mm
- Length: 900 mm
- Capacity: 250 mL to 1 L
- Material: HDPE or transparent PVC
- Bottom valve: automatic PTFE or stainless-steel valve



TECHNICAL  
DATA



## Core Storage Boxes

Core storage boxes are made of plastic material and are used for the collection, preservation, and cataloguing of soil samples or drilling cores.

Available with 2, 3, and 5 compartments.

### Technical features:

- Capacity: up to 5 cores Ø 101 mm
- Length: 1 meter
- Material: impact-resistant plastic
- Equipped with internal PVC dividers
- Stackable and weather-resistant
- Standard color: technical grey

## Water Sampling Pumps

Submersible water-sampling pumps are designed for collecting groundwater samples from piezometric or environmental monitoring wells. They operate at 12 V DC and can be easily connected to portable batteries using clamp or crocodile-type cables.

### Available versions:

- Super Purger – head 18 m, flow rate 11.1 L/min, cable length 20 m (Ø 43 mm)
- Mega Purger – head 27 m, flow rate 10.1 L/min, cable length 30 m (Ø 43 mm)

### Technical features:

- Body: PVC
- Power supply: 12 V DC – low consumption
- Suitable for wells with Ø 50 to 100 mm



Meters	1	5	10	20	25
Flow rate	10	8	7	3,2	1,5

Technical Specifications	Values
Max Head	25 mt
Power Supply	12 Volt
Max Current Draw	7,1 A
Max Flow Rate	12 lt/mt
Diameter	48 mm
Length	450 mm
Hose Connection	10 mm
Cable Length	26 mt



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**[gtswellcomponents.com](http://gtswellcomponents.com)**

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**[gts.biancavilla@gtssrl.it](mailto:gts.biancavilla@gtssrl.it)**