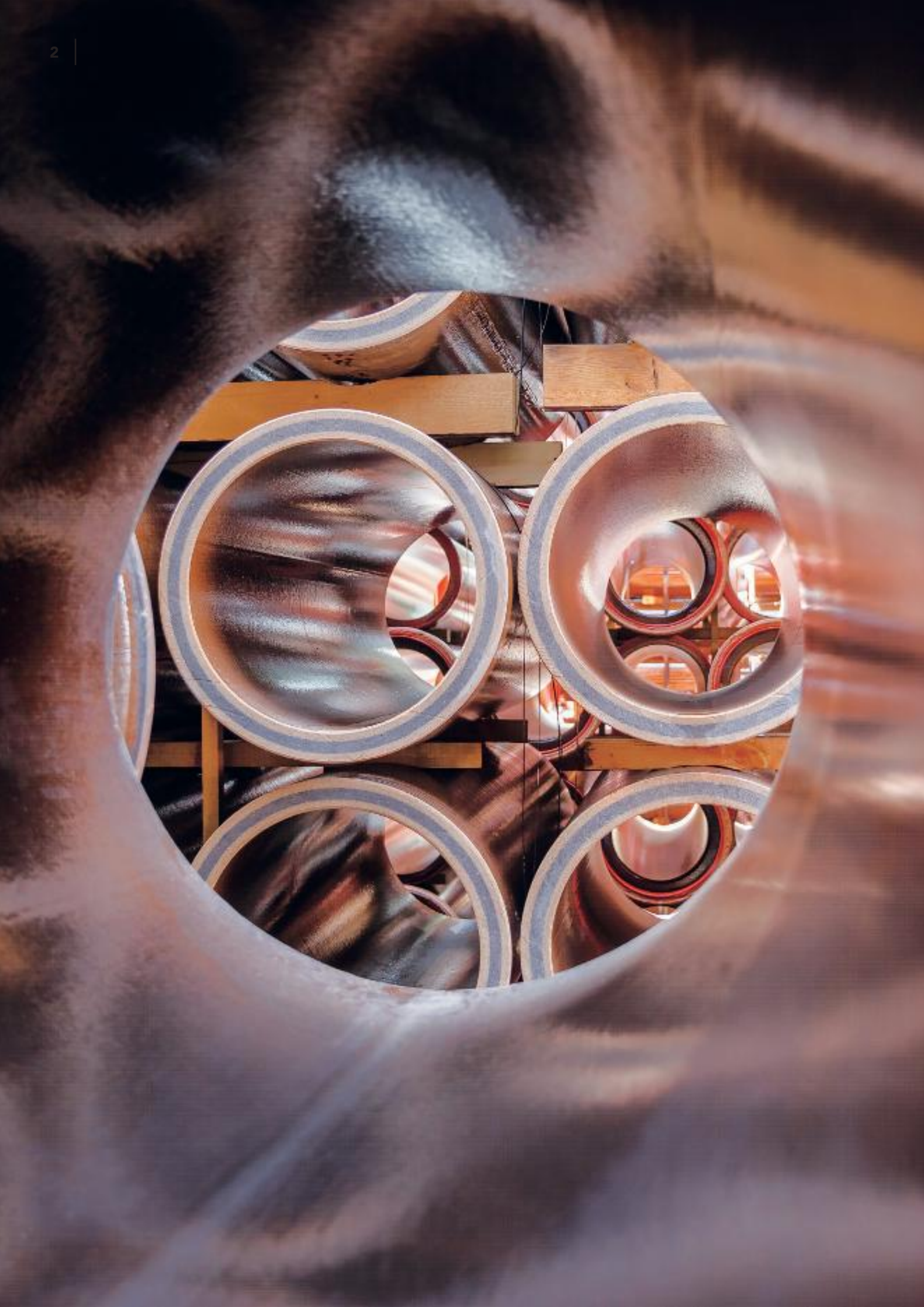


**VITRIFIED CLAY PIPES WITH
A SYSTEM – QUALITY THAT
LASTS FOR DECADES**



CONTENT

About us	5	Special components	43
Vitrified Clay Pipes as a material	6	Section channels	44
System components	8	Accessories	46
Application	10		
Open trench installation	12	Trenchless installation	48
Joining systems	14	Methods	50
Socket K	17	Jacking pipes	52
Quality and sustainability	18		
Cradle to Cradle® certification	19	Areas of application & references	54
		Service & consulting	56
		Training courses	57
		Certificates	58
		Notes	62
PRODUCTS			
Open trench construction	24		
Junctions 45°	26		
Junctions 90°	28		
Bends	30		
Repair junctions	32		
End caps / Stoppers	33		
Connectors – Building Installation (GE)	34		
Connectors – Inlet (GZ)	36		
Connectors – Outlet (GA)	38		
Transitions	40		
Saddle connectors	42		



YOUR SUCCESS IS OUR DRIVING FORCE

We analyse, advise, plan, implement,
monitor and support – day after day.
This creates a trusting partnership on equal terms.

ABOUT US

EURO SWEILLEM – VITRIFIED CLAY PIPES WITH A SYSTEM

Euro Sweillem GmbH is the European sales company of Sweillem Vitrified Clay Pipes Co. from Cairo, with more than 90 years of experience in the production of Vitrified Clay Pipes and over 10 years of successful market presence in Europe. Our commitment: sustainable infrastructure with responsibility, quality and system.

Tradition and technological expertise since 1935

Since 1935, our parent company has been producing Vitrified Clay Pipes for a wide range of requirements. Due to strong growth and increasing demand, a modern production facility was built in the 1980s – planned and implemented with the know-how of experienced German engineers.

Today, state-of-the-art German technologies, combined with reliable technical support, ensure a high level of flexibility and enable production that is precisely tailored to each specific requirement.

Our products combine technical precision, durability and sustainability. We manufacture in accordance with the European standards DIN EN 295 and ZP WN 295, thereby guaranteeing the highest quality, safety and durability – for generations.



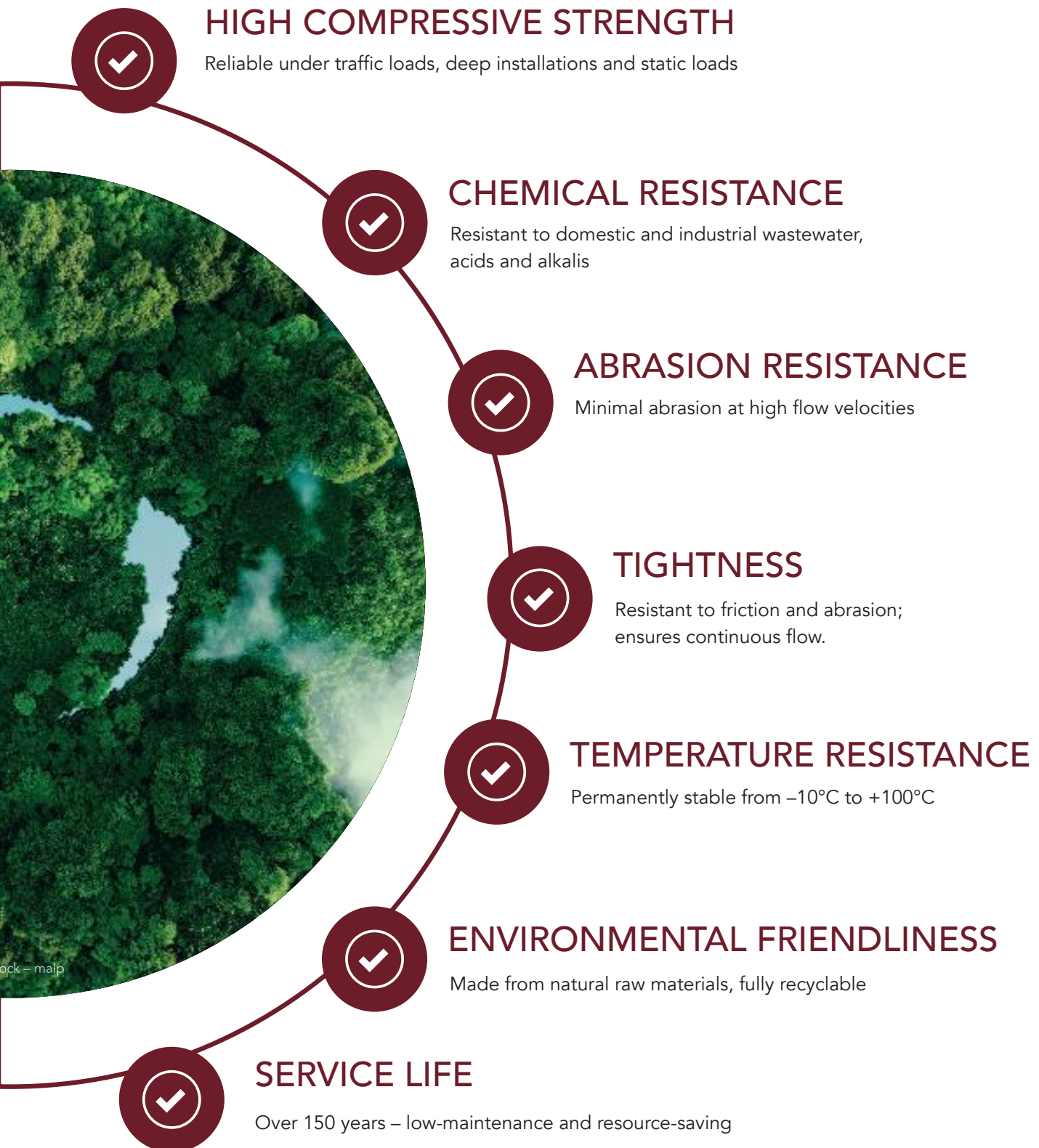
THE MATERIAL VITRIFIED CLAY

Nature at its best

Vitrified clay is the heart of our products and has been the benchmark for quality in sewer construction for decades. It is made from natural raw materials – clay, chamotte and water – and fired in modern kilns at approx. 1200°C, giving it its exceptional strength and tightness.

The result: a densely fired ceramic material that performs reliably for generations, even under extreme conditions.





The image features a large, dark, metallic industrial pipe in the foreground, slightly out of focus. A circular cutout in the pipe reveals a stack of smaller, reddish-brown pipes in the background. The background is a blurred, warm-toned industrial setting. The text "THE COMPONENTS OF THE SYSTEM" is overlaid in white, bold, sans-serif font at the bottom left.

THE COMPONENTS OF THE SYSTEM

THE PIPE

The pipe body is made of fired vitrified clay with high density and a smooth surface on the inside and outside. Thanks to its strong self-cleaning effect that ensures low friction resistance and enables permanently high hydraulic performance.

Available in:

- Nominal diameters: DN 125 – DN 1200
- Lengths: 1.00 – 2.50 m
- Load-bearing classes: standard load and heavy load according to DIN EN 295 / ZP WN 295

THE FITTINGS

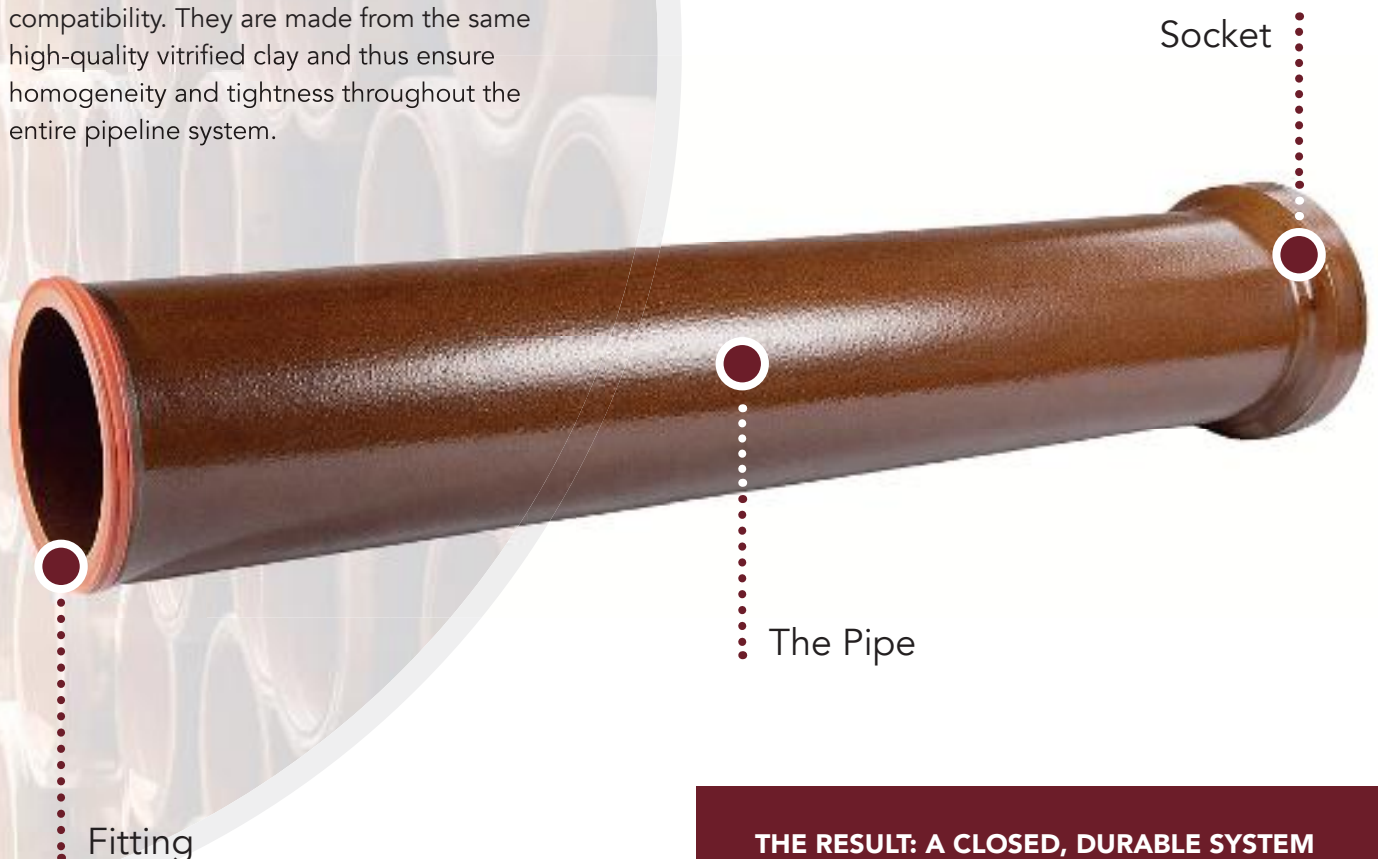
Our fittings – branches, bends, articulated pieces and transition pieces – provide full system compatibility. They are made from the same high-quality vitrified clay and thus ensure homogeneity and tightness throughout the entire pipeline system.

THE SOCKET

The socket forms the counterpart to the spigot end and serves to connect two pipe sections. During production, it is fired integrally with the pipe body and therefore has the same material quality and service life, as it is a homogeneous ceramic body.

Depending on the application, it is used in two versions:

- **System C:** A jointing system determined by the socket. To compensate for ceramic tolerances, the spigot end (soft polyurethane) and the socket (hard polyurethane) are permanently cast in place.
- **System F:** A jointing system determined by the spigot end. The sealing element is integrated in the socket area.



THE RESULT: A CLOSED, DURABLE SYSTEM

All components are made from the same material, are standardised and are compatible with one another. This creates safety in planning, installation and operation and makes Vitrified Clay Pipes the first choice for sustainable, resilient and economical drainage systems.

FLEXIBLE FOR EVERY APPLICATION



© Adobe Stock – whitcomberd

Efficient solutions for new construction & renovation

Our Vitrified Clay Pipes are ideally suited for both open trench installation and trenchless installation. This enables us to offer the right system for every project situation – from classic pipe laying to modern renovation of existing infrastructure.

The material Vitrified Clay – ideal for both installation methods

Vitrified Clay combines high compressive strength, abrasion resistance and dimensional stability – properties that are essential for installation using both construction methods.

Whether open trench or trenchless: our Vitrified Clay Pipes ensure permanently tight, low-maintenance and sustainable pipeline systems.





OPEN TRENCH

YOUR BENEFITS

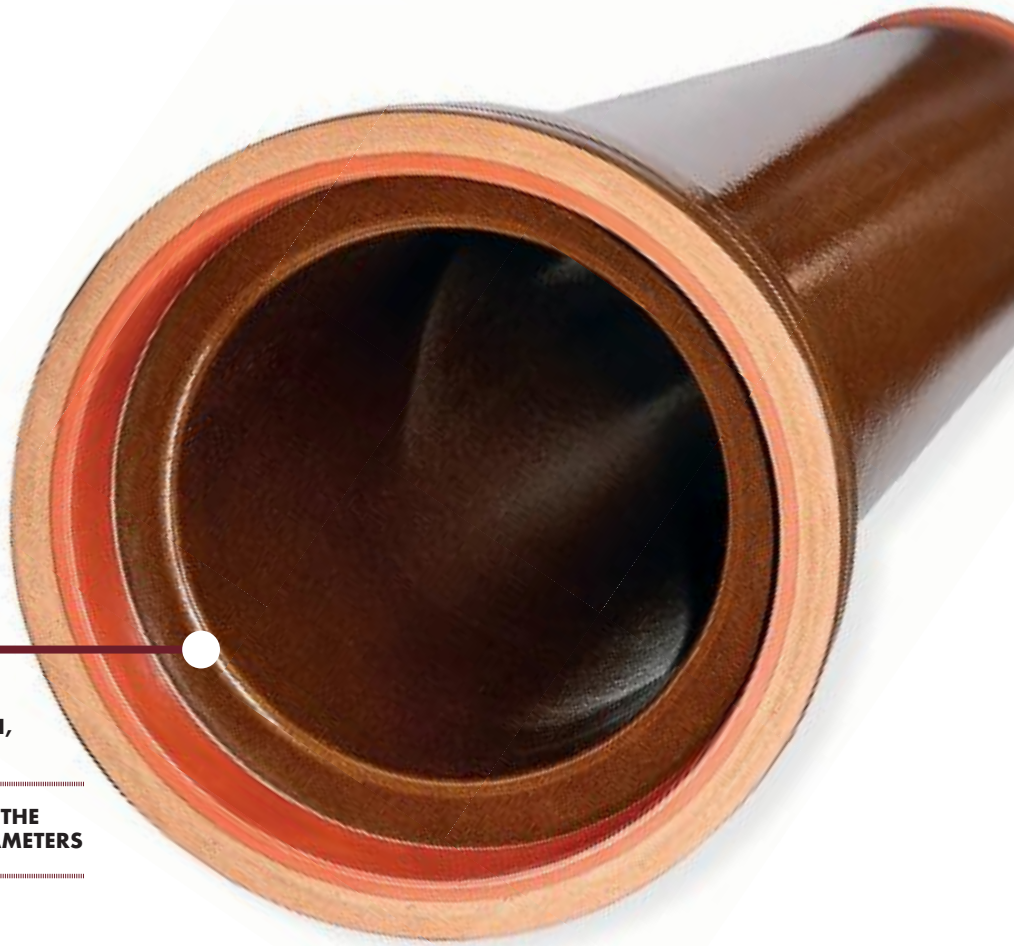
✚ FULL ACCESSIBILITY FOR INSTALLATION, INSPECTION AND ADJUSTMENTS

✚ IDEAL FOR NEW-BUILD PROJECTS AND THE INSTALLATION OF LARGER NOMINAL DIAMETERS

✚ EASY CONNECTION OF MANHOLES AND BRANCHES

✚ CAN BE COMBINED WITH JOINTING SYSTEM C OR F

✚ ENABLES PRECISE GRADIENT ALIGNMENT AND VISUAL INSPECTION DURING INSTALLATION



TYPICAL AREAS OF APPLICATION

- ✓ Municipal sewer construction
- ✓ New construction of wastewater and stormwater pipelines
- ✓ infrastructure projects in open terrain



A CONNECTION BETWEEN KNOWLEDGE AND THE FUTURE

Euro Sweillem stands for technology with tradition. Our engineers develop jointing systems that withstand the highest loads while remaining easy to install.

JOINTING SYSTEMS – TIGHT. SAFE. DURABLE.

Euro Sweillem's F and C jointing systems are precisely tailored to the requirements of modern sewer construction systems. They ensure a permanently tight, dimensionally stable and low-maintenance connection, even under extreme load conditions. Both systems comply with the requirements of DIN EN 295-1:2013 and are an integral part of our Vitrified Clay Pipes system.

STRONG TOGETHER IN THE SYSTEM

Both jointing systems are fully compatible with our product range and can be selected individually according to the installation situation, load requirements or construction method. Whether System F for maximum stability or System C for maximum reliability – Euro Sweillem always offers the right connection for sustainable infrastructure projects.



SYSTEM F – standardized and tested – offers a secure and sealed solution for universal application.



SYSTEM C – reliably compensates for ceramic tolerances, thereby ensuring a permanently stable pipe connection.

Euro Sweillem therefore provides a coordinated, future-ready system that sets standards in terms of tightness, sustainability and cost-effectiveness, ensuring safe and durable wastewater infrastructure.





What makes Socket K a proven and market-leading system in the field of wastewater systems made from Vitrified Clay Pipes?



Socket K – also known as jointing system C – is the proven and market-leading system in the field of Vitrified Clay Pipes.

It stands for reliability, precision and sustainable quality in sewer construction and has established itself over decades as a reliable, durable solution for permanently tight connections.



YOUR BENEFITS AT A GLANCE

- Permanently tight connection, even with changing soil conditions and temperature fluctuations.
- Fast and safe installation thanks to the factory-mounted seal.
- High chemical and mechanical resistance – ideal for municipal and industrial applications.
- Highest product quality: our products are DINplus-certified and awarded Cradle to Cradle® Bronze.
- Sustainably manufactured: made from 100% natural raw materials and fully recyclable.
- Extremely durable: over 150 years of functional reliability without material fatigue thanks to pipes glazed on the inside and outside.
- System advantage: Unlike other jointing systems, Euro Sweillem offers a complete range of pipes, fittings and accessories – for a fully compatible solution from a single source.



QUALITY AND SUSTAINABILITY

Vitrified Clay is a natural ceramic product – made from clay, chamotte and water.

The benefits at a glance:

- extreme compressive strength
- absolute tightness and corrosion resistance
- chemical resistance to domestic, industrial and aggressive wastewater
- service life of over 150 years

Environmentally conscious production

Our production is focused on energy efficiency, recycling and closed material cycles. In this way, we contribute to sustainable infrastructure – both ecologically and economically.

SCAN HERE TO
LEARN MORE
ABOUT
SUSTAINABILITY:



CRADLE TO CRADLE® – SUSTAINABILITY WITH A SYSTEM

With the Cradle to Cradle® Bronze certification, Euro Sweillem proves that our Vitrified Clay Pipes are not only durable, but are also produced in an environmentally responsible, circular and socially responsible way.

What does Cradle to Cradle® mean?

Cradle to Cradle® evaluates products holistically – from raw material extraction and manufacturing through to recycling.

The goal: to keep materials in cycles and conserve resources.

The path to certification

1. Analysis: assessment of all ingredients and production processes.
2. Auditing: inspection by independent, accredited institutes.
3. Optimisation: implementation of sustainable measures.
4. Certification: award of Cradle to Cradle Certified® Bronze.
5. Recertification: regular review in a two-year cycle

Added value for our customers

- Sustainable, future-proof procurement
- Transparent environmental performance
- Contribution to public sustainability goals
- Verifiable ecological responsibility

The five assessment categories

1. Material health: only safe, natural raw materials.
2. Material circularity: 100% recyclable – not waste, but valuable material.
3. Renewable energy & CO₂ management: efficient firing processes, heat recovery, CO₂ reduction.
4. Water management: closed systems, reuse of process water.
5. Social fairness: fair working conditions and responsible supply chains.





Sustainability with responsibility



© Adobe Stock – malp

© Adobe Stock – whitcomberd



Cradle to Cradle® Bronze certified, proven quality for infrastructure projects with Vitrified Clay Pipes.

Sustainable. Durable. Certified.

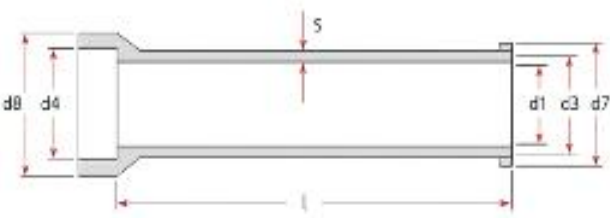






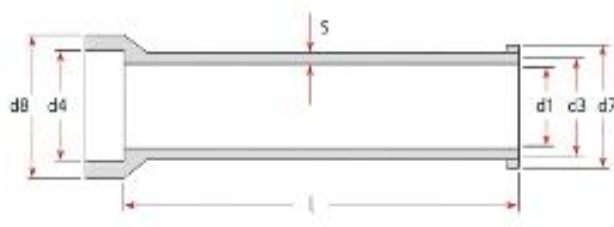
PRODUCTS

OPEN TRENCH CONSTRUCTION



NORMAL STRENGTH PIPES

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø	Spigot end outer diameter Ø		
		TKL	FN	d1 +/- Tolerance	d3 +/- Tolerance	s1	d4 +/- 0,5 mm	d7 +/- 0,5 mm	Length	Weight
DN	Joining system		(kN/m)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(kg/m)
125	F	-	34	126 +/- 4	159 +/- 2	17	-	-	1,25	19,2
150	F	-	34	151 +/- 5	186 +/- 2	18	-	-	1,25	27,2
	F	-	34	151 +/- 5	186 +/- 2	18	-	-	1,50	26
200	F	160/200	32/40	200 +/- 5	242 +/- 3	21	-	-	1,00	42
	F	160/200	32/40	200 +/- 5	242 +/- 3	21	-	-	1,50	38
	C	160/200	32/40	200 +/- 5	242 +/- 3	21	260	263	1,50	38
	F	160/200	32/40	200 +/- 5	242 +/- 3	21	-	-	2,00	39,5
	C	160/200	32/40	200 +/- 5	242 +/- 3	21	260	263	2,00	40
250	C	160	40	250 +/- 6	299 +/- 6	23	317,5	320,5	2,00	52,5
300	C	160	48	300 +/- 7	355 +/- 7	25	371,5	374,5	2,00	69,75
	C	160	48	300 +/- 7	355 +/- 7	25	371,5	374,5	2,50	69,75
350	C	160	56	348 +/- 7	417 +/- 7	27	433,5	436,5	2,00	93,5
400	C	160	64	398 +/- 8	486 +/- 8	43	507,5	510,5	2,00	137,5
	C	160	64	398 +/- 8	486 +/- 8	43	507,5	510,5	2,50	137,5
450	C	120	54	447 +/- 8	524 +/- 8	37	547	550	2,00	131,5
500	C	120	60	496 +/- 9	581 +/- 9	40,5	605	608	2,00	175
	C	120	60	496 +/- 9	581 +/- 9	40,5	605	608	2,50	175
600	C	95	57	597 +/- 12	687 +/- 12	43,5	720	723,2	2,00	220
	C	95	57	597 +/- 12	687 +/- 12	43,5	720	723,2	2,50	220



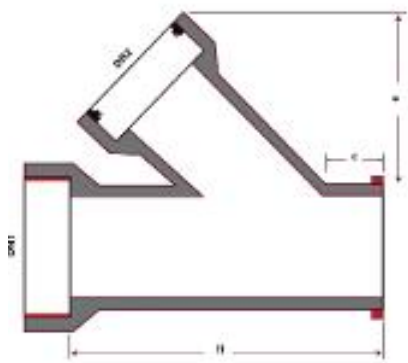
HIGH STRENGTH PIPES

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø	Spigot end outer diameter Ø		
		TKL	FN	d1 +/- Tolerance	d3 +/- Tolerance	s1	d4 +/- 0,5 mm	d7 +/- 0,5 mm	Length	Weight
DN	Jointing system		(kN/m)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(kg/m)
200	C	240	48	200 +/- 5	254 +/- 5	31	275	278,4	2,00	48
250	C	240	60	250 +/- 5	318 +/- 6	34	341,5	344,9	2,00	75,25
300	C	240	72	300 +/- 5	376 +/- 7	37	398,5	401,9	2,00	103,5
	C	240	72	300 +/- 5	376 +/- 7	37	398,5	401,9	2,50	103,5
350	C	200	70	348 +/- 5	430 +/- 7	40	459	462,5	2,00	144
400	C	200	80	398 +/- 8	492 +/- 8	45	515,5	518,7	2,00	161
	C	200	80	398 +/- 8	492 +/- 8	45	515,5	518,7	2,50	157
450	C	160	72	447 +/- 8	548 +/- 8	49	579	582	2,00	184,5
	C	160	72	447 +/- 8	548 +/- 8	49	579	582	2,50	184,5
500	C	160	80	496 +/- 9	609 +/- 9	53,5	637	640,5	2,00	223
	C	160	80	496 +/- 9	609 +/- 9	53,5	637	640,5	2,50	220
600	C	160	96	597 +/- 12	725 +/- 12	60,5	758	761,5	2,00	317
	C	160	96	597 +/- 12	725 +/- 12	60,5	758	761,5	2,50	317
700	C	84/120	84/112	696 +/- 14	831 +/- 14	69	871	874,5	2,00	346
800	C	120	96	792 +/- 16	949 +/- 16	73	976	979,5	2,00	434
1000	C	95	95	1000 +/- 25	1120 +/- 25	77	1172 +/- 0,5	1176 +/- 0,5	2,00	573



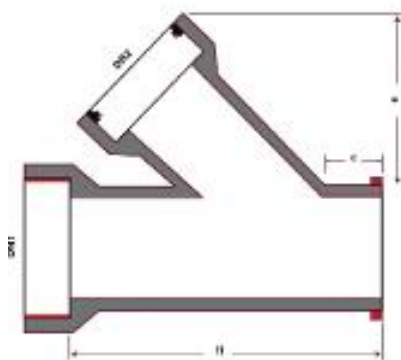
Available in DN 1200 on request.
Please contact us.

JUNCTIONS 45°



NORMAL STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Dimensions			
DN1/DN2			FN	e	a	Length	Weight
	Jointing system	TKL	(kN/m)	(mm)	(mm)	(m)	Piece in kg
150/150	F/F	–/–	34/34	75	270	0,50	20
200/150	F/F	200/–	40/34	85	270	0,50	28
200/150	C/F	200/–	40/34	85	270	0,50	28
200/200	F/F	200/200	40/40	85	370	0,70	37
200/200	C/C	200/200	40/40	85	370	0,60	37
250/150	C/F	160/–	40/34	85	270	0,50	32
250/200	C/C	160/200	40/40	85	370	0,60	40
250/200	C/F	160/200	40/40	85	370	0,60	40
300/150	C/F	160/–	48/34	85	270	0,60	50
300/200	C/C	160/200	48/40	85	370	0,70	59
300/200	C/F	160/200	48/40	85	370	0,70	59
300/250	C/C	160/160	48/40	–	–	0,70	66
400/150	C/F	160/–	64/34	–	270	1,00	151
500/150	C/F	120/–	60/34	-	270	1,00	192

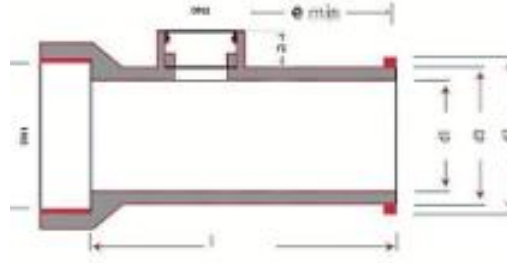


HIGH STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Dimensions			
DN1/DN2			FN	e	a	Length	Weight
	Jointing system	TKL	(kN/m)	(mm)	(mm)	(m)	Piece in kg
200/150	C/F	240/-	48/34	85	270	0,50	34
200/200	C/C	240/240	48/48	85	370	0,60	36
250/150	C/F	240/-	60/34	85	270	0,50	49,5
250/150	C/F	240/200	60/40	85	370	0,60	52
250/200	C/C	240/200	60/40	85	370	0,60	52
300/150	C/F	240/34	72/34	85	270	0,60	64
300/200	C/F	240/200	72/40	85	370	0,70	77
300/200	C/C	240/200	72/40	85	370	0,70	77
400/150	C/F	200/34	80/34	-	-	1,00	177

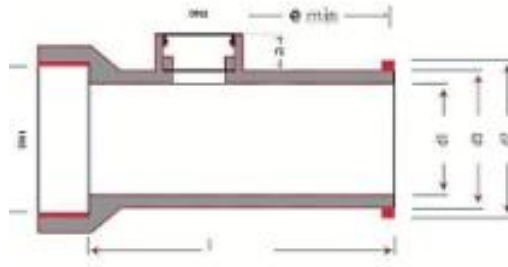
Available on request in
DN 125, DN 225, DN 350,
DN 450, DN 500 and DN 600.

JUNCTIONS 90°



NORMAL STRENGTH

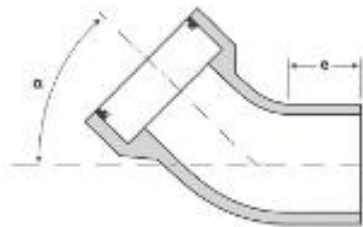
Nominal diameter		Load-bearing class	Crushing strength	Dimensions			
DN1/DN2			FN	e	a	Length	Weight
(mm)	Joining system	TKL	(kN/m)	(mm)	(mm)	(m)	Piece in kg
150/150	F/F	–/–	34/34	160	75	0,50	18
200/150	F/F	200/–	40/34	170	85	0,50	27
200/150	C/F	200/–	40/34	170	85	0,50	27
200/200	F/F	200/200	40/40	180	85	0,60	33
200/200	C/C	200/200	40/40	180	85	0,60	33
250/150	C/F	160/–	40/34	170	85	0,50	30,5
250/150	C/F	160/–	40/34	170	85	0,60	37
250/200	C/F	160/200	40/40	180	85	0,60	38
250/200	C/C	160/200	40/40	180	85	0,60	42
300/150	C/F	160/–	48/34	170	85	0,50	48
300/200	C/F	160/200	48/40	200	85	0,70	55
300/200	C/C	160/200	48/40	200	85	0,70	56
400/150	C/F	160/–	64/34	–	85	1,0	149
400/200	C/F	160/200	64/40	–	85	1,0	151
400/200	C/C	160/200	64/40	–	85	1,0	151
500/150	C/F	120/–	60/34	–	95	1,0	190
500/200	C/F	120/200	60/40	–	95	1,0	190
500/200	C/C	120/200	60/40	–	95	1,0	190
600/150	C/F	120/–	72/34	–	95	1,0	251
600/200	C/F	120/200	72/40	–	95	1,0	254
600/200	C/C	120/200	72/40	–	95	1,0	251



HIGH STRENGTH

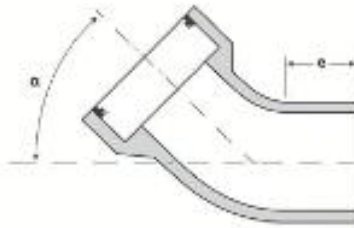
Nominal diameter		Load-bearing class	Crushing strength	Dimensions			
DN1/DN2			FN	e	a	Length	Weight
(mm)	Jointing system	TKL	(kN/m)	(mm)	(mm)	(m)	Piece in kg
200/150	C/F	240/-	48/34	170	85	0,50	33
200/200	C/C	240/240	48/48	180	85	0,60	34
250/150	C/F	240/-	60/34	170	85	0,50	48
250/200	C/F	240/200	60/40	180	85	0,60	50
250/200	C/C	240/200	60/40	180	85	0,60	50
300/150	C/F	240/-	72/34	170	85	0,60	62
300/200	C/F	240/200	72/40	180	85	0,70	74
300/200	C/C	240/200	72/40	180	85	0,70	74
400/150	C/F	200/-	80/34	-	85	1,0	175
400/200	C/F	200/200	80/40	-	85	1,0	180
400/200	C/C	200/200	80/40	-	85	1,0	180
500/150	C/F	160/-	80/34	-	95	1,0	243
500/200	C/F	160/200	80/40	-	95	1,0	245
500/200	C/C	160/200	80/40	-	95	1,0	245
600/150	C/F	160/-	96/34	-	95	1,0	336
600/200	C/F	160/200	96/40	-	95	1,0	340
600/200	C/C	160/200	96/40	-	95	1,0	340

BENDS 15°, 30°, 45°, 90°



NORMAL STRENGTH

Nominal diameter		Angle	Load-bearing class	Crushing strength	Insertion shaft length	
DN		a +/- tolerance		FN	e	Weight
(mm)	Jointing system	(Grad)	TKL	(kN/m)	(mm)	Piece in kg
150	F	15° +/- 3°	–	34	75	9
	F	30° +/- 4°	–	34	75	10
	F	45° +/- 5°	–	34	75	10,5
	F	90° +/- 5°	–	34	75	11
200	F	15° +/- 3°	200/160	40/32	85	13,5
	C	15° +/- 3°	200/160	40/32	85	14
	F	30° +/- 4°	200/160	40/32	85	14,5
	C	30° +/- 5°	200/160	40/32	85	15
	F	45° +/- 5°	200/160	40/32	85	16,5
	C	45° +/- 5°	200/160	40/32	85	17
	F	90° +/- 5°	200/160	40/32	85	19,5
	C	90° +/- 5°	200/160	40/32	85	20
250	C	15° +/- 3°	160	40	85	16
	C	30° +/- 5°	160	40	85	18,5
	C	45° +/- 5°	160	40	85	22
	C	90° +/- 5°	160	40	85	30
300	C	15° +/- 3°	160	48	85	29
	C	30° +/- 5°	160	48	85	28,5
	C	45° +/- 5°	160	48	85	32
	C	90° +/- 5°	160	48	85	42,5
400	C	15° +/- 3°	160	64	85	101
	C	30° +/- 5°	160	64	85	82
	C	45° +/- 5°	160	64	85	80

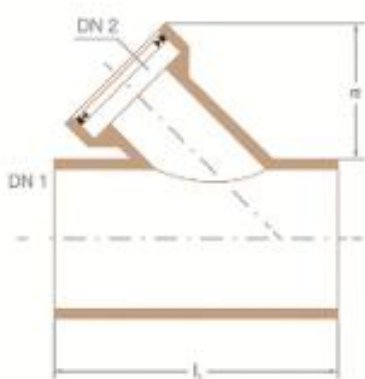


HIGH STRENGTH

Nominal diameter		Angle	Load-bearing class	Crushing strength	Insertion shaft length	
DN		a +/- tolerance		FN	e	Weight
(mm)	Joining system	(Grad)	TKL	(kN/m)	(mm)	Piece in kg
200	C	15° +/- 3°	240	48	85	19
	C	30° +/- 5°	240	48	85	18
	C	45° +/- 5°	240	48	85	21,5
	C	90° +/- 5°	240	48	85	29
250	C	15° +/- 3°	240	60	85	55,5
	C	30° +/- 5°	240	60	85	58
	C	45° +/- 5°	240	60	85	60
300	C	15° +/- 3°	240	72	85	50
	C	30° +/- 5°	240	72	85	52,5
	C	45° +/- 5°	240	72	85	62
400	C	15° +/- 3°	200	80	85	112
	C	45° +/- 5°	200	80	85	112



45° REPAIR JUNCTIONS



NORMAL STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Dimensions		
DN1/DN2			FN	a max. deflection	Length	Weight
(mm)	Jointing system	TKL	(kN/m)	(mm)	(m)	Piece in kg
150/150	-/F	-/-	34/34	270	0,5	23
200/150	-/F	200/-	40/34	270	0,6	34
200/200	-/F	200/200	40/40	270	0,5	37
250/150	-/F	160/-	40/34	270	0,6	39
300/150	-/F	160/-	48/34	270	0,6	53

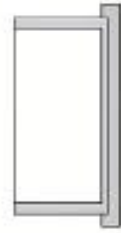
HIGH STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Dimensions		
DN1/DN2			FN	a max. deflection	Length	Weight
(mm)	Jointing system	TKL	(kN/m)	(mm)	(m)	Piece in kg
200/150	-/F	240/-	48/34	270	0,6	45
250/150	-/F	240/-	60/34	270	0,6	58
300/150	-/F	240/-	72/34	270	0,6	79



In addition to the standard sizes, our repair branches are also available in the nominal diameters DN 225, DN 350, DN 375, DN 400, DN 450 and DN 750. In addition, we also offer repair branches optionally as 90° branches. Please contact us – we will advise you individually and find the right solution for your application.

END CAPS/STOPPERS



NORMAL STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	
DN			FN	Weight
(mm)	Jointing system	TKL	(kN/m)	Piece in kg
150	F	—/—	34	3
200	F	160/200	32/40	5,5
	C	160/200	32/40	5,5
250	C	160	40	11
300	C	160	48	13
400	C	160	64	24

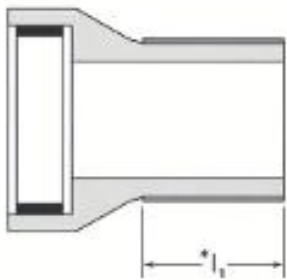


HIGH STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	
DN			FN	Weight
(mm)	Jointing system	TKL	(kN/m)	Piece in kg
200	C	240	48	5,5
250	C	240	60	11
300	C	240	72	14
400	C	240	80	24



CONNECTORS – BUILDING INSTALLATION (GE)



NORMAL STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø		
DN	Jointing system	TKL	FN (kN/m)	d1 +/- Tolerance (mm)	d3 +/- Tolerance (mm)	s1 (mm)	d7 +/- 0,5 mm (mm)	Length (m)	Weight (kg/m)
150	F		34	151 +/- 5	186 +/- 2	18		0,25	10
200	F	160/200	32/40	200 +/- 5	242 +/- 3	21		0,25	15
		160/200	32/40	200 +/- 5	242 +/- 3	21	260	0,25	15
250	C	160	40	250 +/- 6	299 +/- 6	23	317,5	0,25	19
300	C	160	48	300 +/- 7	355 +/- 7	25	371,5	0,25	31
400	C	160	64	398 +/- 8	486 +/- 8	43	507,5	0,25	53,5
450	C	120	54	447 +/- 8	524 +/- 8	37	547	0,25	58
500	C	120	60	496 +/- 9	581 +/- 9	41	605	0,25	84
600	C	95	57	597 +/- 12	687 +/- 12	44	720	0,25	63

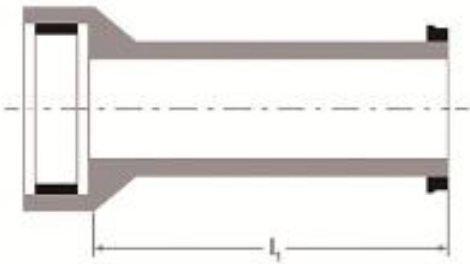
HIGH STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø		
DN	Jointing system	TKL	FN (kN/m)	d1 +/- Tolerance (mm)	d3 +/- Tolerance (mm)	s1 (mm)	d7 +/- 0,5 mm (mm)	Length (m)	Weight (kg/m)
200	C	240	48	200 +/- 5	254 +/- 5	31	275	0,25	21
250	C	240	60	250 +/- 6	318 +/- 6	34	341,5	0,25	28
300	C	240	72	300 +/- 7	376 +/- 7	37	398,5	0,25	39
400	C	200	80	398 +/- 8	492 +/- 8	45	515,5	0,25	64
500	C	160	80	496 +/- 9	609 +/- 9	54	637	0,25	78
600	C	160	96	597 +/- 12	725 +/- 12	61	758	0,25	183
700	C	120/160	84/112	696 +/- 12	831 +/- 12	69	871	0,25	145
800	C	120	96	792 +/- 12	935 +/- 12	73	976	0,25	108
1000	C	95	95	990 +/- 15	1120 +/- 15	75	1152,5	0,25	262



CONNECTORS

INLET (GZ)



NORMAL STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø	Spigot end outer Ø		
		TKL	FN	d1 +/- Tolerance	d3 +/- Tolerance	s1	d4 +/- 0,5 mm	d7 +/- 0,5 mm	Length	Weight
DN	Jointing system		(kN/m)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(kg/m)
150	F	–	34	151 +/- 5	186 +/- 2	18	–	–	0,75	21
200	F	160/200	32/40	200 +/- 5	242 +/- 3	21	–	–	0,75	35
	C	160/200	32/40	200 +/- 5	242 +/- 3	21	260,0	263,0	0,75	35
250	C	160	40	250 +/- 6	299 +/- 6	23	317,5	320,5	0,75	42
300	C	160	48	300 +/- 7	355 +/- 7	25	371,5	374,5	0,75	61,5
350	C	160	56	348 +/- 7	417 +/- 7	27	433,5	436,5	0,75	76
400	C	160	64	398 +/- 8	486 +/- 8	43	507,5	510,5	0,75	117
450	C	120	54	447 +/- 8	524 +/- 8	37	547,0	550,0	0,75	120
500	C	120	60	496 +/- 9	581 +/- 9	41	605,0	608,0	0,75	145
600	C	95	57	597 +/- 12	687 +/- 12	44	720,0	723,2	0,75	186

HIGH STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø	Spigot end outer Ø		
DN	Jointing system	TKL	FN (kN/m)	d1 +/- Tolerance (mm)	d3 +/- Tolerance (mm)	s1 (mm)	d4 +/- 0,5 mm (mm)	d7 +/- 0,5 mm (mm)	Length (m)	Weight (kg/m)
200	C	240	48	200 +/- 5	254 +/- 5	31	275,0	278,4	0,75	52
250	C	240	60	250 +/- 6	318 +/- 6	34	341,5	344,9	0,75	64
300	C	240	72	300 +/- 7	376 +/- 7	37	398,5	401,9	0,75	81
350	C	200	70	348 +/- 7	430 +/- 7	40	459,0	462,5	0,75	84
400	C	200	80	398 +/- 8	492 +/- 8	45	515,5	518,7	0,75	132
450	C	160	72	447 +/- 8	548 +/- 8	49	579,0	582,0	0,75	156,5
500	C	160	80	496 +/- 9	609 +/- 9	54	637,0	640,5	0,75	194
600	C	160	96	597 +/- 12	725 +/- 12	61	758,0	761,5	0,75	248
700	C	120/160	84/112	696 +/- 12	831 +/- 12	69	871,0	874,5	0,75	312
800	C	120	96	792 +/- 12	935 +/- 12	73	976,0	979,5	0,75	325
1000	C	95	95	990 +/- 15	1120 +/- 15	75	1152,5	1157,0	0,75	482



CONNECTORS

OUTLET (GA)



NORMAL STRENGTH

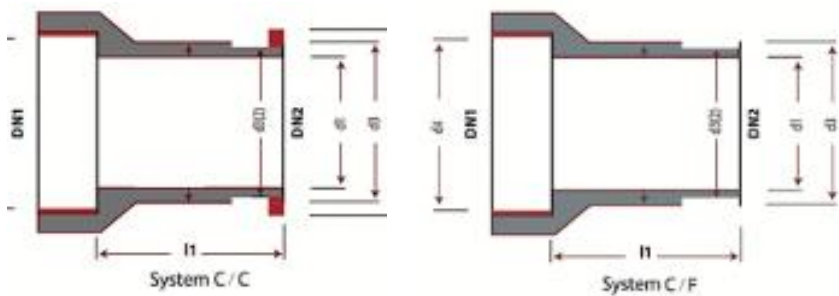
Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Spigot end outer Ø		
		TKL	FN	d1 +/- Tolerance	d3 +/- Tolerance	s1	d7 +/- 0,5 mm	Length	Weight
DN	Jointing system		(kN/m)	(mm)	(mm)	(mm)	(mm)	(m)	(kg/m)
150	F	-	34	151 +/- 5	186 +/- 2	18	-	0,75	21
200	F	160/200	32/40	200 +/- 5	242 +/- 3	21	-	0,75	35
	C	160/200	32/40	200 +/- 5	242 +/- 3	21	263,0	0,75	35
250	C	160	40	250 +/- 6	299 +/- 6	23	320,5	0,75	42
300	C	160	48	300 +/- 7	355 +/- 7	25	374,5	0,75	61,5
350	C	160	56	348 +/- 7	417 +/- 7	27	436,5	0,75	76
400	C	160	64	398 +/- 8	486 +/- 8	43	510,5	0,75	117
450	C	120	54	447 +/- 8	524 +/- 8	37	550,0	0,75	120
500	C	120	60	496 +/- 9	581 +/- 9	41	608,0	0,75	145
600	C	95	57	597 +/- 12	687 +/- 12	44	723,2	0,75	186

HIGH STRENGTH

Nominal diameter		Load-bearing class	Crushing strength	Inner Ø	Outer Ø	Wall thickness	Socket inner Ø	Spigot end outer Ø		
DN	Jointing system	TKL	FN (kN/m)	d1 +/- Toleranz (mm)	d3 +/- Toleranz (mm)	s1 (mm)	d4 +/- 0,5 mm (mm)	d7 +/- 0,5 mm (mm)	Length (m)	Weight (kg/m)
200	C	240	48	200 +/- 5	254 +/- 5	31	275,0	278,4	0,75	52
250	C	240	60	250 +/- 6	318 +/- 6	34	341,5	344,9	0,75	64
300	C	240	72	300 +/- 7	376 +/- 7	37	398,5	401,9	0,75	81
350	C	200	70	348 +/- 7	430 +/- 7	40	459,0	462,5	0,75	84
400	C	200	80	398 +/- 8	492 +/- 8	45	515,5	518,7	0,75	132
450	C	160	72	447 +/- 8	548 +/- 8	49	579,0	582,0	0,75	156,5
500	C	160	80	496 +/- 9	609 +/- 9	54	637,0	640,5	0,75	194
600	C	160	96	597 +/- 12	725 +/- 12	61	758,0	761,5	0,75	248
700	C	120/160	84/112	696 +/- 12	831 +/- 12	69	871,0	874,5	0,75	312
800	C	120	96	792 +/- 12	935 +/- 12	73	976,0	979,5	0,75	325
1000	C	95	95	990 +/- 15	1120 +/- 15	75	1152,5	1157,0	0,75	482



TRANSITIONS



ARTICULATED PIECES

Transition from one nominal diameter to the next larger nominal diameter and vice versa.

Nominal diameter		Load-bearing class	Crushing strength	Dimensions	
DN1/DN2				Length	Weight
	Joining system	TKL	(kN/m)	(m)	Piece in kg
125/150	F/F	–/–	34/34	0,25	7
150/200	F/F	–/200	34/40	0,25	9
150/200	F/C	–/200	34/40	0,25	9
150/200	F/C	–/240	34/48	0,25	15
200/150	F/F	200/–	40/34	0,25	12,5
200/150	C/F	200/–	40/34	0,25	12,5
200/250	C/C	200/160	40/40	0,25	15
250/200	C/C	160/200	40/40	0,25	23
250/200	C/F	160/200	40/40	0,25	23
250/300	C/C	160/160	40/48	0,25	18
300/250	C	160/160	48/40	0,25	19

ARTICULATED PIECES

Transition from one jointing system to another jointing system with the same nominal diameter.

Nennweite		Trag- fähigkeits- klasse	Scheitel- druckkraft	Abmessungen	
DN1/DN2			FN	Baulänge	Gewicht
	Verbindungs- system	TKL	(kN/m)	(m)	(Stück in kg)
200/200	F/C	200/200	40/40	0,25	17
200/200	C/F	200/200	40/40	0,25	15

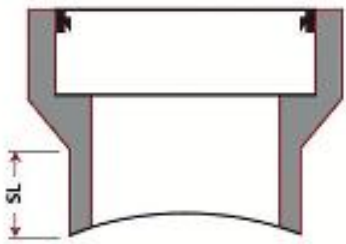
ARTICULATED PIECES

Transition from one strength class to the next higher strength class and vice versa.

Nennweite		Trag- fähigkeits- klasse	Scheitel- druckkraft	Abmessungen	
DN1/DN2			FN	Baulänge	Gewicht
	Verbindungs- system	TKL	(kN/m)	(m)	(Stück in kg)
200/200	C/C	240/200	48/40	0,25	20
200/200	C/C	200/240	40/48	0,25	13
200/250	C/C	240/240	48/60	0,25	19
250/250	C/C	240/160	60/40	0,25	25
250/250	C/C	160/240	40/60	0,25	41
250/300	C/C	240/240	60/72	0,25	30



SADDLE CONNECTORS



Nominal diameter		Load-bearing class	Crushing strength	Shaft length	
DN			FN	SL	Weight
(mm)	Jointing system	TKL	(kN/m)	(mm)	Piece in kg
150	F	–	34	50	4,5
	F	–	34	70	5
200	F	160/200	32/40	50	8
	F	160/200	32/40	70	8
	C	160/200	32/40	50	8

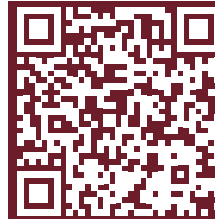


SPECIAL COMPONENTS

**Individually planned.
Precisely manufactured.**

Not every project can be realised with standard solutions. That is why Sweillem offers tailor-made production for special requirements in municipal sewer construction and industry. Whether special fittings, individual construction lengths or project-specific jointing systems: we develop solutions that are precisely tailored to your needs.

Our experienced team from technology, project management and sales supports you from planning and production through to on-time delivery. This results in precisely fitting systems that combine all the benefits of durable, corrosion-free and chemically resistant Vitrified Clay Pipes – for sustainable safety and maximum cost-effectiveness.



Please contact us for a suitable solution. Further information can be found on our website – simply scan the QR code.



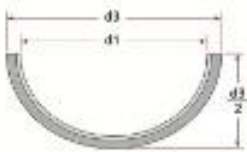
SECTION CHANNELS

NORMAL STRENGTH



CHANNELS

Nominal diameter			
DN	Length	Weight	Outer diameter
(mm)	(mm)	Piece in kg	
150	1,0 m	10	186
200	1,0 m	17	242
250	1,0 m	23	299
300	1,0 m	31	350
400	1,0 m	63	486
500	1,0 m	80	581
600	1,0 m	94	687



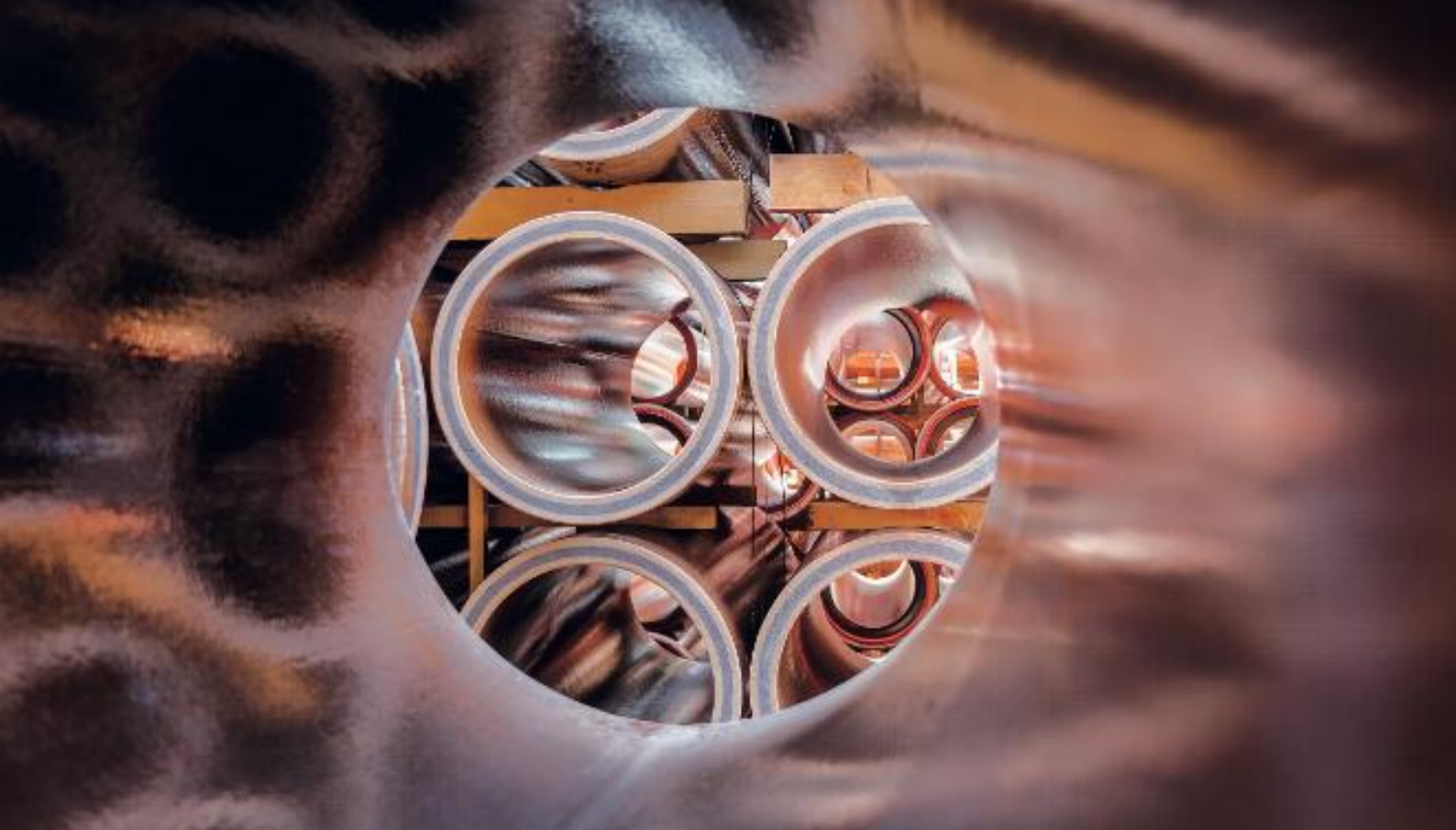
CHANNEL BENDS

Nominal diameter	Angular construction length		
DN	a +/- Tolerance	Weight	Outer diameter
(mm)	Degree	Piece in kg	
150	45° +/- 5°	4	186
150	90° +/- 5 °	5	186



BRANCHED CHANNELS

Nominal diameter		Dimensions
DN1/DN2	a max. deflection	Weight
(mm)	(mm)	Piece in kg
150/150	270	6,5
150/150	270	6,5



Material in original quality

100% Vitrified Clay –
reliable solutions for open trench
and trenchless installation.

www.euro-sweillem.de



ACCESSORIES

P-RINGS NORMAL STRENGTH

Nominal diameter	Load-bearing class	Application area
DN		Pipe outside diameter
(mm)	TKL	(mm)
200	160	237 - 247
250	160	293 - 305
300	160	348 - 362
400	160	478 - 494
500	120	572 - 590
600	95	675 - 699



P-RINGS HIGH STRENGTH

Nominal diameter	Load-bearing class	Application area
DN		Pipe outside diameter
(mm)	TKL	(mm)
200	240	249 - 259
250	240	312 - 324
300	240	369 - 373
400	240	484 - 500
500	200	600 - 618
600	160	713 - 737

DRILLING RINGS (B-RINGS)

Nominal diameter	Specification
DN	
(mm)	
150	Sealing element for saddle connectors DN 150 STZ
200	Sealing element for saddle connectors DN 200 STZ



SOCKET BASE RINGS

Nominal diameter	Specification
DN	
(mm)	
125	Schutzring
150	Schutzring



CERAMIC CLINKER PLATE

Specification		
Plate	Dimension	Weight
	(mm)	Piece in kg
	240 x 115 x 15 mm	0,95



COLD GLAZE

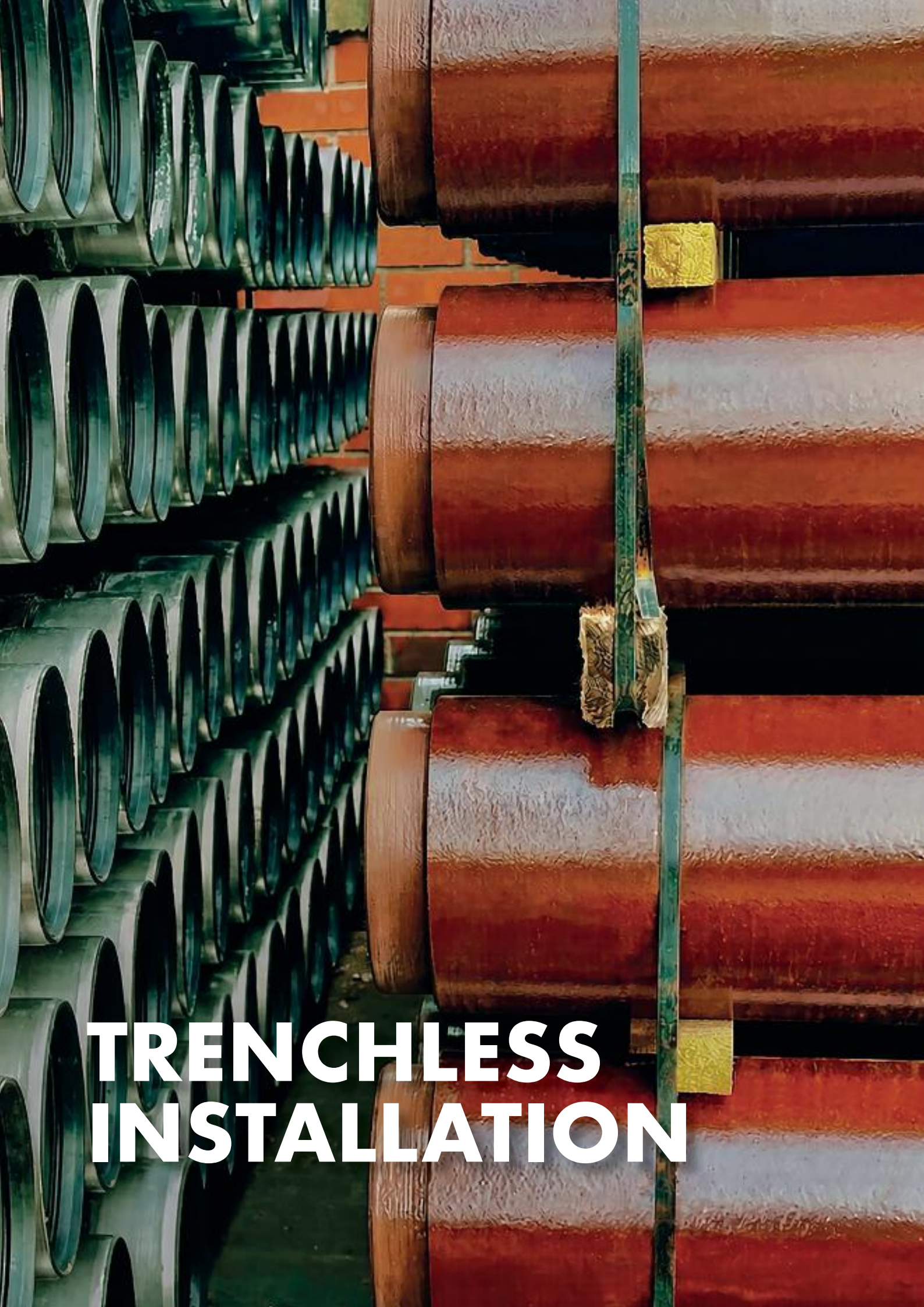
Specification	Weight
Cold glaze	0,1 kg



LUBRICANT

Specification	Weight
Lubricant	1 kg





TRENCHLESS INSTALLATION

PRECISION BELOW THE SURFACE

Jacking pipes made from Vitrified Clay enable trenchless pipeline construction with maximum precision and load-bearing capacity.

They are used wherever open excavation pits are not possible or not economically viable, for example in city centres, under roads, railway tracks or in sensitive landscape areas.

Thanks to their robust construction, permanent tightness and sustainable material properties, our jacking pipes are the ideal solution for safe, economical and durable wastewater infrastructure.

Underground construction methods – variety for every application

Euro Sweillem offers jacking pipes for main and house connection lines that can be used in all common underground construction methods. Our systems are precisely manufactured, structurally load-bearing and compatible with modern jacking and renovation technologies.





NEW CONSTRUCTION METHODS

Pilot pipe jacking

- with soil displacement
- with soil removal

Microtunnelling

- with auger conveying
- with slurry conveying

Pipe jacking

- for larger nominal diameters and longer distances



RENEWAL METHODS

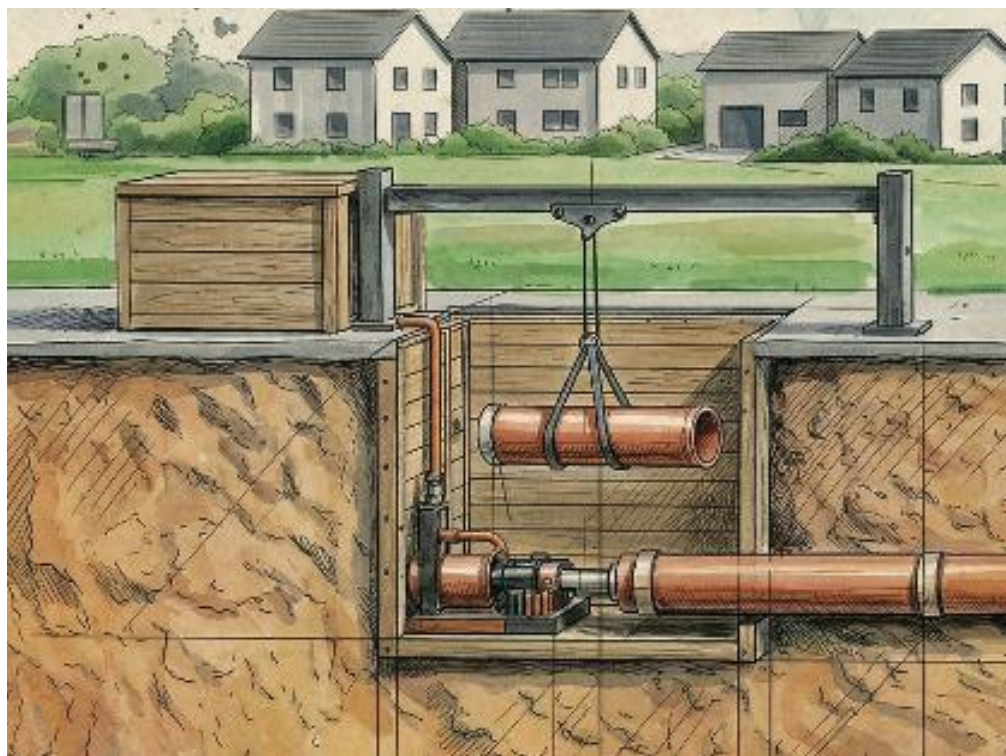
Pipe eating

- simultaneous removal of the existing pipeline and installation of the new Vitriified Clay Pipes

Burst lining

- breaking up the existing pipeline and simultaneously pulling in new pipes

Pilot pipe jacking method
with soil displacement



Seal

Stainless steel coupling

Pressure ring

Technical consulting – personal & competent

Our technical consultants are available at any time to support you in selecting the appropriate construction method, dimensioning, and with questions regarding planning and installation.

Whether new construction, renovation or a special project – we accompany you from the initial idea through to successful implementation.



+ PERMANENTLY TIGHT CONNECTION, EVEN WITH CHANGING SOIL CONDITIONS AND TEMPERATURE FLUCTUATIONS.

+ FAST AND SAFE INSTALLATION THANKS TO THE FACTORY-MOUNTED SEAL.

+ HIGH CHEMICAL AND MECHANICAL RESISTANCE – IDEAL FOR MUNICIPAL AND INDUSTRIAL APPLICATIONS.

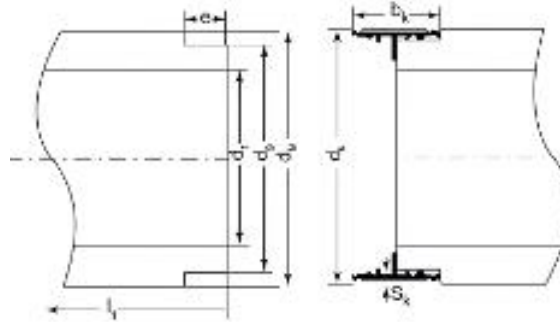
+ SUSTAINABLY MANUFACTURED: MADE FROM 100% NATURAL RAW MATERIALS AND FULLY RECYCLABLE.

+ EXTREMELY DURABLE: OVER 150 YEARS OF FUNCTIONAL RELIABILITY WITHOUT MATERIAL FATIGUE THANKS TO PIPES GLAZED ON THE INSIDE AND OUTSIDE.

+ SYSTEM ADVANTAGE: UNLIKE OTHER JOINTING SYSTEMS, EURO SWEILLEM OFFERS A COMPLETE RANGE OF PIPES, FITTINGS AND ACCESSORIES – FOR A FULLY COMPATIBLE SOLUTION FROM A SINGLE SOURCE.



JACKING PIPES



VITRIFIED CLAY JACKING PIPES ACCORDING TO TYPE 1

Nominal diameter			DN 150	DN 200	DN 250	DN 300	DN 400
Inner diameter	d_1	mm	149 +/- 2,5	199 +/- 3	250 +/- 3	299 +/- 3	400 +/- 6
Shell diameter	d_M	mm	213 +0/- 4	276 +0/- 6	360 +0/- 6	406 +0/- 10	556 +0/- 12
Spigot end diameter	d_3	mm	186 +/- 2	244 +/- 2	322 +0/- 1	374 +0/- 1	525 +0/- 1
Insertion dimension	e	mm	51 +/- 2	50 +/- 2	50 +3 /-1	50 +3/-1	50 +3/-1
Pipe length	l	mm	997 +/- 2	990 +/- 2	990 +/- 1/1990 +/- 1	990 +/- 1/1990 +/- 1	990 +/- 1/1990 +/- 1
Thickness of pressure transfer ring	D_z	mm	-	10 +/- 1	10 +/- 1	10 +/- 1	10 +/- 1

KEY FIGURES FOR VITRIFIED CLAY JACKING PIPES

Nominal diameter	Length	Pressure transfer ring	Jacking force		Crushing strength	Compressive strength	Tensile strength	Weight
DN		+/- Tolerance	Pilot pipe jacking	Micro-tunnelling	FN	DN 300		DN 400
(mm)	(m)	(mm)	(kN)	(kN)	(kN/m)	(N/mm ²)	(N/mm ²)	(kg/m)
150	1,00	-	150	-	64	100	18	36
200	1,00	-	300	-	80	100	18	60
250	1,00	10 +/- 1	600	600	130	100	18	110
250	2,00	10 +/- 1	600	600	130	100	18	110
300	1,00	10 +/- 1	750	700	120	100	18	114
300	2,00	10 +/- 1	750	700	120	100	18	114
400	1,00	10 +/- 1	1750	1700	160	100	18	256
400	2,00	10 +/- 1	1750	1700	160	100	18	256

Available in DN 500 and DN 600 on request.
Please contact us.



TECHNICAL DATA AND STANDARDS ARTICULATED PIECES

- ✓ Tested according to DIN EN 295-7 / ZP WN 295-7
- ✓ CE certified
- ✓ DIN*plus* certified
- ✓ Cradle to Cradle® Bronze certified
- ✓ Chemically and thermally resistant
- ✓ Suitable for all relevant load levels



AREAS OF APPLICATION AND REFERENCES

From municipal sewer construction projects and demanding sewer rehabilitation works to complex infrastructure projects: our pipe systems are successfully used throughout Europe.

Numerous references demonstrate their versatility and performance. Our customers rely on durable solutions that meet the highest technical standards while also making a sustainable contribution to environmental requirements.

- ✓ Municipal sewer construction
- ✓ Stormwater and combined sewer systems
- ✓ Industrial drainage
- ✓ Rehabilitation projects and new construction







SERVICE & CONSULTING

Technical consulting

Our service team supports you from planning through to installation – personally, competently and practically.

Training & support

- Product training
- Installation instructions
- Online downloads & CAD data

TRAINING COURSES

Our training courses provide practical know-how on the use of Vitrified Clay Pipes systems – from planning and processing through to quality assurance. Whether for engineering and planning offices, civil engineering companies or municipal operators: we pass on our knowledge so that projects can be implemented efficiently, sustainably and in accordance with standards.

The content includes, among other things, material and technology fundamentals, selection and application of our pipe systems, installation practice, standards and quality requirements such as DIN EN 295 and DINplus, as well as information on environmental and sustainability aspects such as Cradle to Cradle®. Our training courses are individually tailored and take place on site, in-house or online – flexibly and with a strong practical focus. In this way, we support you in making full use of the potential of our products and in implementing your projects safely and successfully over the long term.



CERTIFICATES

Quality that sets standards

In modern infrastructure, durable, safe and sustainable solutions are essential. Our products stand for the highest level of reliability – confirmed by recognised national and international certifications. These not only ensure compliance with the strictest technical requirements, but also responsible action towards the environment, resources and people.

OUR CERTIFICATIONS AT A GLANCE

DIN EN 295 – European Standard for Vitrified Clay Pipe Systems

- European product standard for vitrified clay pipes and fittings used in drains and sewers.
- Defines requirements including strength, watertightness, dimensional accuracy and joints.
- Establishes uniform quality and testing requirement for vitrified clay pipe systems across Europe.
- Added value: Provides a reliable basis for planning, tendering and durable, safe sewer systems.



DINplus – Germany

- Defines quality requirements beyond DIN EN 295.
- Independent testing and regular third-party monitoring.
- Confirms consistently high technical product quality.
- Added value: Provides additional assurance for planning, tendering and installation.



CE Marking – Verified Conformity

- Confirms conformity with the relevant European requirements.
- Documents defined and verified product characteristics.
- Creates transparency and comparability within the European market.
- Added value: An important basis for the use of products in European construction projects.



ISO certifications – Structured excellence

ISO certifications stand for structured and auditable management systems and demonstrate our commitment to quality, environmental responsibility and safe working conditions.

ISO 9001: Quality Management: Ensures clearly defined processes, continuous improvement and consistently high quality.

ISO 14001: environmental management: Demonstrates a systematic and responsible approach to environmental impacts and the use of resources.

ISO 45001: Promotes safe working conditions and the systematic prevention of occupational health and safety risks.

**ISO 9001/
ISO 14001/
ISO 45001**

Cradle to Cradle Certified® Bronze v4.1 – Holistic Sustainability Assessment

- Assesses areas including material health, product circularity, energy, water & social responsibility.
- Confirms a systematic approach to circular and responsibly manufactured products.
- Supports the requirements of sustainable and resource-efficient infrastructure.
- Added value: Provides independent sustainability verification for planners, municipalities and clients.



BENOR – Belgium

- Recognised Belgian quality mark for construction products.
- Confirms compliance with additional technical requirements for vitrified clay pipe systems.
- Certified products are subject to independent monitoring.
- Added value: Provides additional assurance for tenders and infrastructure projects in Belgium.



NF – France

- French quality mark for tested construction products.
- Supplements European standard requirements with defined quality criteria.
- Represents independently tested and monitored product characteristics.
- Added value: Supports market acceptance and planning reliability in France.



TZUS – Czech Republic

- Testing and assessment by the Czech Technical and Test Institute for Construction (TZUS).
- Provides evidence of technical suitability for the Czech market.
- Supports compliance with relevant national requirements.
- Added value: Provides additional assurance for planners, clients and contractors in the Czech Republic.



NL BSB – Netherlands

- Dutch certification with a particular focus on environmental requirements for construction products.
- Certification based on the relevant Dutch assessment guidelines.
- Supports verification of the environmentally compliant use of construction materials.
- Added value: Particularly relevant for sustainability-focused tenders and infrastructure projects in the Netherlands.



SASO / Saudi Quality Mark – Saudi Arabia

- Confirms compliance with relevant Saudi quality and product requirements.
- Includes defined testing and monitoring requirements for quality assurance.
- Supports compliant use and market access in Saudi Arabia.
- Added value: Recognised quality verification providing additional assurance for clients, planners and infrastructure projects in Saudi Arabia.



GIG – Poland

- Quality verification by the Polish research and testing institute GIG.
- Independent assessment of defined product characteristics.
- Supplements European quality assurance with a nationally recognised verification.
- Added value: Strengthens confidence and acceptance in projects within the Polish market.



ITB – Poland

- Quality verification by the Polish Building Research Institute.
- Technical testing and assessment of construction products.
- Supports verification of suitability for use in construction.
- Added value: Increases transparency and planning reliability in the Polish market.



Access more information digitally

For detailed information about our certificates and credentials, please visit our website:

Scan the QR code to learn more!

THANK YOU FOR TAKING THE TIME.

If you like our work, we would be pleased
to receive a short review on Google.

Simply scan the QR code and share
your opinion with us!





NOTES

NOTES

READY FOR LONG-LASTING INFRASTRUCTURE?

Euro Sweillem – Sustainable. Durable. Certified.

Rely on Vitrified Clay Pipes with a system for planning and construction: standards-compliant, resilient and circular. We advise you on tenders, dimensioning and the Cradle to Cradle® Bronze certification.

**Request documents, CAD data and references now,
or arrange a consultation appointment directly.**



Euro Sweillem GmbH
Stiegstraße 60
41379 Brüggen-Bracht

+49 2157 1286411
info@euro-sweillem.de
www.euro-sweillem.de

