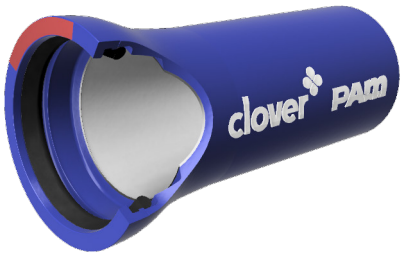
DUCTILE IRON PIPE DN800 TO DN2200 C25

ZINALIUM® HYDROCLASS® & INTEGRAL®

The PAM Zinalium Hydroclass and Integral large diameter ductile iron pipe range is flexible pipe system suitable for pressure and non-pressure water supply, sewerage and aggressive medium applications.



ZINALIUM® COATING

- Zinalium is an active corrosion protection system, consisting of a base zinc and aluminium alloy coating (400g/m²)) and a synthetic epoxy pore sealer (100µm).
- Zinalium extends the lifespan of a pipeline by actively protecting the pipe against the corrosive effects of the surrounding soil.
- Zinalium ductile iron pipes can be directly buried in contact with the majority of soils without polyethylene sleeving. Contact the Clover engineering team to discuss suitable ground conditions.

HYDROCLASS®

- Hydroclass ductile iron pipes are supplied with a standard Sulphate Resistant (SR) blast furnace slag cement mortar lining and are suitable for potable water, recycled water and raw water applications.
- An optional bituminous seal coat may be applied to the cement mortar lining to restrict lime leaching when conveying soft water, especially with low flow rates and/or lengthy residence times. (Total alkalinity < 30mg/L).
- Hydroclass pipes are supplied with a standard T-type EPDM gasket and feature a blue external colour.

INTEGRAL®

- Integral ductile iron pipes are supplied with a standard Calcium Aluminate (CA) cement mortar lining and are suitable for gravity sewer, pressure sewer, mining slurry and aggressive applications (mediums with pH concentrations ranging from pH4 and pH12).
- Integral pipes are supplied with a standard T-type EPDM gasket and feature a red external colour.

OPTIONS

- Zinc external coating (Zn200g/m2)
- Polyethylene coating and lining options available
- Higher pressures available (Up to PN100)

SPECIFICATIONS

Diameter Range: DN800 to DN2200

Nominal Pressure: Up to 2,500kPa (PN25)

End Connection:
- Standard Rubber Ring Joint (RRJ) – EPDM
- Restraint Rubber Ring Joint (RRJ) – EPDM

Certification:
- ISO2531 “Ductile iron pipes, fittings, accessories and their joints for water applications”
- ISO7186 “Ductile iron products for sewerage applications”
- EN545 “Ductile iron pipes, fittings, accessories and their joints for water applications”
- EN598 “Ductile iron pipes, fittings, accessories and their joints for sewerage applications”
- AS/NZS4020 “Testing of products for use in contact with drinking water”

WSAA Product Appraisal: PA 14/19

WSA Purchase Specification:
- PS202 - Ductile Iron Pipes and Fittings (ISO Sized) for Pressure Applications - Water Supply
- PS202S - Ductile Iron Pipes and Fittings (ISO Sized) for Pressure Applications - Sewerage

FEATURES

- High hoop and axial strength provides ductile iron pipe the ability to resist the extreme stresses imparted by soil, construction loads and variable pipeline operating conditions.
- Ductile iron is tough allowing it to endure irregular operating conditions and the demands of handling in the field.
- High burst strength makes ductile iron pipe well suited for high-pressure applications.
- Ductile iron pipe has proven long term performance and maintenance free operation.
- Each ductile iron pipe joint can be deflected allowing the installer to reduce the number of bends required.

APPLICATIONS

- Potable and recycled water supply
- Irrigation and raw water
- Gravity and sewer rising mains
- Mining and slurry
- Stormwater and drainage
- Buried and above ground

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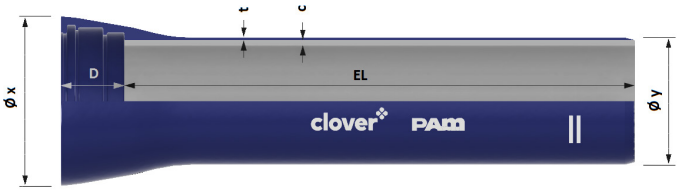
C25 DUCTILE IRON PIPE

SPECIFICATIONS	SYM	UNITS	DN 800	DN 900	DN 1000	DN 1100	DN 1200	DN 1400	DN 1600	DN 1800	DN 2000	DN 2200
PRESSURE NOMINAL	PN	Nom	25	25	25	25	25	25	25	25	25	25
MEAN PIPE OUTSIDE DIAMETER	Ø y	mm	842	945	1048	1152	1255	1462	1668	1875	2082	2288
EFFECTIVE LENGTH	EL	m	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
EFFECTIVE JOINT DEFLECTION	°	deg	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	2.5	2.0
MEAN INTERNAL PIPE DIAMETER - CEMENT MORTAR LINED	Ø z	mm	811.8	911.8	1012.8	1114.8	1215.8	1412.6	1614.6	1817.6	2020.4	2216.4
NOMINAL PIPE WALL THICKNESS	t	mm	9.6	10.6	11.6	12.6	13.6	15.7	17.7	19.7	21.8	23.8
MINIMUM PIPE WALL THICKNESS	a	mm	7.5	8.4	9.3	10.2	11.2	13.0	14.8	16.6	18.5	20.3
NOMINAL CEMENT MORTAR LINING THICKNESS	c nom	mm	6.0	6.0	6.0	6.0	6.0	9.0	9.0	9.0	9.0	12.0
MINIMUM CEMENT MORTAR LINING THICKNESS	c min	mm	3.5	3.5	3.5	3.5	3.5	6.0	6.0	6.0	6.0	7.0
PIPE SOCKET DEPTH OF ENTRY	D	mm	160	175	185	200	215	239	266	297	319	328
PIPE SOCKET OUTSIDE DIAMETER	Ø x	mm	943	1052	1158	1267	1377	1610	1821	2043	2262	2486
WEIGHT OF PIPE LENGTH	W	kg	1365	1674	2011	2402	2807	3971	5022	6263	7622	9404

PRESSURE	SYM	UNITS	DN 800	DN 900	DN 1000	DN 1100	DN 1200	DN 1400	DN 1600	DN 1800	DN 2000	DN 2200
ALLOWABLE OPERATING PRESSURE	AOP	MPa	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
MAXIMUM ALLOWABLE OPERATING PRESSURE	MAOP	MPa	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
ALLOWABLE SITE TEST PRESSURE	ASTP	MPa	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
BURST PRESSURE	BURST	MPa										

PROPERTIES	SYM	UNITS	DN 800	DN 900	DN 1000	DN 1100	DN 1200	DN 1400	DN 1600	DN 1800	DN 2000	DN 2200
TRANSFORM WALL THICKNESS	tt	mm										
CELERITY	C	m/s										
RING STIFFNESS	SN	N/m/m	15 000	15 000	14 000	14 000	14 000	14 000	13 000	13 000	13 000	13 000
BUCKLING PRESSURE	BP	kPa										

TRANSPORT	SYM	UNITS	DN 800	DN 900	DN 1000	DN 1100	DN 1200	DN 1400	DN 1600	DN 1800	DN 2000	DN 2200
NUMBER OF PIPES PER SEMI-LOAD	-	No.	8	8	8	8	2	2	2	2	2	2



C25 pipes feature a red marking on the socket face

The products shown form part of Clover's continuous improvement program and as such the product designs, specifications and materials may change without notice.

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