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DUCTILE IRON PILES

Certified and tested foundation solution for houses, industrial buildings, bridges, slope stabilisation and underpinning works.

Description

Ductile iron piles are made from cast iron GJS 450-10 in sections of 5.00 or 5.80 m length (for container loading) and driven into the soil by an excavator with suitable hydraulic hammer. Non-grouted end bearing piles are mainly for projects with a solid stratum while grouted piles are used where skin friction can be activated.
We offer the complete system including pile driving shoes for grouted and non-grouted piles as well as different driving adapters to connect the pile top to the hydraulic hammer.

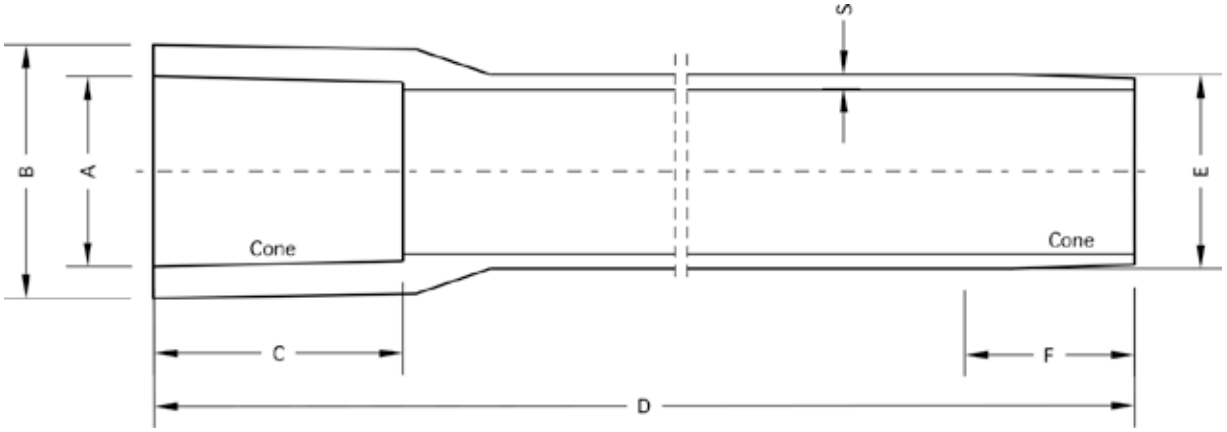
Type	*Outer diameter mm*	*Wall thickness mm*	*Weight kg*	*Internal load bearing capacity kN*	*Load bearing with concrete C20/25 kN*
118/7.5	118	7.5	21.0	833	944
118/9.0	118	9.0	24.4	986	1091
118/10.6	118	10.6	28.0	1144	1243
170/7.5	170	7.5	33.8	1225	1477
170/9.0	170	9.0	37.1	1457	1699
170/10.6	170	10.6	42.5	1699	1930
170/13.0	170	13.0	50.4	2052	2269

The internal load bearing capacity is calculated according to the requirements in the EAD, section 2.2.1. The safety coefficient Ymo is set to 1 according to EN 1993-1-1. The load bearing capacity is calculated for the cross section, buckling is not taken into account.

Advantages

- Ductile iron piles can be driven by standard hydraulic excavators of 25-35 tons operating weight.
- The socket and spigot connection is fast, reliable and does not need any welding.
- Therefore the pile length can easily be adjusted to meet different ground conditions and load requirements.
- Low vibration by the hydraulic hammer allows installation of piles close to existing structures.
- Due to high carbon and silicon content ductile iron has higher corrosion resistance than steel.
- Excellent driving performance make these piles a very economical foundation solution for many applications.

Dimensions & Tolerances



Section	*Dimension*	*Unit*	*Type 98*		*Type 118*		*Type 170*	
			Size	*Tolerance*	*Size*	*Tolerance*	*Size*	*Tolerance*
Pile tube	Outer ø E	mm	98	+1.5/-1.0	118	+1.5/-1.0	170	+2.5/-1.0
	Length D	m	5-6	+/-100	5-6	+/-100	5-6	+/-100
Pile shaft	Wall S	mm	6.0 7.5	-0.8 -0.8	7.5 9.0 10.6	-0.8 -0.8 -0.8	7.5 9.0 10.6 13.0	-0.8 -0.8 -0.8 -0.8
	Straightness	mm	According to EN545:2011 section 4.2.4 ≤ 0.125% of pile pipe length					
Socket	Inner ø	mm	104	+2.0/-1.0	118.5	+2.0/-1.0	171.5	+2.0/-1.0
	Outer ø	mm	132	+/-1.6	≤ 162		≤ 220	
Conus	Conus length C	mm	125	+/-3.0	155	+/-3.0	215	+/-3.0
	Conus	mm	1:8 to 1:18		1:10 to 1:18		1:12 to 1:18	
	Conus length F	mm	125		110	-20	150	-20
	Outer ø E	mm	98	+1.5/-1/0	118	+1.5/-1.0	170	+2.5/-1.0

Accessories & Options

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