DUCTILE IRON PILES

Because every driven pile is a tested pile









DESCRIPTION

Ductile iron piles are made of cast iron GJS 450-1 in sections of 5.0, 5.5 or 5.65 m net 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 frition can be activated.

We offer the complete system including pile driving shoes for grouted and non-grouted piles as well as pile connectors and driving adapters to connect the pile top to the hydrauilc hammer and grouting boxes.

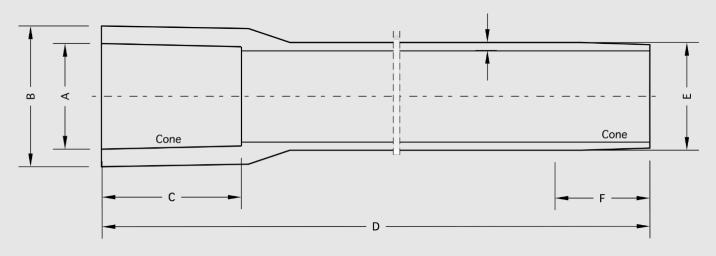
APPLICATIONS

- Foundation of buildings
- Foundation of prefabricated structures
- Bridge construction Slope stabilisation Uplift protection

- Underpinning foundations Tall structures (silos, transmission towers, etc)
- Retaining walls

DIMENSIONS, TOLERANCES & ADVANTAGES

Туре	Outer diameter mm	Wall thickness mm	Weight kg/m	Internal load bearing capacity kN	Load bearing capacity with concrete C20/25 kN	
118/7.5	118	7.5	21.00	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	



Section	Dimensions	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	-0.8	7.6	-0.8	9.0	-0.8
			7.5	-0.8	9.0	-0.8	9.0	-0.8
					10.6	-0.8	10.6	-0.8
							13.0	-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

ADVANTAGES

- Ductile iron piles can be driven by standard hydraulic excavators of 25-35 tons operating weight. The spigot and socket connection is fast, reliable and does not need any welding. Therefore the pile length can be easily 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 piles have higher corrosion resistance than steel.
- Excellent driving performance make these piles a very economical foundation solution for many applications.

