

Steel Pipe Piles – Piling solutions for narrow and small construction sites





attach the pipe



lengthening of the pipe

Piling Foundations – to always be on the safe side

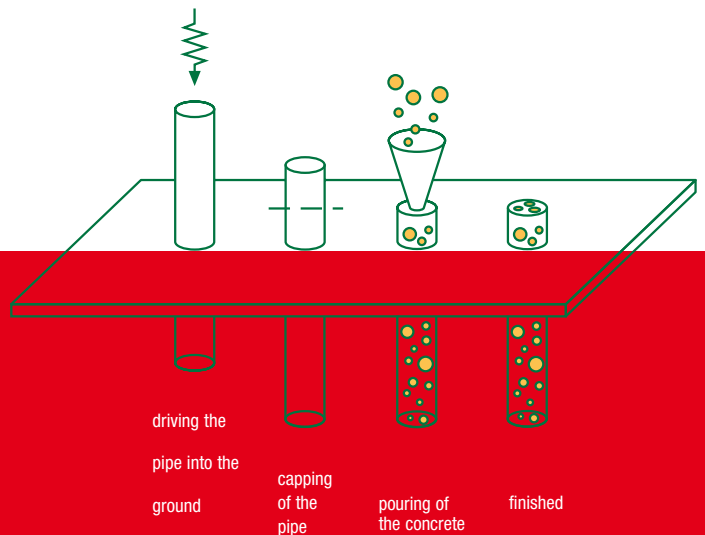
Piling foundation works are required in cases where sustainable building- and foundation ground is only available on deeper soil layers.

Via the piles that are driven into the ground the service load of the building to be erected is passed down in a punctual fashion to those lower and supportive stratum.

Steel Pipe Piles – for foundation works at small and narrow construction sites or with little clearance

Steel pipe piles are suitable to cover the lower load ranges of driven piles cast in situ and can be placed while keeping vibrations and noise levels at a minimum. With buildings or residential areas very close to the construction site the building ground can be prepared by either drilling a pilot hole or by mechanically loosening up the ground to be worked on.

Thus, this method is ideally suited nearby other buildings, adjacent construction pits or for the purpose of either cleansing and clearing or the decontamination of building ground.



| steel pipe pile | wall thickness | loading* | M approved |
|-----------------|----------------|----------|------------|
| Rohr Ø 219 mm | 5,0–8,8 mm | 250 kN | |
| Rohr Ø 273 mm | 5,0–8,8 mm | 450 kN | 43–70 kNm |
| Rohr Ø 324 mm | 5,0–8,8 mm | 600 kN | 60–90 kNm |
| Rohr Ø 356 mm | 5,0–8,8 mm | 750 kN | 60–110 kNm |
| Rohr Ø 406 mm | 5,0–8,8 mm | 950 kN | 60–110 kNm |

* loading depending on the construction ground and bonding length

| machine types | Typ 1 HL 2500/2 | Typ 2 HL 1200 |
|---------------------|-----------------|---------------|
| width | 2,00 m | 0,70–1,0 m |
| length | 4,50 m | 2,00 m |
| travelling height | 2,40 m | 1,53 m |
| working height min. | 3,70 m | 2,00 m |
| working height max. | 12,70 m | 5,00 m |
| weight | 10 t | 1,9 t |



sunk by driving steel pipe



spilling in closed space

The Manufacturing Process of Steel Pipe Piles

Using this method, a tube that is closed at the end is driven into the building ground. This is carried out by hammering a free drop hammer on an earth moist grit or concrete cold slug. The steel pipes are shot by shot and blow by blow driven into the ground and afterwards weld shut with each other. After having reached the desired pipe length respectively the pipe depth the pipes are cut to size. The steel profile alone suffices to carry the required loads.

The pouring of the concrete into the pipes is usually the final step of work and can be carried out by us or the follow-up contractor. The piles are only filled up with concrete to the height as required so that the cutting of concrete can be omitted. In some cases even a concrete pile head is not required as the supporting structure can be directly welded respectively sealed with the pile.

The pile can be used immediately after the manufacturing process has been finished. Debris or drilling dirt does not occur while using this method. The construction site stays tidy. The pipe can be covered and be driven on right away.

The external bearing capacity can be proofed by means of EA piles or a respective survey report by the consulting engineers of Professor Dr.-Ing. H. Jagau & Partners in relation to DIN 4026 an EN 12699.

Advantages at a glance

- Minimum working height
- Little working space required
- Marginal distances to nearby buildings possible
- Quick and time saving method of manufacture
- Low vibration level
- Environmentally friendly and safe
- Low noise level foundation
- No excavation works required
- Suitable for soft or pulpy ground conditions
- High pile lengths feasible
- No impact on ground water

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Our Expertise – 50 Years of Special Civil Engineering Underground

The König GmbH is a medium sized and family-run building company with headquarters in Stade on Elbe and branches in Werder on Havel near Berlin and in Oberhausen in the Ruhr area as well as a representative office in Austria. Ever since our foundation in 1955 we have been carrying out pile and foundation works for all kind of construction projects and are proudly looking back on more than 50

years of expertise in the field of special civil engineering underground. Since 1979 we have been working in the field of manufacture of slim cast in situ piles and our company developed into a genuinely high performance supplier with a very strong market position in Germany. Whatever the requirements for a particular building project might be – we can provide the ideal solution.