HP piles

HP piles are special H-shaped bearing piles with webs and flanges of the same thickness. They are used as bearing piles for foundation projects such as bridges and industrial facilities or as anchoring piles for quay or excavation walls. HP piles have the following common characteristics:

- Guaranteed pile integrity after installation. No length limitations due to trimming or splicing.
- Easy to store, handle and install. Easy connection to superstructure.
- Bearing capacity available right after installation, capacity can be determined during installation.
- Excellent durability. Corrosion rates of embedded HP piles are extremely low.
- HP piles are able to take high tensile and bending forces.



HP bearing piles range from HP 200 to HP 400. They are available in structural steel grades (yield strength 235 – 355 MPa) as well as in high-strength steel grades (yield strength 355 – 460 MPa) including HISTAR quality.

Rolling tolerances on dimensions, shape, weight and length are fixed in accordance with EN 10034.

Minimum delivery length is 8 m, maximum delivery length is 24.1 m for HP 200/220/260 and 33.0 m for HP 305/320/360/400.

The table below contains but a small extract of the available piles. Please refer to the brochure "Wide flange bearing piles" for detailed information on the entire HP range.

Section	Mass	Dimensions				Sectional area	Total area A _{tot} = hxb	Perimeter	Moment of inertia		Elastic section modulus	
	kg/m	h mm	b mm	t _w mm	t _f mm	cm²	cm ²	P m	y-y cm ⁴	z-z cm ⁴	y-y cm³	z-z cm³
HP 200 x 43	42.5	200	205	9.0	9.0	54.1	410	1.18	3888	1294	389	126
HP 220 x 57	57.2	210	225	11.0	11.0	72.9	472	1.27	5729	2079	546	185
HP 260 x 75	75.0	249	265	12.0	12.0	95.5	660	1.49	10650	3733	855	282
HP 305 x 110	110	308	311	15.3	15.4	140	955	1.80	23560	7709	1531	496
HP 320 x 117	117	311	308	16.0	16.0	150	958	1.78	25480	7815	1638	508
HP 360 x 152	152	356	376	17.8	17.9	194	1338	2.15	43970	15880	2468	845
HP 400 x 213	213	368	400	24.0	24.0	271	1472	2.26	63920	25640	3474	1282

 $t_w = t_{web} \quad t_f = t_{flange} \quad$

