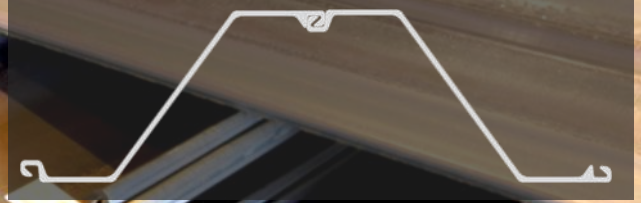


# HRZ SERIES

## DURABILITY OF SHEET PILES

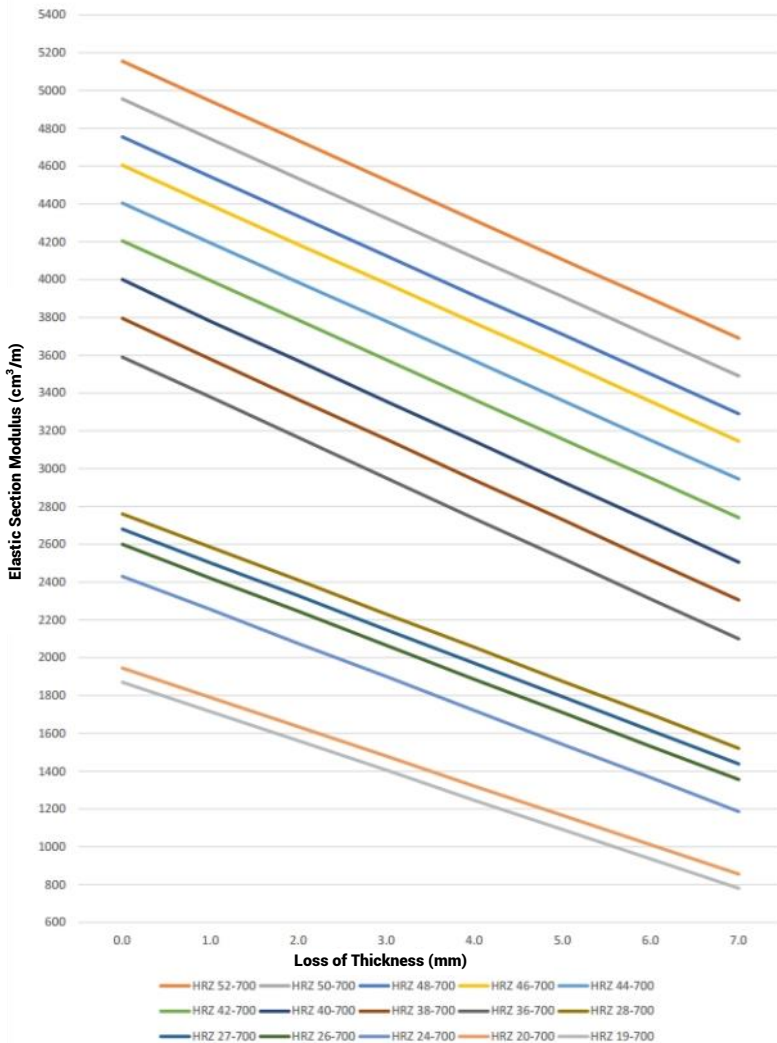


Typical Loss of Thickness during Design Life in accordance with BS Eurocode EN 1993-5:2007 Chapter 4

Environment		Design Life					
		0	5	25	50	75	100
Atmospheric	Normal Atmosphere	0.00	0.05	0.25	0.50	0.75	1.00
	Locations close to the Sea	0.00	0.10	0.50	1.00	1.50	2.00
Soil	Undisturbed natural soils (sand, silt, clay, schist,...)	0.00	0.00	0.30	0.60	0.90	1.20
	Polluted natural soils and industrial grounds	0.00	0.15	0.75	1.50	2.25	3.00
	Aggressive natural soils (swamp, marsh, peat,...)	0.00	0.20	1.00	1.75	2.50	3.25
	Non-compacted and non-aggressive fills (clay, schist, sand, silt,...)	0.00	0.18	0.70	1.20	1.70	2.20
	Non-compacted and aggressive fills (ashes, slag,...)	0.00	0.50	2.00	3.25	4.50	5.75
	Compacted and non-aggressive fills (clay, schist, sand, silt,...)	0.00	0.09	0.35	0.60	0.85	1.10
Water	Compacted and aggressive fills (ashes, slag,...)	0.00	0.25	1.00	1.63	2.25	2.88
	Common fresh water (river, ship canal,...) in the zone of high attack (water line)	0.00	0.15	0.55	0.90	1.15	1.40
	Very polluted fresh water (sewage, industrial effluent,...) in the zone of high attack (water line)	0.00	0.30	1.30	2.30	3.30	4.30
	Sea water in temperate climate in the zone of high attack (low water and splash zones)	0.00	0.55	1.90	3.75	5.60	7.50
	Sea water in temperate climate in the zone of permanent immersion or in the intertidal zone	0.00	0.25	0.90	1.75	2.60	3.50



### Reduction of Section Modulus vs Loss of Thickness



Note the elastic section modulus calculations that are shown are based on a uniform thickness loss excluding any loss from the inside of the interlocks. These charts are to be used in conjunction with the steel grades to determine the main parameters in design:

1. Bending Moment
2. Compression Load
3. Deflection



### Get in Touch:

T +1 (704) 654 0321  
 E info@escsteel.com  
 W www.escsteel.com  
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