

Steel Piles made of Seawater Corrosion Resistant Steel, POSEIDON500 system

Poseidon 500

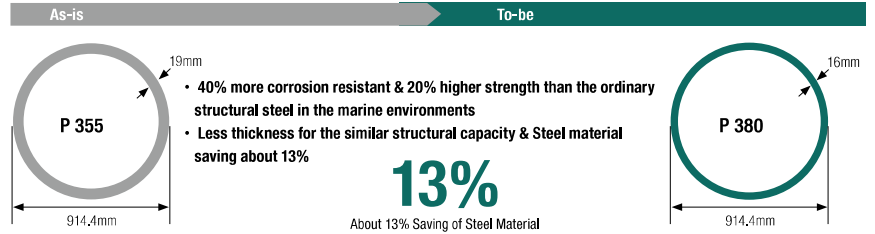


Technology

- Seawater corrosion resistant structural steel with the increased Cr, Cu alloy to enhance the corrosion resistance economically
- Developed to replace the conventional steel piles (P275/P355) for port and marine foundations (t≤40mm)



Characteristic / Advantage



Spec / Standard

- Available thickness & Dia. : t=5~40mm, D406~D3,000mm
- Standard : Structural pipes(D 3300), Steel Piles(F4602), Steel Sheet Piles(F4605)
- Corrosion resistance welding materials developed for pile connection

KS	Name	Tensile Strength(MPa)	Yield strength(MPa)	Elongation(%)	Charpy Energy
D3300	SKTM500				
F4602	STP380	≥ 500	≥ 380	≥16	≥ 47J @-5℃
F4605	SKY500				

Comparisons

- Allowable Stress : 20% higher strength comparing to conventional P355
- Corrosion Allowance : 40% reduction comparing to conventional structural steel

	P355	P380	Notes
Allowable Stress	185MPa	230MPa	Design & Standards for Harbor and Port Requirements.
Corrosion Allowance	2.0mm (Life span 50 years)	1.2mm (Life span 50 years)	
Cost Saving	100%	92%	

Applications

