

# 1 SHEET PILE /	32,859	56,975	49,905	139,739	#.1
<p>Tc = ((0.75 + r x Nmax) x L + a) x K / F (min/ )</p> <p>a, r :  L : (M)  F :  Nmax: N  K : SHEET PILE</p> <p>Fo = 1.0  . : f1=-0.05  . : f2=-0.05  . : f3=-0.05</p> <p>F = Fo + (f1 + f2 + f3) = 0.85</p> <p>.SHEET PILE ( ): L = 14.0 m</p> <p>. N : Nmax = 50</p> <p>K = 1.00</p> <p>a = 3.75</p> <p>r = 0.02</p> <p>Tc = ((0.75 + r * Nmax) * L + a) * K / F = 33.24</p> <p>(1)</p> <p>. (60 kw) : 1  . ( ) (40 ton) : 1  . (250 kw) : 1  . ( 20 ton) : 1  . ( 60 %) : 1</p> <p>(2)</p> <p>. : 2  . : 1  . : 1  . : 1</p> <p>(3)</p> <p>1) (60 kw)</p> <p>. : 21,913 * Tc / 60 = 12,139</p> <p>2) ( 40 ton)</p> <p>. : 10,939.68 * Tc / 60 = 6,060</p> <p>. : 31,751 * Tc / 60 = 17,590</p> <p>. : 31,913 * Tc / 60 = 17,679</p> <p>3) (250 kw)</p> <p>. : 44,760.24 * Tc / 60 = 24,797</p> <p>. : 12,438 * Tc / 60 = 6,890</p>					
			12,139	12,139	E65300060
			12,139	12,139	
	6,060			6,060	E21010040
		17,590		17,590	E21010040
			17,679	17,679	E21010040
	6,060	17,590	17,679	41,329	
	24,797			24,797	E75050250
		6,890		6,890	E75050250

. : $12,173 * T_c / 60 = 6,743$			6,743	6,743	E75050250
	24,797	6,890	6,743	38,430	
4) ( 20 ton) ( 60 %)					
. : $6,024.52 * T_c / 60 * 0.6 = 2,002$	2,002			2,002	E21040020
. : $31,751 * T_c / 60 * 0.6 = 10,554$		10,554		10,554	E21040020
. : $40,147 * T_c / 60 * 0.6 = 13,344$			13,344	13,344	E21040020
	2,002	10,554	13,344	25,900	
(4)					
. : $97,360 * T_c / 60 / 8 * 2 = 13,484$		13,484		13,484	L015
. : $52,374 * T_c / 60 / 8 * 1 = 3,626$		3,626		3,626	L085
. : $69,773 * T_c / 60 / 8 * 1 = 4,831$		4,831		4,831	L081
		21,941		21,941	
	32,859	56,975	49,905	139,739	
: 2002	32,859	56,975	49,905	139,739	

# 2 SHEET PILE ( ) /	16,399	28,436	24,906	69,741	#.2
Tc = ((0.75 + r x Nmax) x L + a) x K / F (min/ )					
a, r :					
L : (M)					
F :					
Nmax: N					
K : SHEET PILE					
Fo = 1.0					
. : f1=-0.05					
. : f2=-0.05					
. : f3=-0.05					
F = Fo + (f1 + f2 + f3) = 0.85					
30 kw 45 kw 60kw					
a K a K a K					
SP-III 3.24 1.11 3.87 0.93 4.34 0.83					
SP-IIIA 2.71 1.33 3.24 1.11 3.60 1.00					
SP- IV - - 3.05 1.18 3.43 1.05					
r 0.00					
.SHEET PILE ( ): L = 14.0 m					
. N : Nmax = 50					
K = 1.00					
a = 3.60					
r = 0.00					
Tc = ((0.75 + r * Nmax) * L + a) * K / F = 16.59					
(1)					
. (60 kw) : 1					
. ( ) (40 ton) : 1					
. (250 kw) : 1					
. ( 20 ton) : 1					
. ( 60 %) : 1					
(2)					
. : 2					
. : 1					
. : 1					
. : 1					
(3)					
1) (60 kw)					
. : 21,913 * Tc / 60 = 6,058			6,058	6,058	E65300060
			6,058	6,058	
2) ( 40 ton)					
. : 10,939.68 * Tc / 60 = 3,024	3,024			3,024	E21010040

. : $31,751 * T_c / 60 = 8,779$		8,779		8,779	E21010040
. : $31,913 * T_c / 60 = 8,823$			8,823	8,823	E21010040
	3,024	8,779	8,823	20,626	
3) (250 kw)					
. : $44,760.24 * T_c / 60 = 12,376$	12,376			12,376	E75050250
. : $12,438 * T_c / 60 = 3,439$		3,439		3,439	E75050250
. : $12,173 * T_c / 60 = 3,365$			3,365	3,365	E75050250
	12,376	3,439	3,365	19,180	
4) ( 20 ton) ( 60 %)					
. : $6,024.52 * T_c / 60 * 0.6 = 999$	999			999	E21040020
. : $31,751 * T_c / 60 * 0.6 = 5,267$		5,267		5,267	E21040020
. : $40,147 * T_c / 60 * 0.6 = 6,660$			6,660	6,660	E21040020
	999	5,267	6,660	12,926	
(4)					
. : $97,360 * T_c / 60 / 8 * 2 = 6,730$		6,730		6,730	L015
. : $52,374 * T_c / 60 / 8 * 1 = 1,810$		1,810		1,810	L085
. : $69,773 * T_c / 60 / 8 * 1 = 2,411$		2,411		2,411	L081
		10,951		10,951	
	16,399	28,436	24,906	69,741	
	16,399	28,436	24,906	69,741	

# 3 H-PILE ( ) ( ) L=5.00 M/	9,053	28,297	16,079	53,429	#.3
1. H-PILE (H-250x250x9x14)					
Tc = (Ts + Tb) / F (min / )					
Tc : PILE 1 ( )					
Ts : PILE 1 ( )					
Tb : PILE 1 ( )					
F : PILE					
F0 = 0.8					
. : f1=0					
. : f2=0					
. : f3=0					
. : f4=0					
F = F0 + ( f1 + f2 + f3 + f4 ) = 0.80					
Ts = 10 (min / )					
r :					
LL: PILE (M)					
k :					
H-200 : 0.80 , H-250 : 0.95					
H-300 : 1.00 , H-350 : 1.05					
k = 0.95					
.H-PILE : L = 5.00 m					
.H-PILE : LL= 4.50 m					
. : L1 = 4.50 m					
. : L2 = 0.00 m					
N1.N2: 71 N					
. N : N1 = 5					
. N : N2 = 0					
. ( ) : r1					
. ( ) : r2					
r1 = 0.03 * N1 + 0.6 = 0.75					
r2 = 0.05 * N2 + 0.6 = 0.60					
r = (r1 * L1 + r2 * L2) / (L1 + L2) = 0.75					
Tb = r * LL * k = 3.21 (min / )					
Tc = (Ts + Tb) / F = 16.51 (min / )					
1)					
. (40 kw) : 1					
. ( 30 ton) : 1					
. (100 kw) : 1					
. ( 10 ton) : 1					
. ( 60 %) : 1					
2)					
. : 2					
. : 1					

. : 1					
3)					
(1) (40 kw)					
. : $15,311 * T_c / 60 = 4,213$			4,213	4,213	E65300040
			4,213	4,213	
(2) ( 30 ton)					
. : $10,015.2 * T_c / 60 = 2,755$	2,755			2,755	E21010030
. : $31,751 * T_c / 60 = 8,736$		8,736		8,736	E21010030
. : $24,750 * T_c / 60 = 6,810$			6,810	6,810	E21010030
	2,755	8,736	6,810	18,301	
(3) ( 100 kw )					
. : $20,338.56 * T_c / 60 = 5,596$	5,596			5,596	E75050100
. : $12,438 * T_c / 60 = 3,422$		3,422		3,422	E75050100
. : $5,652 * T_c / 60 = 1,555$			1,555	1,555	E75050100
	5,596	3,422	1,555	10,573	
(4) ( 10 ton ) ( 60 %)					
. : $4,252.6 * T_c / 60 * 0.6 = 702$	702			702	E21040010
. : $31,751 * T_c / 60 * 0.6 = 5,242$		5,242		5,242	E21040010
. : $21,210 * T_c / 60 * 0.6 = 3,501$			3,501	3,501	E21040010
	702	5,242	3,501	9,445	
(5)					
. : $97,360 * T_c / 60 / 8 * 2 = 6,697$		6,697		6,697	L015
. : $52,374 * T_c / 60 / 8 * 1 = 1,801$		1,801		1,801	L085
. : $69,773 * T_c / 60 / 8 * 1 = 2,399$		2,399		2,399	L081
		10,897		10,897	
	9,053	28,297	16,079	53,429	

# 4 H-PILE ( ) ( ) L=5.00 M/	4,890	15,288	8,686	28,864	#.4
<p>1. H-PILE (H-250x250x9x14)</p> <p><math>T_c = (T_s + T_b) / F</math> (min / )</p> <p>Tc:PILE 1 ( )  Ts:PILE 1 ( )  Tb:PILE 1 ( )  F :PILE</p> <p><math>F_0 = 0.9</math></p> <p>. : f1=0  . : f2=0  . : f3=0  . : f4=0</p> <p><math>F = F_0 + (f_1 + f_2 + f_3 + f_4) = 0.90</math></p> <p><math>T_s = 6</math> (min/ )</p> <p>r :  LL:PILE (M)  k :</p> <p>H-200 : 0.80 , H-250 : 0.90  H-300 : 0.95 , H-350 : 1.05  k = 0.90</p> <p>.H-PILE : L = 5.00 m  .H-PILE : LL = 4.50 m</p> <p>. ( . ) : r1  . ( ) : r2</p> <p>r1 = 0.5  r2 = 0.8  r = 0.5</p> <p><math>T_b = r * LL * k = 2.03</math> (min/ )</p> <p><math>T_c = (T_s + T_b) / F = 8.92</math> (min/ )</p> <p>1)</p> <p>. (40 kw) : 1  . ( 30 ton) : 1  . (100 kw) : 1  . ( 10 ton) : 1  . ( 60 %) : 1</p> <p>2)</p> <p>. : 2  . : 1  . : 1</p> <p>3)</p> <p>(1) (40 kw)</p> <p>. : <math>15,311 * T_c / 60 = 2,276</math></p>			2,276	2,276	E65300040

			2,276	2,276	
(2) ( 30 ton)					
. : $10,015.2 * T_c / 60 = 1,488$	1,488			1,488	E21010030
. : $31,751 * T_c / 60 = 4,720$		4,720		4,720	E21010030
. : $24,750 * T_c / 60 = 3,679$			3,679	3,679	E21010030
	1,488	4,720	3,679	9,887	
(3) ( 100 kw )					
. : $20,338.56 * T_c / 60 = 3,023$	3,023			3,023	E75050100
. : $12,438 * T_c / 60 = 1,849$		1,849		1,849	E75050100
. : $5,652 * T_c / 60 = 840$			840	840	E75050100
	3,023	1,849	840	5,712	
(4) ( 10 ton ) ( 60 %)					
. : $4,252.6 * T_c / 60 * 0.6 = 379$	379			379	E21040010
. : $31,751 * T_c / 60 * 0.6 = 2,832$		2,832		2,832	E21040010
. : $21,210 * T_c / 60 * 0.6 = 1,891$			1,891	1,891	E21040010
	379	2,832	1,891	5,102	
(5)					
. : $97,360 * T_c / 60 / 8 * 2 = 3,618$		3,618		3,618	L015
. : $52,374 * T_c / 60 / 8 * 1 = 973$		973		973	L085
. : $69,773 * T_c / 60 / 8 * 1 = 1,296$		1,296		1,296	L081
		5,887		5,887	
	4,890	15,288	8,686	28,864	