IMPACT-POWER HYDRAULICS SDN. BHD.

(Company No. : 280464-V)
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Manufacturer of 2.5 tonnes Hydraulic Piling Hammer
- complete with base rig and leader

Raked up to 1 : 3

No need to dismantle for transportation

Benefits :-

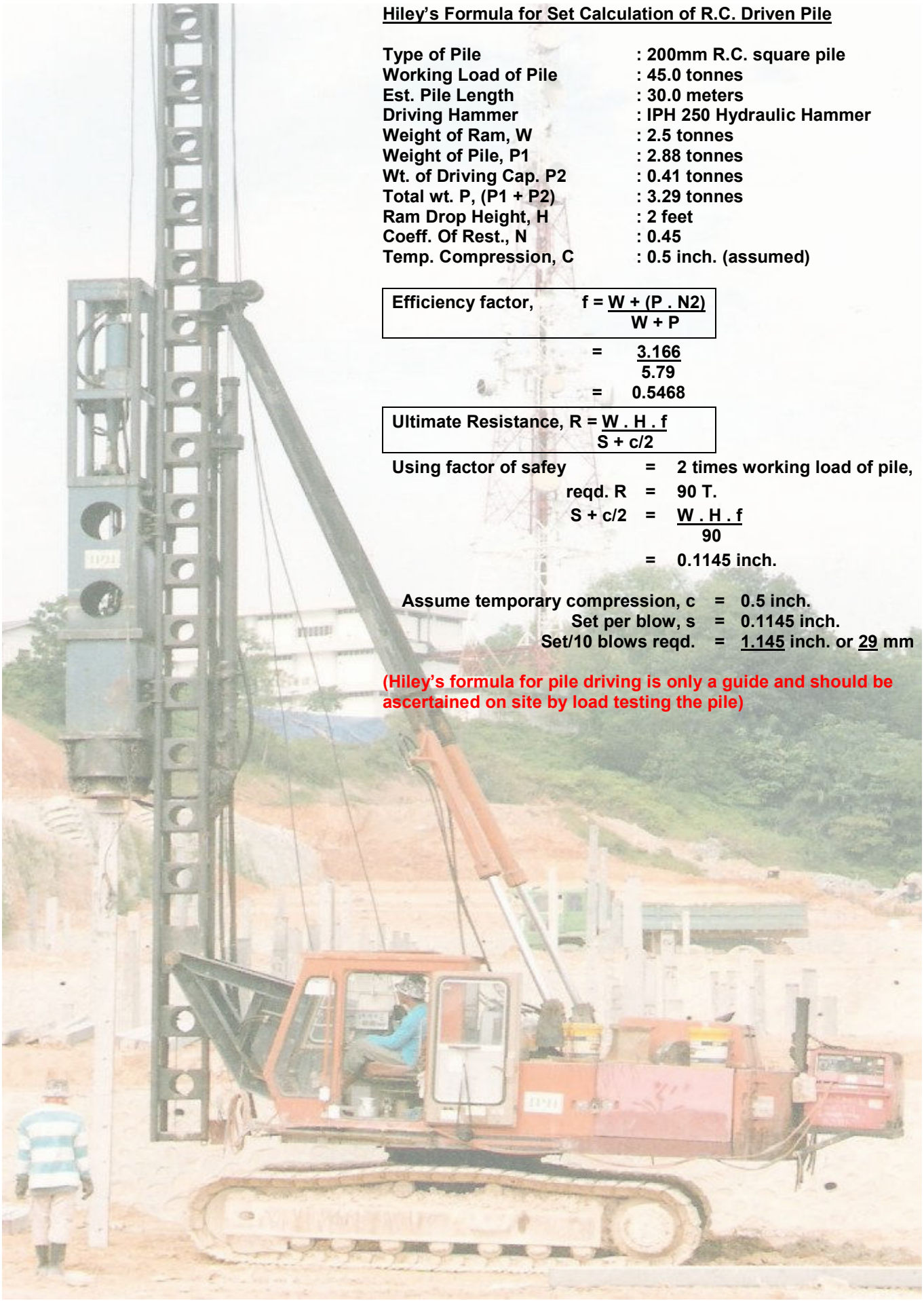
- Can drive piles up to 250 x 250 diameter square.
- No power pack required.
- No heavy crane required during mobilization and demobilization.
- No dismantling of parts during transportation.
- Mounted on excavator.
- Easy handling.
- Flexibility.

Hammer details :-

Ram weight	kg	2500
Drive cap weight	kg	410
Total hammer weight	kg	4390
Max. stroke	mm	1200
Min. stroke	mm	100
Max. energy	kNm	30
Blow rate (blows/rate) - at min. stroke - at 600mm stroke At max. stroke		 100 60 35

3 types of hammer ram available :-

- 1.5 tonnes
- 2.5 tonnes
- 3 tonnes



Hiley's Formula for Set Calculation of R.C. Driven Pile

Type of Pile	: 200mm R.C. square pile
Working Load of Pile	: 45.0 tonnes
Est. Pile Length	: 30.0 meters
Driving Hammer	: IPH 250 Hydraulic Hammer
Weight of Ram, W	: 2.5 tonnes
Weight of Pile, P1	: 2.88 tonnes
Wt. of Driving Cap. P2	: 0.41 tonnes
Total wt. P, (P1 + P2)	: 3.29 tonnes
Ram Drop Height, H	: 2 feet
Coeff. Of Rest., N	: 0.45
Temp. Compression, C	: 0.5 inch. (assumed)

Efficiency factor, $f = \frac{W + (P \cdot N2)}{W + P}$

$= \frac{3.166}{5.79}$

$= 0.5468$

Ultimate Resistance, $R = \frac{W \cdot H \cdot f}{S + c/2}$

Using factor of safey = 2 times working load of pile,

reqd. R = 90 T.

$S + c/2 = \frac{W \cdot H \cdot f}{90}$

= 0.1145 inch.

Assume temporary compression, c = 0.5 inch.

Set per blow, s = 0.1145 inch.

Set/10 blows reqd. = 1.145 inch. or 29 mm

(Hiley's formula for pile driving is only a guide and should be ascertained on site by load testing the pile)