



Point Loadings explained

**DROMAD HIRE**

## Point Loading Chart



### PRESSURES AND REACTIONS TO THE GROUND

	Model	UNDERCARRIAGE		OUTRIGGER		maximum ground bearing pressure PSI
		Average Reaction [daN]	Pressure on soft ground [daN/cm <sup>2</sup> ]	Reaction [daN]	Average Pressure on pad Ø30cm [daN/cm <sup>2</sup> ]	
Z50RT	LL1570	N/A	N/A	1670 daN	2.36 daN/cm <sup>2</sup>	34.2 PSI
Z66RT	LL2010	2980 daN	0,64 daN/cm <sup>2</sup>	2150 daN	3,04 daN/cm <sup>2</sup>	45 PSI
Z85RT	LL2614	4182 daN	0.53 daN/cm <sup>2</sup>	3124 daN	4.42 daN/cm <sup>2</sup>	65 PSI
Z85RTL	LL2614 Lithium	4182 daN	0.53 daN/cm <sup>2</sup>	3124 daN	4.42 daN/cm <sup>2</sup>	65 PSI

## Concentrated surface pressure CSP

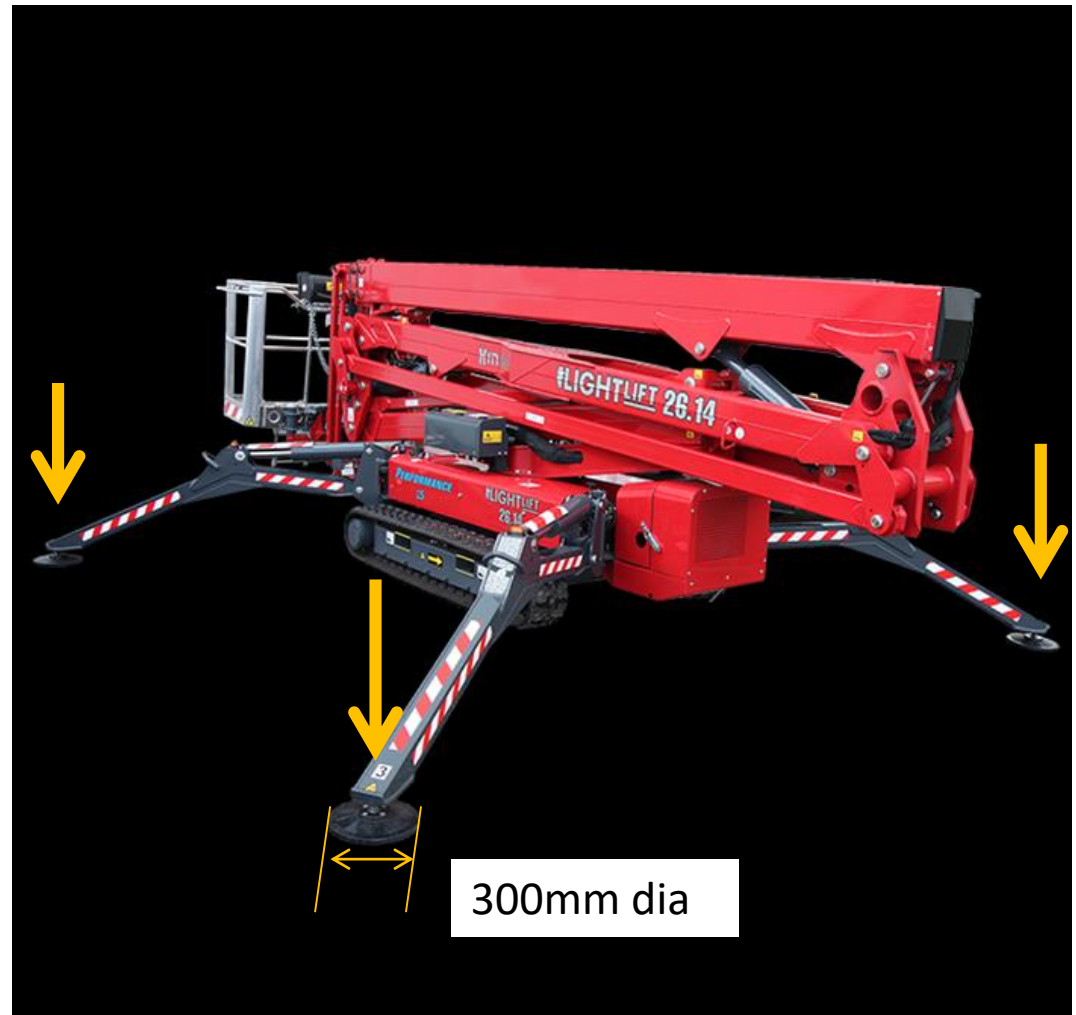
CSP is the force that is concentrated it is the most accurate way of measuring point loadings and Hinowa recommend this figure.

E.G. Model 2614  
30cm dia foot pad area = 706.85cm<sup>2</sup>  
Reaction 3124daN

$$3124/706.85 = 4.419 \text{ (4.42) daN/cm}^2$$

To convert Decca N (daN) to KN/M<sup>2</sup>  
(kilo Newton's per metre square  
Times by 100)

E.G.  
 $4.42 \times 100 = 442\text{KN/M}^2$



# General surface pressure GSP

GSP is a general load over an area many shopping centres use this measurement also other access platform manufactures, Hinowa don't consider this to be accurate.

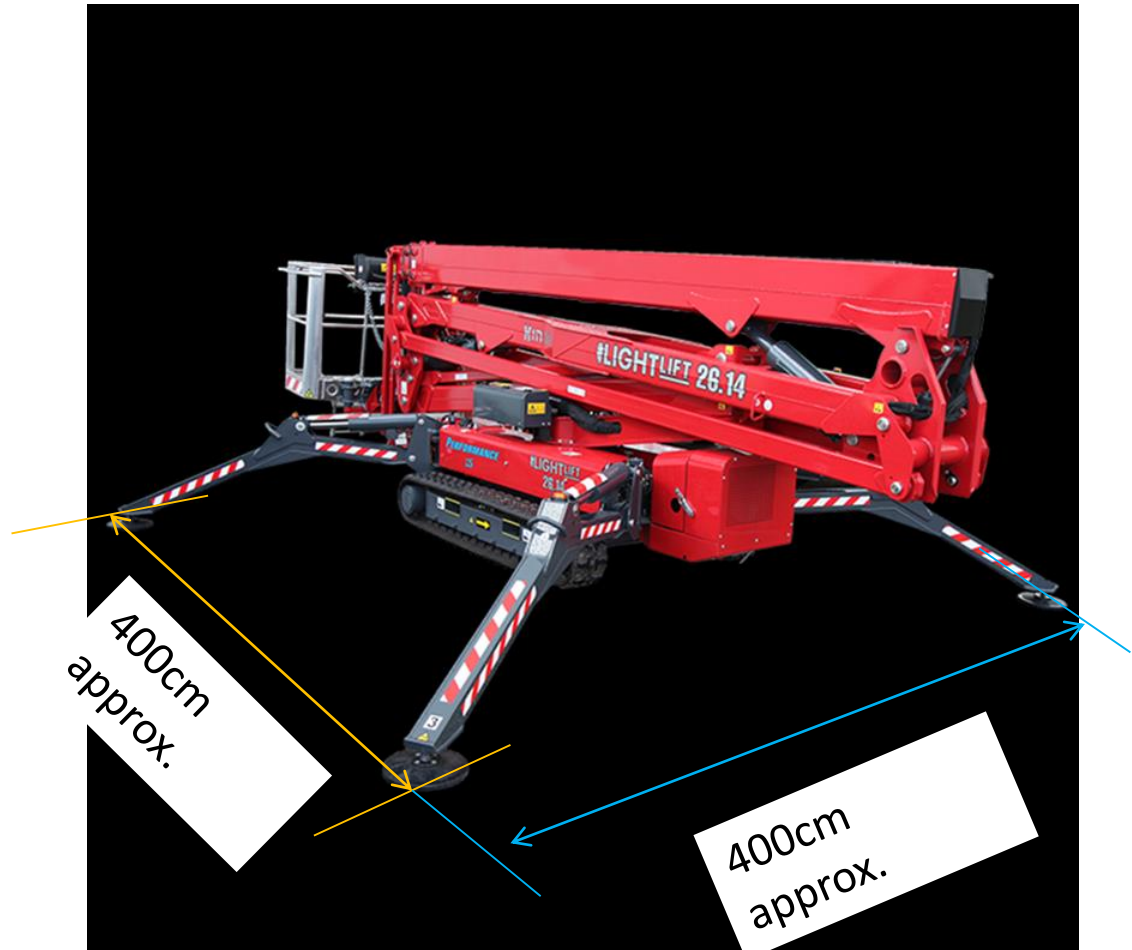
E.G. machine weight (model 2614 diesel ) 4365Kg

Base area 4mtr x 4mtr =16 mtr/2

$4365/16 = 272\text{daN/M}^2$

(To convert daN Decca Newton's to KN Kilo Newton's Divide by 100)

$272/100 = 2.73\text{KN/M}^2$



## Point Loadings Conclusion

1. CSP is accurate
2. CSP is the choice of Hinowa
3. You must understand the value of the point loadings you have been Given CSP or GSP
4. The values in this Guide are for example only you must check the values for your specific machine
5. If in doubt check with you Architect