

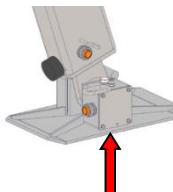
# Teupen TL156AX

Pressures and Force:

Stable ground

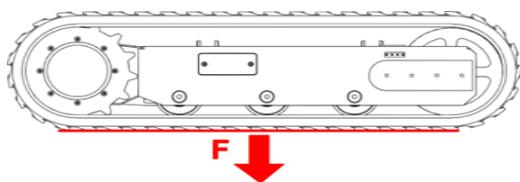
## I. Force Impact

### 1. Machine Effect on Floor Surface Material - Outriggers

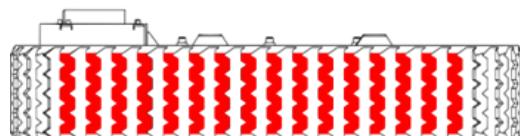
Maximum Force on Floor Material under single outrigger (fully loaded machine with max basket capacity)	81 kN 	8209 lb force
Total area of a single outrigger foot (based on length and width 43,6 x 27 cm)	1177 cm <sup>2</sup> * 182.4 sq in	
Max. ground pressure (force / area of foot)	68.8 N/cm <sup>2</sup> * 99.76 psi	
Required synthetic underplate for outrigger (max psi reduced when using underplate)		
109cm x 39cm (42.9x15.4in), 300584	19 N/cm <sup>2</sup> 	27.5 psi

### 2. Machine Effect on Floor Surface Material – Tracks

Max. load under one track (machine weight / 2) (13500kg / 2)	66.2 kN 14882 lb force	
Crawler area in contact with surface	3026 cm <sup>2</sup> * 469 sq in	
Max. ground pressure	22.5 N/cm <sup>2</sup> * 32.6 psi	



32.6 psi

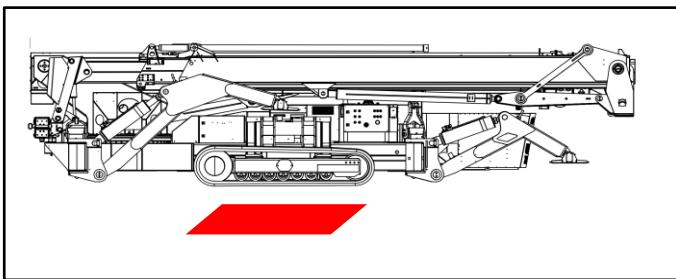
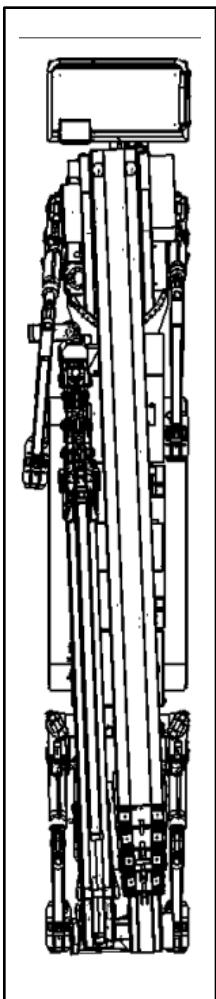


## II. Live Load (Weight and Pressure) Impact on Structure

(The Machine Live Load over projected area of machine.)

### 1. Area load in transport position (Unloaded basket)

Area in transport position (cordoned area 10m x 2,4m – 32ft 10in x 7ft 10in)	24 m <sup>2</sup>	258.3 sq ft
Machine loading in transport position	132,4 kN	29764 lb force
Live Load with basket	5.5 kN/m <sup>2</sup>	114 psf



Track dimension is 15,8" wide x 95" long  
or 1501 square inches x 2 = 3002 sq in.  
3002 sq in = 20.9 sq ft  
25,808 lbs / 20.9 = 1,234.8 psf

This calculation is only for dead load on track  
surface and not the live load effect over the  
entire area the machine would operate on.

with Basket  
114 psf

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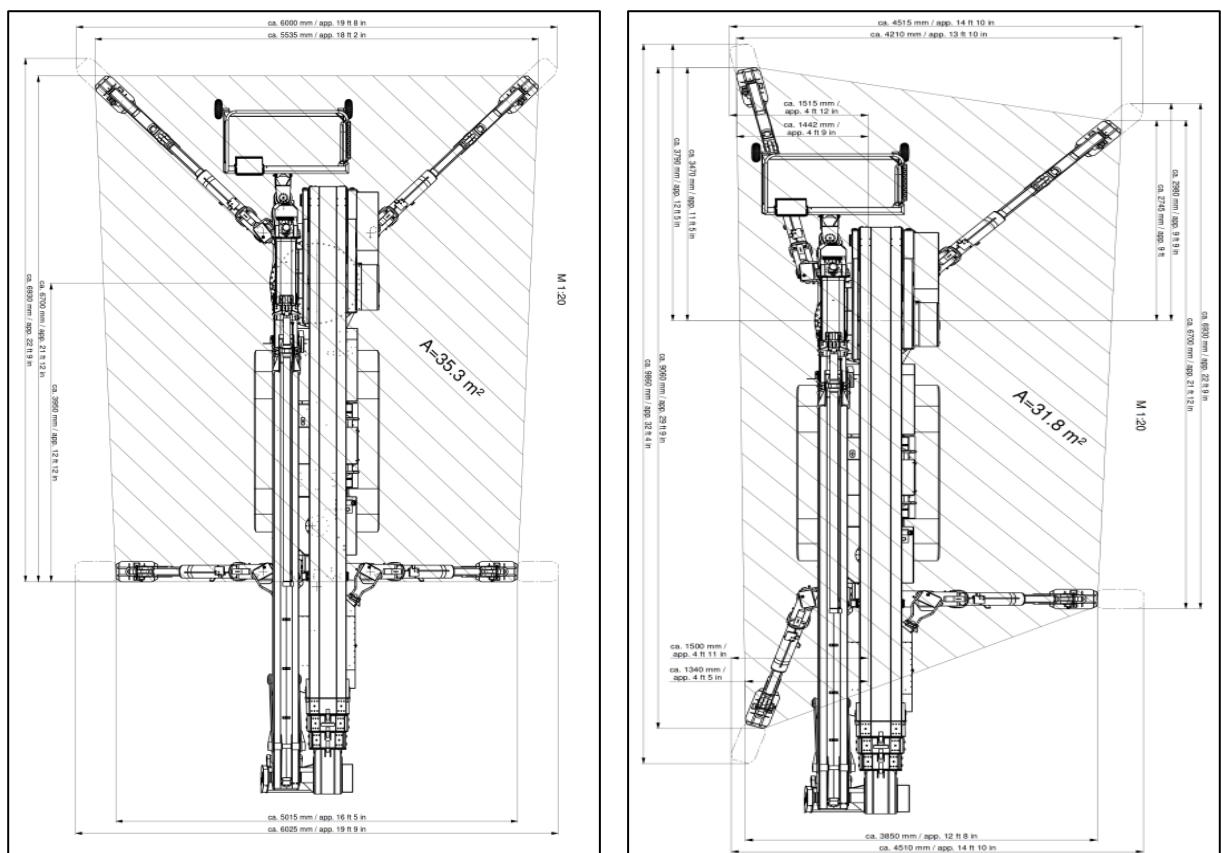


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## 2. Area pressure in working position

Area in working position (outrigger wide/wide)	35.3 m <sup>2</sup>	380 sq ft
Area in working position (outrigger narrow/wide)	31.8 m <sup>2</sup>	342.3 sq ft
Machine loading in working position (with full load in basket)	136.3 kN	26,685 lb force
Area pressure (Live Load) (outrigger wide/wide)	3.8 kN/m <sup>2</sup>	79.3 psf
Area pressure (Live Load) (outrigger narrow/wide)	4.2 kN/m <sup>2</sup>	87.7 psf



Machine loading in working position (with full load in basket)	136.3 kN	30641 lb force
Area pressure (outrigger wide / wide)	3.8 kN/m <sup>2</sup>	79 psf
Area pressure (outrigger narrow / wide)	4.2 kN/m <sup>2</sup>	88 psf