

OPICO Vertikator seed box calibration test – Land drive wheel

Seed rate - to calculate the seed rate, apply the following formula: -

$$\frac{\text{Area}}{\text{drive wheel circumference} \times \text{drive wheel turns} \times \text{working width}} \times \text{seed weight} = \text{Quantity seed / area}$$

e.g. To calculate seed rate in kg/ha

$$\begin{array}{l} 3\text{mtr working width} \\ 1.72\text{mtr drive wheel} \\ 50 \text{ drive wheel turns} \\ 0.6\text{kg collected seed} \end{array} \quad \frac{10,000\text{m}^2}{1.72\text{mtr} \times 50 \times 3\text{mtr}} \times 0.6 \text{ kg} = 23.3 \text{ Kg/ha}$$

Place the calibration tray under the distributor outlets. Set the seed rate adjuster to required output (increments 0–30 scale, see table of approximate settings in operators manual), adjust outlet slides to suit the seed type. Using the calibrating turn handle on the land drive wheel axle, turn the drive wheel 50 times, collect and weigh the delivered seed in kg, multiply this weight by 38.8 to give a seed rate in kg/ha for a 3m Vertikator with 1.72m steel drive wheel. NOTE: when using a land drive wheel the effective drive wheel circumference will vary depending on the ground condition and moisture.

For more information on changing seed rates and settings please refer to the operators manual.

Table 1. Calibration factor for different working widths using single drive wheel (on firm ground)

Working width	1.5m	2.5m	3.0m	
Factor for 1ha – 10,000m ²	77.5	46.5	38.8	Multiply calibrated seed weight by factor = weight / ha
Factor for 1ac - 4,047m ²	31.4	18.8	15.7	Multiply calibrated seed weight by factor = weight / ac

