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providing advanced technology for progressive farming

robocrop 4 QUICK TOUCH

precision guided high speed hoes

Robocrop guides row crop equipment accurately and at high speed.

The crop foliage ahead of the machine is viewed by a video camera. The image is processed by a computer to find the higher concentrations of green pixels relating to the crop rows.

Due to the large area viewed by the camera and the multiple crop line processing an excellent average crop row centre-line tracking is achieved. Robocrop compares the resulting image to a predetermined grid pattern relating to the crop row spacing.

This information is then utilised to bring the equipment onto the row centres via a hydraulic side shift.

The grid matching feature makes the system very robust against background weed infestations.

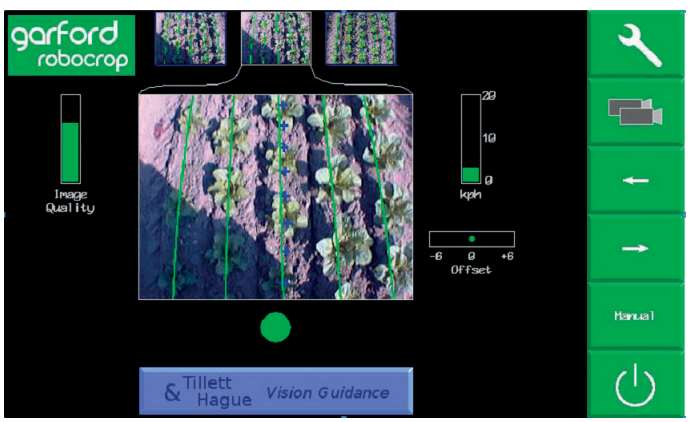
Multi camera, multi section systems can be supplied enabling very large hoes to follow smaller planters therefore increasing workrate.

Components of the Robocrop System are...

- Robocrop Console
- Hydraulic sideshift and 3 point linkage frame
- Imaging camera
- Wheel mounted speed sensor
- In work sensor

Tractor requirements...

- Hydraulic feed and return
- 12V power supply
- Category 2 or 3, 3 point linkage



A typical screen shot showing the live tracking pictures

The Robocrop camera views numerous crop rows over an area of approximately 1.5mtr.sq.

Simple and robust Robocrop console with touch screen controls

The custom colour feature enables operation on all crop colours

- The large field of vision of the Robocrop results in accurate tracking even in poor crop conditions.
- Robocrop will accurately track crop rows in many different arable and horticultural crops
- Robocrop is colour intelligent and therefore the effects of shadows or strong sunlight are minimised
- Robocrop is very accurate at high working speeds
- Because Robocrop looks at multiple rows it can maintains high accuracy at all times even in higher weed infestations. So long as the crop foliage is the dominant green feature in the camera view accurate guidance is possible.
- The side shift platform is very stable and self adjusts for wear and tear therefore accuracy can be maintained for a long period of the life of the machine
- Robocrop enables very large inter-row cultivator's to be mounted on the rear of the tractor but still maintain high accuracy and speed.
- Smaller systems can be front mounted so increasing the versatility of the system
- Reduces weed competition
- Reduces chemical residues
- For reliable operation the crop must be the more dominant feature in the image. The crop must present more foliage than the weed material and the crop foliage should be closer in colour to the centre of the green colour band (540nm) or red colour band (620nm) when working in red mode.

Robocrop enables large rear mounted cultivator to operate swiftly and accurately with reduced operator fatigue.

Fertiliser and agrochemical application equipment can be encorporated

High Accuracy!

High Speed!

Reduced Operator fatigue!

The compact hydraulic sideshift mechanism is available in Standard, Heavy Duty and Extra Heavy Duty for mounted hoes up to 18mtr

precision guided high speed hoes

Multi camera, multi section types.

Ultra precise mini for roller seeder established crops.

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