

Garford



Robocrop 2

The New Generation of Precision Guidance



*Accurate and fast
inter-row weed control!*

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What's new for Robocrop 2

Robocrop 2 features include Firewire Camera Technology which allows the software complete control of camera settings on a per frame basis, this delivers improved pixel information to the vision analysis software so nullifying many of the effects of strong sunlight and shadow. The improved v2.8 software package delivers greater versatility and an improved user interface. With the addition of ground engaging discs accuracy can be increased to less than 1cm.

Robocrop guides row crop equipment accurately and at high speed. The crop ahead of the machine is viewed by a video camera. The image is scanned to find the higher concentrations of green pixels relating to the crop rows and, using prior knowledge of the row configuration, overlay a matching grid onto the image. This information is then utilised to bring the equipment onto the exact row centres via a hydraulic side shift.

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

- 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
- 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
- Because Robocrop looks at multiple rows it maintains high accuracy at all times even in high weed infestations. So long as the crop foliage is the dominant green feature in the camera view accurate guidance is assured.
- 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

- **High Accuracy!**
- **High Speed!**
- **Reduced Operator fatigue!**

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...

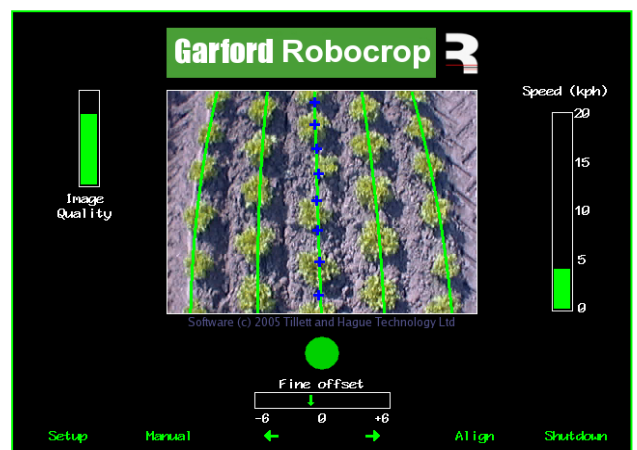
- Hydraulic feed and return
- 12V power supply
- Category 2, 3 point linkage



The compact hydraulic sideshift mechanism incorporates the junction box and hydraulic control valve



Simple and robust Robocrop console with soft key controls



A typical screen shot showing the live tracking pictures



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