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for progressive farming

garford
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THE COMPANY

The company was initially formed in the mid 1950's when local farmer, Norman Garford developed his own sugar beet harvester after spending considerable time hand harvesting sugar beet on the family farm in South Lincolnshire.

The three point linkage mounted machine appeared at the British Sugar national beet demonstrations and orders followed. Because Mr Garford was a farmer and not a manufacturer, he went into partnership with an engineer and a local blacksmith and GBW was formed to manufacture and sell these harvesters.

The present company was re-formed in the mid seventies with Mr Garford and his four sons working both on the farm and producing agricultural machinery. It was at this time that he decided to develop what is now the Victor sugar beet harvester range.

In 1984 the company moved to its present location on the outskirts of the small market town of Market Deeping in south Lincolnshire.

The company has evolved & grown and now, due to the reduction in the number of farmers growing sugar beet, further products have been developed and imported establishing the business in its position today as the only UK manufacturer of mechanical hoeing equipment.

The reputation of the company in the weed control business strengthened in 1997 when it was approached by the then NIAE institute to assist in the development of a camera guidance system for hoeing. The Robocrop was born and Garford Farm Machinery is now recognised as the market leader in precision guidance weeding systems.

The awarding winning Robocrop guidance system was further developed and in 2005, in conjunction with Tillet and Hauge, the Robocrop In Row Weeder was launched. This unique machine uses camera technology to locate individual plants in the field to allow mechanical weeding, both around the plant and between the rows.

The Robocrop In Row Weeder has won many prestigious prizes and awards both in the UK and European markets and is exported to USA, Canada, Australia, China, Israel and the European community.

The company prides itself on providing a bespoke solution to all clients' precision weeding requirements using production built assemblies with a talented multi-skilled work force and worldwide after sales support.

ROBOCROP IN ROW WEEDER

ROBOCROP HIGH SPEED GUIDED HOE



The control of weeds is one of the most important requirements in the production of foods for yield, quality and reduction in contamination.

The traditional method of hoeing weeds was labour intensive and time consuming but with the advent of chemical solutions, growers had little need for mechanical hoeing but today, all that has changed.

The need to control our environment to protect wildlife and its habitat has meant that farmers worldwide have had to return to the control of weeds with more traditional methods.

This is where the Garford Robocrop High speed guidance hoe is in its element. Whether you are growing cereals, maize, sugar beet, vegetables, salads, flowers, soft fruit, trees and shrubs, this machine can provide you with a solution for your weed control.

The Robocrop High Speed Hoe can be built from 1.5m to 18m in working width and accurately work within 1cm of the centre of the plant at speeds of up to 20kph.

The system uses a video camera to seek the crop foliage ahead and by looking at multiple rows is able, with the use of a computer and forward speed control, to accurately guide the hoe (via the hydraulically activated side shift) to extreme precision. The actions of the machine are all monitored in the tractor cab with a live visual feed.



The concept Robocrop In Row Weeder was first introduced to the press in 2004 and went to market in 2008. Since that time 100's of machines have been built and supplied in the UK and around the world.

This machine takes the crop location from the standard Robocrop High Speed Hoe and adds another dimension by locating every single plant to allow the computer to mechanically control the activation of the inter plant weeding units.

The In Row Weeder is self levelling and self seeking to ensure it follows the rows and plants accurately, to perform this efficient operation. When working to its optimum, the

machine can work at forward speeds of 3 to 4 plants per second and is capable of weeding up to 98% of the unplanted ground.

The In Row Weeder is primarily designed to work in transplanted crops such a salads and vegetables as a great degree of plant spacing accuracy is required. However the machine is being used more and more now in precision planted crops to provide a near complete weed control.

The In Row Weeder is ideally suited to the large production of chemical free salads and vegetables and provides the farmer with weed control at lower running costs than manual labour.



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THE VICTOR SUGAR BEET HARVESTER



The company started its business providing sugar beet harvesting machinery for farmers in 1988. The Victor first appeared in its original yellow before changing to its familiar green and white livery in 1993.

Initially, 3 and 4 row machines were built and supplied to the local farming community. The well-thought out design (which included the front mounted defoliator, skew bar topper, spiral cleaning rollers and loading elevator) meant that the high performance harvester was also low on power consumption.

The Victor gained success and soon the 6 row machine was developed to meet the demand from the market

for a larger capacity single machine. The first 6 row machines were mechanically driven but it was soon very clear that a fully hydraulic machine was the way forward and so the Victor 6 Hydro was born.

The success of these simple yet robust machines has seen them exported to China, Chile, The Middle East and Europe and although the European sugar beet harvesting market is dominated by self propelled machines, the Victor range continues to sell.

The Victor 6 Hydro can harvest, in one hour, a similar amount of sugar beet as a self propelled harvester - which costs at least 4 times as much!

SPECIAL PRODUCTS

The company has developed over a number of years, with initially the UK farming community, its ability to manufacture individual machines to meet the special requirements of its customers. These customers can be farmers, seed companies, universities, chemical companies and other manufactures all looking for a solution to a specific requirement.

This enables Garford Farm Machinery to be in the front line of precision farming development and by working with these individuals and companies to meet their demands, has allowed them to bring to the market the following machines:

WEED FOIL

The weed foil is the result of the immediate need to control weeds and weed beet in sugar beet crops by using a glyphosate saturated foil to brush the offending weed which will be higher than the crop and thus destroy it.

The weed foil is available in 6m, 9m and 12m format.

PRECISION WEED FOIL

This machine uses the above technology combined with automatic height control to specifically target weeds growing through such crops as carrots and onions. Once again it uses a glyphosate saturated foil to brush the offending weeds and destroy them.

PRECISION FERTILIZER APPLICATIONS

The Robocrop high speed guided hoe lends itself to the precision application of fertilizer with the addition of a front mounted tank with metering system & distribution heads and shoes on the hoe. This allows the grower to accurately place the precise amount of fertilizer at the area the plant requires for growth and saves overall fertilizer use, avoiding run-off in wet weather and protecting local water courses from pollution.

HOODED SPRAYERS

These machines have been developed since the mid 1970's solely to apply chemical to the area between the crops for weed control. This reduces the amount of chemical per hectare, minimising the risk of crop contamination. The original machines were mostly used in salad and vegetable crops but today there is more interest in using this technology in sugar beet, oil seed rape and maize.





BAND SPRAYERS

This attachment is mostly fitted to sugar beet and maize Robocrop high speed guidance hoes and used for spraying on the crop chemicals directly, for weed control and crop husbandry.



HOODED AND BAND SPRAYERS

These machines (either RTK or camera guided) have both hoods for inter-row spraying and band spraying units for over-row spraying, allowing mixed spraying applications in one pass.

These machines are commonly fitted with twin tanks and spray lines with independent controls but today many are fitted with 3 or 4 tanks and spray lines to give the owner optimum choice in applications.

SPOT SPRAYERS

This machine has been developed in conjunction with Tillet and Hague Ltd and uses the Robocrop In Row computer system to seek out and spray clumps of weeds growing in young crops thus reducing the amount and cost of chemicals.

Initially the machine was aimed at treating potatoes growing in carrot and onion crops but the interest and usage requirements are spreading to general weed control in all crops.

HOES

These products are still manufactured, although in small numbers, for the farmers and growers who require a basic machine for weed control at an economic price.









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