

# INTER-ROW WEEDING FOR SPECIALIST CROPS









WEAPONS AGAINST WEEDS
FOR ANY SPECIALIST CROP





KULT was founded by Mr Christian Kirchhoff and his wife Sabine in 1997 when they purchased Walter Kress GmbH to specifically supply mechanical weeding solutions for organic growers in Germany. Mr Kirchhoff had been the Managing Director of Walter Kress GmbH for a number of years.

KULT prides itself in supplying mechanical weeding solutions to organic vegetable, salad, soft fruit, fruit and vine growers in multiple countries around the world.

KULT's most recent innovation is their patented Finger Weeder which is used in all crops to control weeds intra-row, ie between plants.

Specialised crops require bespoke solutions and over the years KULT have developed a knowledgeable team. KULT own a number of satellite companies around the world and work with carefully selected national distributors, who have the know how to build and supply tailored solutions for farmers across the globe.

OPICO believes that, given the current political and environmental agenda, mechanical weeding provides a commercially-viable means of herbicide-free weed control. This is being proven to provide big environmental benefits and reduced chemical costs as well as helping to overcome resistance issues. All whilst satisfying the requirements of supermarkets and government agencies by reducing pesticide usage.

OPICO is pleased to have the opportunity to work closely with KULT to supply UK farmers and growers with bespoke mechanical weeding solutions.

OPICO already works with Hatzenbichler, the Austrian mechanical weeding specialists, and has been supplying comb harrows since 1994 and more recently inter-row cultivators for combinable crops, maize and sugar beet. OPICO believes strongly that farmers and growers will benefit from these associations.



# **FLEXIBLE & ADAPTABLE**

# (V)

# **FINGER WEEDERS**

Intra-row weeds constitute a major challenge. So, with the aim of minimising laborious hand weeding, KULT has developed a patented cost-effective solution to control weeds between crops in the row. Developed in the early 2000s KULT finger weeders have become very successful in meeting market requirements.

The finger weeder is either mounted independently on the wheel unit, parallel frame and share assembly or directly to the share frame if space is restricted.

There are a choice of three textile strengths, OPICO specialists will advise which is the best according to soil type and crop.



Lettuce

There are 3 diameters, which fit all applications, of 250mm, 290mm and 370mm. The choice of size is dictated by the width between the crop rows.







**Artichoke** 



**Beans** 

# SPECIALIST WEED CONTROL

# **Improve Yields**

Weeds, when combined with diseases and pests, can reduce vield in vegetable crops by up to 70% by competing for water. soil nutrients, light and space that ultimately restricts the development of the crop. Furthermore, keeping the weed population down will also reduce the prevalence of pests and disease.

OPICO is the UK supplier of the KULT specialist mechanical weeding machinery for both inter-row and intra-row weeding. OPICO believes the KULT 'Argus' system is the ideal base for specialist weeding of small to large scale vegetable, herb and flower production, indeed anywhere close spaced rows are direct seeded or transplanted.

In co-operation with KULT, the OPICO team, is able to provide a full consultation, design, build, supply and maintenance of machines suitable for most vegetable and specialist crops.

# **Bespoke Machines**

KULT Argus machines can be front or rear mounted with working widths from 1½ - 12m. Manual, mechanical or camera guided steering is available as well as a wide range of shares including the traditional duck foot A share, flat A shares, L blades, as well as the patented finger weeders, crop protection shields and discs.

For growers with delicate cropping such as spinach or small salads KULT offers high accuracy special shares that allow for gentle movement of the soil for mechanical weed control.

# **Technical Expertise**

With so many options, creating a bespoke specialist crop weeding machine requires technical expertise and know how. The process begins with a farm visit to understand the needs and any issues e.g. crop type, soil type, how the crop is grown, how high tech or low tech a solution is being sought.

After this initial visit a proposal is prepared recommending headstock type, share type, guidance system and other installation options. Once the bespoke specification is agreed, OPICO works closely with the factory to deliver and then install and support the machine.



2m KULT Argus hoe with manual steer in spinach on raised beds with duo solo, inter-row weeding units and ridging discs.

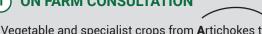


3m KULT Argus hoe with PV frame fitted with Tillett and Hague camera guidance in 25cm rows of wheat with vibro spring tines.

### THE OPICO 5 STEP PROCESS:



# **ON FARM CONSULTATION**



- Vegetable and specialist crops from Artichokes to Zucchini
- Systems e.g. row width, bed formations
- Cost considerations



# **BESPOKE SPECIFICATION**

- · Guidance tractor, manual, or camera guided steering
- Headstock choice (KULT or Hatzenbichler)
- Shares, tools & options



2.5 m KULT Argus hoe with manual steer in 3 rows of cabbage with vibro spring tines.



2m Hatzenbichler hoe with manual steer in rows of cabbage with 370mm diameter KULT finger weeders and S tines.



1.5m KULT Argus hoe with manual steer in a single row of beans complete with 370mm diameter yellow finger weeders and L blades.



3m KULT Argus hoe using a PV frame with Tillett and Hague camera guidance in 30cm rows of onions with vibro spring tines



**3** DESIGN & BUILD

- Technical designs
- Modifications
- · Customer sign off



4 DELIVERY, INSTALLATION TRAINING & SET OFF



5 SERVICE & BACK UP

# **GUIDANCE SYSTEM**

A bespoke machine for your weed control can be supplied as a standard three-point mounted machine with guidance via the tractor steering system or with reactive camera guidance.

#### **Manual Guidance**

There are two options, the tractor driver or the on-board GPS system both work well but accuracy and forward speeds are limited. The more economic solution is to fit a seat and use a second operator who steers the machine via either mechanical or hydraulic activation.

This provides more accurate guidance but again forward speed is limited.

#### **Camera Guidance**

The Tillettt and Hague multi-row single camera guidance system can be fitted, depending on usage and working width, to either a KULT parallel frame or a Hatzenbichler side-shift headstock to accurately guide the hoe and allow the operator to work more effectively at higher speeds.

Camera guided machines work closer to the crop and hence provide improved weed control at higher work rates.

A 12m inter-row cultivator for arable work requires a very different headstock to a 6m inter-row cultivator for vegetable work in beds. Whilst we use Tillett and Hague camera guidance technology across the range we offer two different steering headstocks in order to be able to tailor machines to the job in hand. Our Territory Managers will be able to advise on the best solution for your farm.

#### KULT Parallel Frame Guidance Headstock



- 1 Potentiometer to ensure precise positioning
- (2) Tillett and Hague guidance camera
- (3) KULT Argus parallel frame

# Hatzenbichler Hydraulic Side-Shift Guidance Headstock



- 1 Potentiometer to ensure precise positioning
- 2 Tillett and Hague guidance camera
- (3) Intergrated hydraulic side-shift ram
- (4) Parallel side-shift rails



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