

# EL

Cultirotor/Cultiplow/Cultitiller

EL 122 - EL 162



SOIL PREPARATION AT ITS BEST!



# KUHN EL Power tillers

## KUHN power tillers provide:

- Optimised seedbed preparation that enhances soil structure and increases germination and root development for vigorous plant growth - maximised yields.
- Broad working widths, versatility, and operator convenience - reduced operating costs.
- Useful innovations based on farmer's input - extended service life and reduced maintenance costs.
- Experience and reliability - KUHN equipment holds its worth and provides a high resale value.



Cost  
reductions



Good  
practices

KUHN offers solutions for soil preparation while meeting your requirements in terms of:



**Comfort -  
Quality of live**



**Proximity -  
advices**



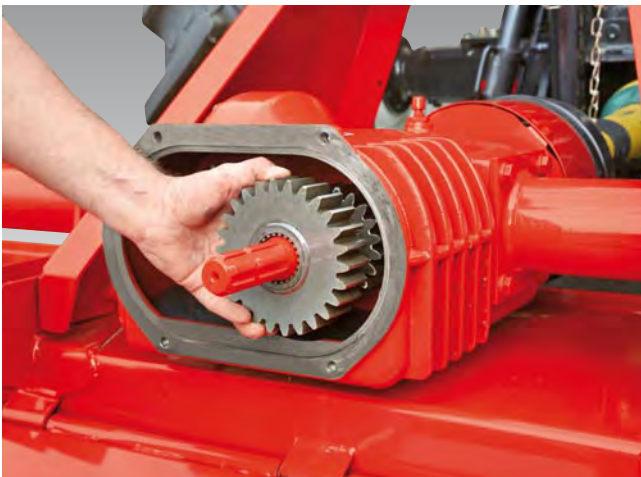
**Peace of mind -  
services**

### Designed for long life and simple operation

> EL 122 and EL 162 power tillers are intended for tractors rated at up to 81 kW (110 hp) respectively 103 kW (140 hp). As with all KUHN implements intended for soil preparation, the new EL 122 and EL 162 power tillers feature a particularly sturdy design. The new one-piece frame, two-speed gearbox, and all gear side case have met the most stringent reliability requirements. EL 122 and EL 162 power tillers are also designed for convenient operation, with extremely quick and easy to perform adjustments.

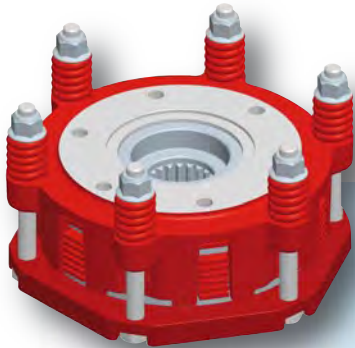


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#### Duplex gearbox: Invertible gearwheels, for difficult soils

- Designed for heavy-duty applications, the gearbox is capable of handling tractors rated at up to 92 kW (125 hp) respectively 121 kW (165 hp).
- Thanks to the invertible gearwheels, the rotor rotation speed is quickly adapted to obtain the required result: an adequate crumbling whatever soil, hard or crumbly.
- An output PTO (standard) enables power to be transmitted to other implements fitted to the tiller.

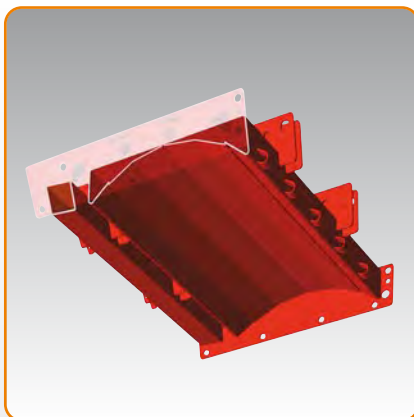


### Torque limiter

All models feature a torque limiting slip clutch with adjustable settings that protects driveline components from shock and excessive loads.

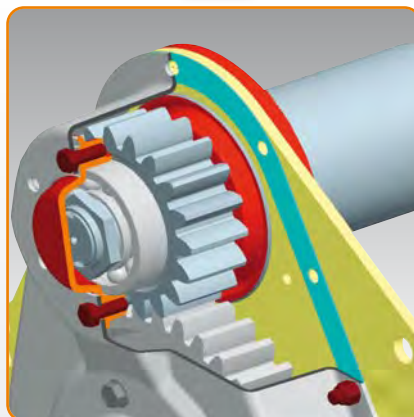


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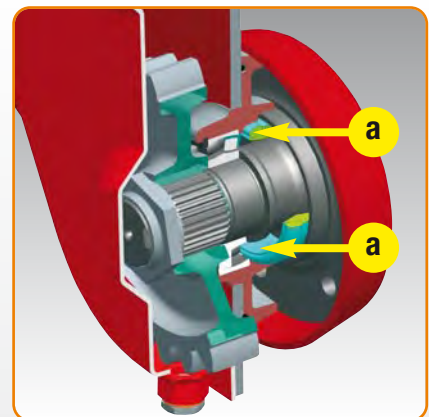
### Frame-casing for extra resistance

- The heavy-gauge box section cross member acts as a one-piece frame. This offers improved rigidity even in the most arduous conditions.
- In stony conditions, the machine aspect is preserved thanks to the inner plate fitted on the casing inside.



### Design providing full reliability

- Power is transmitted to the large diameter rotor through a side case that features an all gear drive. Gears are made from forged steel and operate in an oilbath for an extremely long service life. Reliability is assured along with minimal maintenance. The ASSET: gears held in place by bearings on either sides.
- The rotor housing sealing is made with a metal face seal **a** for superior performance in difficult service applications.



### Tools to match cultivation methods



EL 122/162 power tillers: unmatched versatility  
A wide choice of tools for minimum tillage, soil preparation or even crop residue destruction and incorporation.

#### CULTIROTOR with blades: top soil work and turning in

- "mulching" by incorporating green manure and crop residues,
- Pasture reclamation
- Large size cultivations and market gardening

The blade rotor is efficient through its burying effect and its work evenness.  
The 6 blades per flange also offer a good soil engagement and reduced power absorption.

The blades are attached to the rotor by means of counter-flanges for increased resistance in hard or stony soils..



Rotor with C-blades



Rotor with L-blades (EL 162 fitted on a 590 mm diameter rotor for increased resistance to wear)

#### CULTIPLow with straight tines in trailing position: powerful crumbling

- secondary tillage on hard soils (dry clay),
- topsoil work in minimum tillage,
- fine tilth seedbed preparation for spring-sown crops

CULTIPLow is efficient in crumbling through its shock effect provided by the important tine density (33 tines per meter). The tine trailing position limits clogging risks.

The left or right angled tines ensure a better levelling due to side to side soil movement.



#### CULTITILLER with straight tines in leading position: maximum versatility

- secondary tillage,
- topsoil work in minimum tillage
- work in stony grounds
- "mulching", good incorporation of crop residues.

The tine leading position is well adapted to primary tillage work and provides a good incorporation of crop residues.

The right or left angled tines result in good soil levelling by moving ground sideways.





## Minimum tillage methods: an interesting level of versatility

**The power tiller can be combined with a soil loosener and/or a seed drill.**

- a progressive move towards minimum tillage, limited expenses in specialised tools,
- soils and cultivations require ploughing from time to time : the power tiller also works ploughed soils,
- soils with important crop residues or often wet require a "go-everywhere" machine.

### 2 scenarios for using a power tiller in minimum tillage work:

**1st case:** after stubble clearing or soil loosening, or even directly after harvest: CULTITILLER with straight angled tines for the best soil preparation.

**2nd case:** for implantation in wet soils: CULTITILLER, or even CULTIROTOR with C-blades to avoid smearing.



### More info in

#### The Minimum Tillage Guide

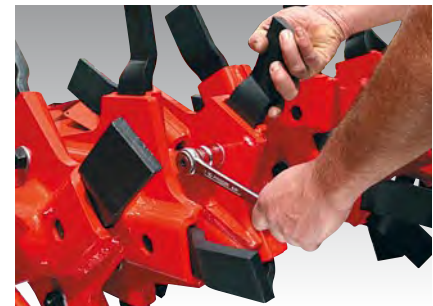


## Easier fitting: comfort of use and time savings



*CULTITILLER FAST-FIT®: A KUHN exclusive, fitted with only one lynch pin, tines are replaced within minutes and their hold is not affected.*

### FAST-FIT® wide angled blades on CULTITILLER

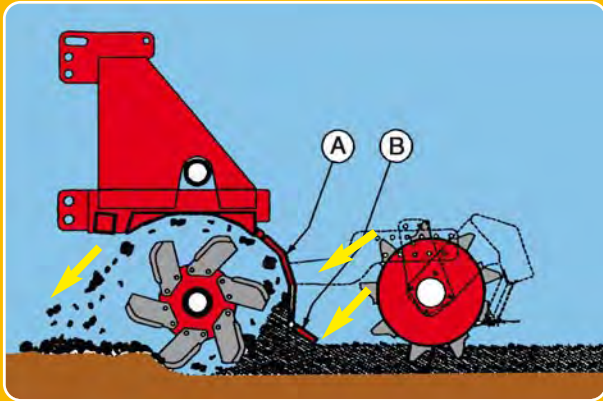


*CULTIPLow EASY-FIT®: Blades are removed and reinstalled by loosening and tightening only one attachment bolt.*

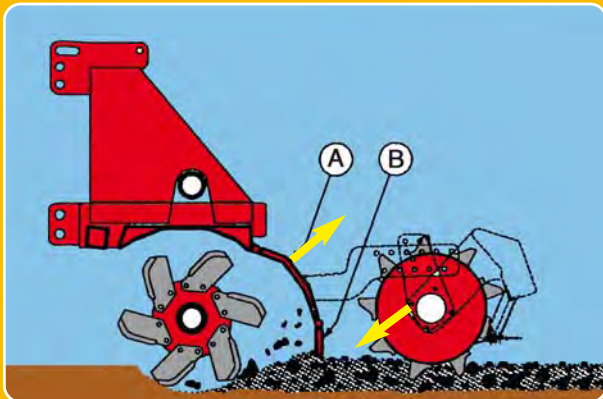
### Simplified rotor replacement

Rotors are mounted with a simple arrangement. Removal and installation of a rotor in order to replace worn blades or points, as well as exchanging different rotors, is convenient and easy, requiring minimal time.

### Easy to use



Important recycling for a high crumbling degree



Large volume behind the rotor in wet conditions or in plant residues

#### A hood adapted to all situations

EL 122 / EL 162 hoods (main hood "A" in an arc of a circle + adjustable levelling flaps "B") enable fast and efficient adaptation to all conditions (working in shallow or deep depth, dry or more wet conditions, plant residues), increase the crumbling effect and provide a good mix.



#### Adjustable rear hoods

- Two hinged rear hoods offer a wide range of adjustment to suit various working conditions.
- Crank handles provide adjustment and are easily accessible from the front of the tiller.



#### They offer a large volume behind the rotor resulting in:

- precise tuning of the soil crumbling degree and improved machine stability,
- numerous position combinations to adapt to all situations.



#### Depth and roller adjustment

- When fitted with a roller, depth adjustment is easily performed using pins inserted along a multiple step block.
- The roller is free to drop maintaining maximum contact with the soil under all circumstances.
- This provides optimum firming of the seedbed and helps level the cultivated surface.



## Depth control for any situation

In order to achieve the soil preparation required in any situation the EL 122 and EL 162 power tillers are offered with a number of different depth-control options. Easy adjustments of rear hoods and roller position.



### Crumbler Roller

- This type of roller, smaller in diameter than the Maxicrumbler, is suitable for use on dry, non-sticky soils without an integrated seed drill.
- The removable rods can be withdrawn, if required, to reduce clogging risks.
- Maintenance reduced to the minimum.



### Rear wheels

- For work at shallow depth (pasture reclamation, stubble clearing), the rear wheels can replace the roller.
- At transport, these wheels are pivoted on the inside to reduce the machine's dimension to a minimum.



### Maxicrumbler roller

- The large (520 mm / 20") diameter of the Maxicrumbler roller offers reduced rolling resistance and requires little maintenance.
- Use of the Maxi crumbler is restricted to dry, non-sticky conditions and operation without an integrated seed drill.



### Packer and Packer PK2 rollers

- Packer and Packer PK2 rollers (diameter 485 mm and 515 mm) can be used in very different conditions.
- They are recommended for grounds that are very clayey or subject to capping and drying out.
  - They will contribute to preparing an optimum seedbed by packing the ground and leaving loosened soil on top.



### Skids or wheels

- For work not requiring the surface to be entirely uniform.
- Front wheels are adjustable spacing and will roll over firm soil without leaving any tracks.



### Maxipacker roller

- The large (535 mm / 21") diameter of this roller gives lower rolling resistance and high floatation, even on light soils.
- This roller has the most universal capability and is particularly recommended for combinations with an integrated seed drill.
  - The Maxipacker roller is supplied as standard with coated scrapers to reduce adjustment and improve cleaning.



**Gain in crop robustness  
by controlled  
working depth**

## High performance combinations



Tiller operations can be impaired by a number of factors. Tractor tires can leave depressions even after tilling. To hitch or unhitch the tiller while alone may be difficult. Vines and long organic matter can cause wrapping at the rotor ends. Plans may be to combine tilling and planting operations. Kuhn offers a wide range of optional attachments that meet the challenges of these special operating conditions.



### Even more profitable than you may expect!

#### Combination with integrated seed drills

EL 122 / EL 162 power tillers can be combined with different integrated seed drills:

- VENTA pneumatic version
- INTEGRA mechanical version.

The KUHN combination is compact and performing

#### Combination with a soil loosener CULTISOIL

3 m EL 122 / EL 162 power tillers, as EL 201 models, can be combined with a soil loosener to loosen the soil in front of the machine (depth adjustable up to 35 cm).



## Equipment adapted to your needs



### Side separating discs for an ideal levelling

- Side separating discs prevent furrowing and wrapping of the rotor ends with vegetation.
- They are quickly adjustable in height and in spacing for an easy adaptation to any situation.



### Quick hitch system: Easy handling

- A quick hitch system (cat. 2 for EL 122 and cat. 2 + 3 for EL 142) makes coupling and uncoupling the tiller easy.
- This option is particularly appreciated if frequent hitching and unhitching is performed while working alone.



### Wheel track eradicators

- Wheel track eradicators are designed to break up and level the layer of soil compacted by the tyres.
- Adjustable for both depth and spacing, eradicators can be matched to any situation.
- Depending on working conditions and the presence of stones in particular, a choice is available between traction bolt and spring reset safety release systems.



## TECHNICAL SPECIFICATION

**EL 122/250\* EL 122/280\* EL 122/300\* EL 162/250\*\* EL 162/300\*\***

|  |                                   |  |           |            |  |             |
|--|-----------------------------------|--|-----------|------------|--|-------------|
| Working width (m/ft)                   |                                   | 2.50/8'2"  | 2.72/8'9" | 3.00/9'10" | 2.50/8'2"  | 3.00/9'10"  |
| Overall transport width (m/ft)         |                                   | 2.77/9'1"  | 2.99/9'9" | 3.25/10'8" | 2.77/9'1"  | 3.25/10'8"  |
| Maximum allowable tractor DIN power at |                                   |  |           |            |  |             |
|  | 540 rpm                           |  | 73 (100)  |            | 73 (100)   |             |
|  | 750 rpm                           |  | 81 (110)  |            | 95 (130)   |             |
|  | 1000 rpm                          |  | 92 (125)  |            | 121 (165)  |             |
| Attachment category                    |                                   | Cat. 2   |           |            |  |             |
| PTO shaft                              |                                   | Waltersheid P series, maintenance intervals 250 hours Friction slip clutch 1"3/8 - 6 or 21 spline yoke or 1"3/4 - 6 or 20 spline yoke) |           |            |  |             |
| Gearbox type                           |                                   | Duplex with two gearwheel sets   |           |            |  |             |
| Rear PTO stub                          |                                   | As standard  |           |            |  |             |
| Gear train protection                  |                                   | Adjustable friction slip clutch  |           |            |  |             |
| Side drive                             |                                   | Heavy forged and heat treated gears housed in an oil bath gearbox  |           |            |  |             |
| Working depth                          |                                   | 8 to 23 cm   |           |            | 8 to 25 cm   |             |
| Rotor diameter (mm)                    |                                   | Cultirotor: 525 - Cultiplow: 540 - Cultitiller : 520   |           |            | Cultirotor: 550<br>HD Cultirotor 590<br>Cultiplow - Cultitiller: 570 |             |
| Number of blades or tines              | Cultirotor                        | 60   | 66        | 72         | 60   | 72          |
|  | Cultiplow                         | 84   | 88        | 100        | 84   | 100         |
|  | Cultitiller                       | 56   | 60        | 66         | 56   | 66          |
| Depth control                          |                                   | Skids, wheels, rollers   |           |            |  |             |
| Weight for Cultirotor                  | with skids (kg/lbs)               | 955/2105   | 995/2193  | 1045/2303  | 1095/2414  | 1200/2645   |
|  | with front gauge wheels (kg)      | 980/2160   | 1020/2248 | 1070/2358  | 1120/2469  | 1225/2700   |
|  | with wheels (kg/lbs)              | 1120/2469  | 1215/2678 | 1240/2733  | 1260/2777  | 1390/3064   |
| Cultirotor                             | with Crumbler roller (kg/lbs)     | 1080/2380  | 1180/2601 | 1195/2634  | 1220/2689  | 1350/2976 0 |
|  | with Maxicrumbler roller (kg/lbs) | 1260/2777  | 1385/3053 | -          | 1400/3086  | -           |
|  | with Packer roller PK2 (kg/lbs)   | -  | -         | 1435/3163  | -  | 1555/3428   |
|  | with Maxipacker roller (kg/lbs)   | 1320/2910  | -         | 1470/3240  | 1460/3218  | 1625/3582   |

\* weight to be increased: 15,12 and 10 kg for EL 122 Cultitiller 250, 280 and 300  
140,160 and 170 kg for EL 122 Cultiplow 250, 280 and 300

\* weight to be increased: 50 and 55 kg for EL 162 HD Cultirotor 250 and 300  
5 and 10 kg for EL 162 Cultitiller 250 and 300  
95 and 105 kg for EL 162 Cultiplow 250 and 300

## EL 122 Table of rotational speeds (in RPM)

| PTO speed | 1st gearwheel set (22/26 teeth)<br>supplied as standard |                       | 2nd gearwheel set (28/20 teeth)<br>supplied as standard |       | Optional gearwheel set (17/30 teeth) |       | Optional gearwheel set (17/30 teeth) |
|-----------|---|-----------------------|---|-------|--------------------------------------|-------|--------------------------------------|
|           | 26/22 factory setting                                   | 22/26 after inversion | 28/20   | 20/28 | 30/18                                | 18/30 | 24/24                                |
| 540       | -   | 195                   | -   | 231   | -                                    | 275   | 165                                  |
| 750       | 194   | 271                   | 164   | 321   | -                                    | 382   | 229                                  |
| 1000      | 258   | 361                   | 218   | -     | 183                                  | -     | 305                                  |

## EL 162 Table of rotational speeds (in RPM)

| PTO speed | 1st gearwheel set (23/30 teeth)<br>supplied as standard |       | 2nd gearwheel set (28/25 teeth)<br>supplied as standard |       | Optional gearwheel set (33/20 teeth) |       | Optional gearwheel set (18/35 teeth) |
|-----------|---|-------|---|-------|--------------------------------------|-------|--------------------------------------|
|           | 30/23   | 23/30 | 28/25 factory setting                                   | 25/28 | 33/20                                | 20/33 | 18/35                                |
| 540       | -   | 194   | -   | -     | -                                    | 235   | 277                                  |
| 750       | -   | 202   | 177   | 222   | -                                    | 327   | 385                                  |
| 1000      | 258   | 344   | 236   | 296   | 160                                  | -     | -                                    |

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