

## HOES AND GUIDANCE



## CROP AND GRASSLAND MAINTENANCE



ECONET F



ECONET



ECONET SGI



PRECICAM



THERMILOC



Along the years, CARRÉ has invested in a modern and performing industrial tool to answer all productivity, competitiveness, flexibility, and quality problematics.



The CARRÉ company in a few images



CARRÉ used a painting process that improves the holding and the aspect of the machine and increases the life and its value over time.



### USER TESTIMONY



## BENEFIT FROM THE 80 YEARS OF EXPERIENCE AND INNOVATION OF CARRÉ



• CARRÉ is a family run company based in Vendée. Since 1938 we have endeavoured to design, build and market equipment intended for soil preparation, drilling, fertilisation and a complete range of crop management.

Our aim is to offer you equipment that is designed to suit your conditions.

• Located in the heart of a farming region, CARRÉ develop all of its products in partnership with recognized cereal farmers. You will therefore benefit from their knowledge and their experience with implements, when buying CARRÉ equipment.

• Over the last 80 years the company has received several prizes for innovation and it would like to assist you in a sustainable management of your crops in order to obtain optimal yields.

#### Philippe L., Farm manager in Calvados

*My main aim when I got an interrow hoe was to reduce the number of passes and chemical applications whilst reducing the number of weeds producing seed heads as much as possible. I have 125 ha of sugar beet, so I tried the 12 row Econet inter-row hoe which is fitted with the PRECICAM camera guidance system.*

*The strong point of this implement is clearly the guidance which provides a huge increase in precision. Thanks to the technique and the precision we have gained, we have been able to have one less person involved in hoeing!*

*The hoes other strong point is the ease with which adjustments can be made.*

*It is an implement that is user-friendly, fully equipped and has fully met my expectations!*



## HOEING IS NOT A SOLUTION ONLY FOR MECHANICAL WEEDING.

Hoeing is considered to be the appropriate weeding solution in most line seeded crops from 15 cm gap between rows. Even if weed destruction is not complete, weeds are weakened limiting its future growth. Hoeing, combined with an effective steering system, will provide precision work with high work rates and increased operator comfort.

The pass with the hoe can be optimised by combining precision spraying equipment to treat the row or apply liquid or solid fertiliser to it.

The quantities of chemicals required are significantly reduced, as are losses due to evaporation and run off. In addition to eliminate weeds and reduce the seed stock, the mechanical action of hoeing on the soil reduces the presence of pests and the risk of diseases of the crop.

Its aeration action on the soil allows a good hygrometric exchange between the air and the soil thus favoring the development of the culture. Soil capping is eliminated, therefore reducing water run-off and erosion whilst encouraging mineralisation due to improved microbial activity.

It is a sound agricultural practice that improves the soil surface, water penetration, and root development thanks to soil shattering.

Nowadays it is possible to hoe at a steady speed of around 8 to 10 km/h. It also gives the opportunity to apply spray or place fertiliser precisely leading to important savings.



Before

After

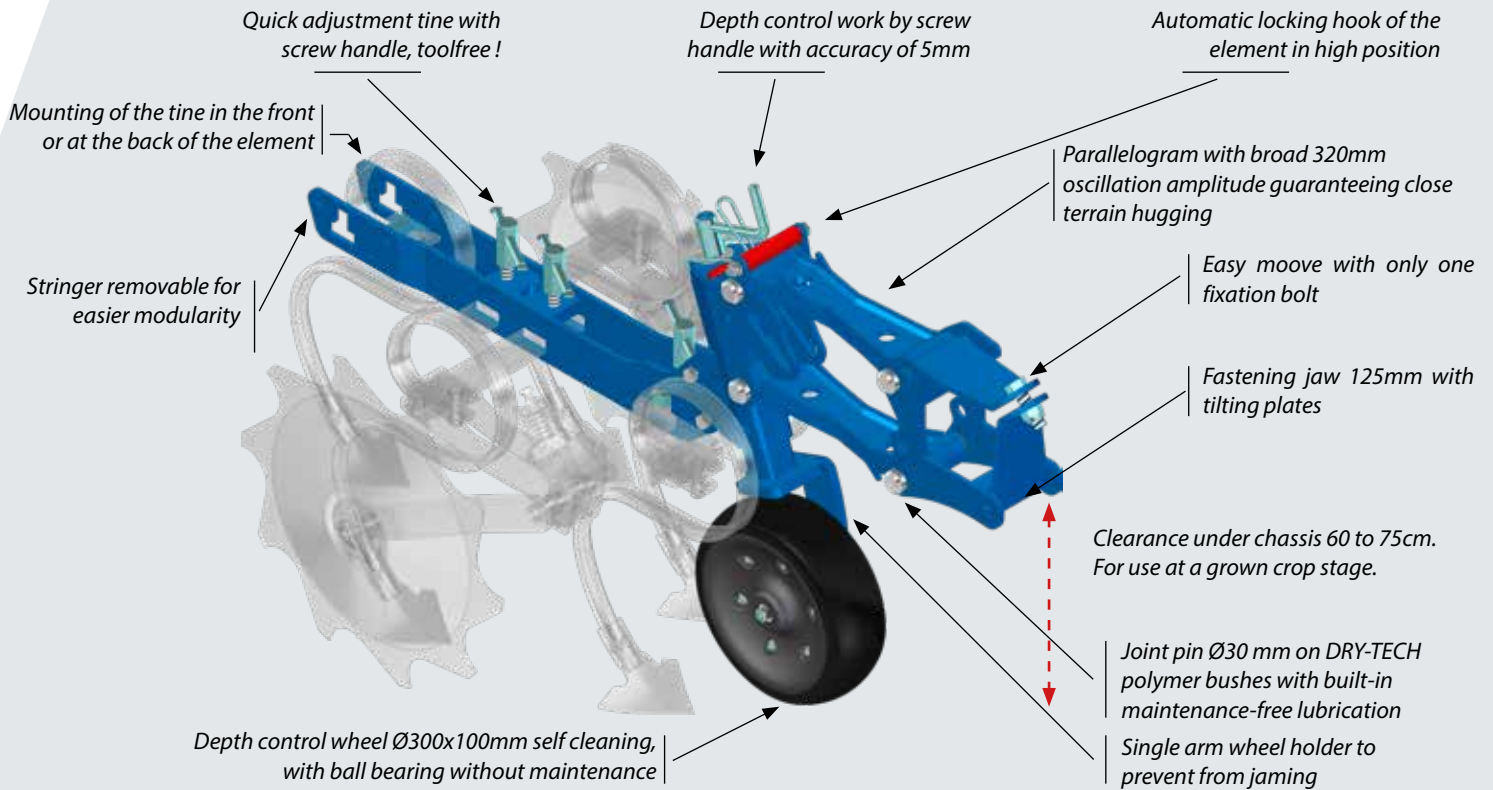


Before

After

# CULTIVATING ELEMENT **NEW!**

The hoeing element guarantees a constant working depth over the whole width of the cultivator thanks to the amplitude of oscillation of its parallelogram and its independent grounding wheel. Robust and maintenance-free design, it adapts to all row crops using its quick setting systems. A wide choice of tines and options to insure an efficient and accurate work.



## **E** ELEMENT



For inter-rows spacing from 45 to 60cm  
 Versatile on all type of soils  
 3 tines 32x12mm  
 Triangular ploughshare 150mm  
 Several ploughshare width in option

## **I** ELEMENT



For inter-rows spacing from 45 to 60cm  
 Suitable for sandy or silt clay soil  
 To cut-off with accuracy  
 32X12 tines with adjustable rigid holder  
 Flat triangular ploughshare 200mm  
 Several ploughshare width in option  
 L blades right and left

## **C** ELEMENT



For inter-row distances from 15 to 30cm  
 1 element for hoeing 1, 2 or 3 crop rows  
 To cut-off with accuracy  
 From 1 to 3 32x12 tines with adjustable rigid holder  
 Flat triangular ploughshare 200mm  
 Several ploughshare width in option

## THE LEGS



Curved 32X12 tine with :  
 - Triangular duckfoot 70, 105, 150, 175, 200 or 250mm  
 - Reversible straight share



Rigid fitted 32x12mm tin adjustable with its 50 to 300mm wide triangular plough share



32x12 tine with adjustable rigid holder and right or left L blade

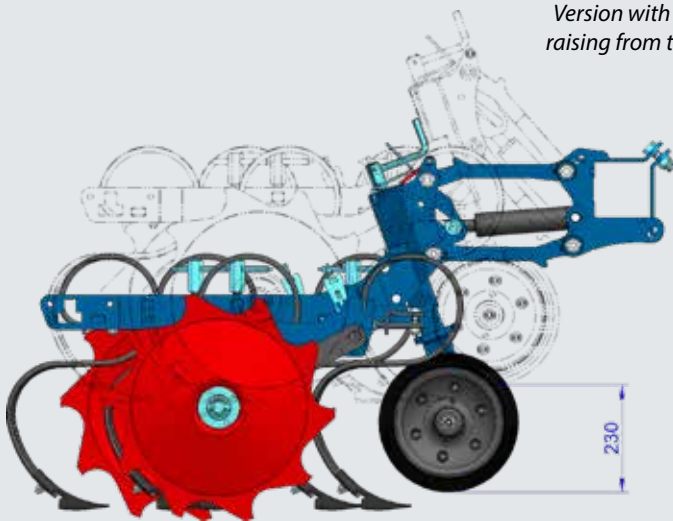
## 2 hydraulic lifting versions

Version with 23cm horizontal raising from the work position

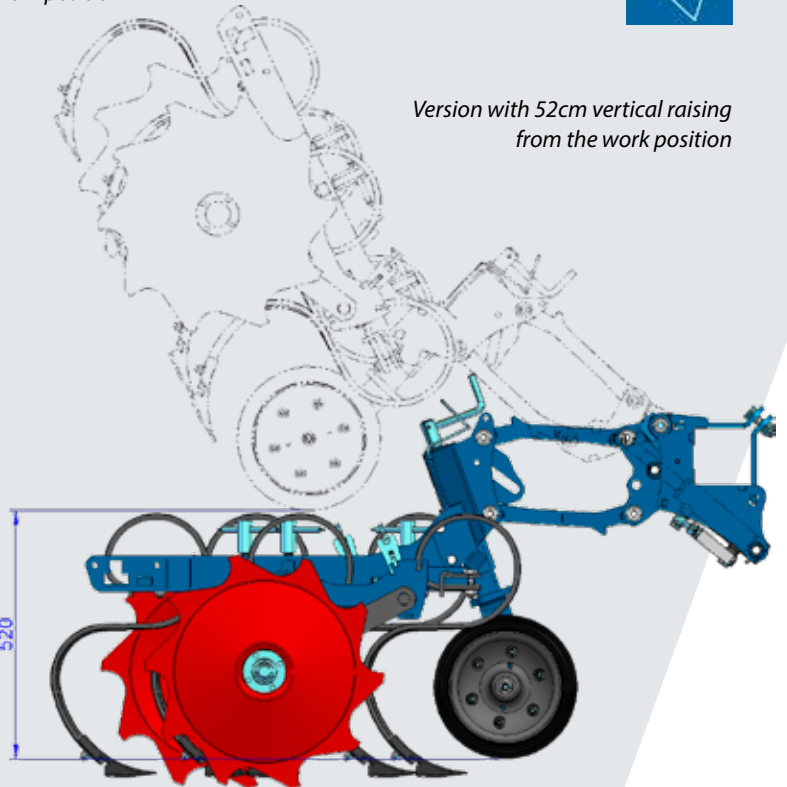
ISOBUS compatible



Version with 52cm vertical raising from the work position



Individual lifting by manual or automatic GPS-controlled hydraulic control



### L ELEMENT



For inter-rows from 60 to 80 cm  
Versatile on all type of soils  
5 tines 32x12mm  
Triangular ploughshare 150mm  
Several ploughshare width in option

### B ELEMENT



For inter-rows from 60 to 80 cm  
Suitable for sandy or silt clay soil  
To cut-off with accuracy  
5 32X12 tines with adjustable rigid holder  
Flat triangular ploughshare 200mm  
Several ploughshare width in option  
L blades right and left

### X ELEMENT

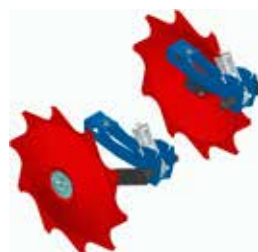


For inter-rows from 60cm  
To work up to 10cm depth  
Suitable for hard stony soil condition  
5 tines 45x12mm  
Straight reversible ploughshare  
Triangular shares optional - W element

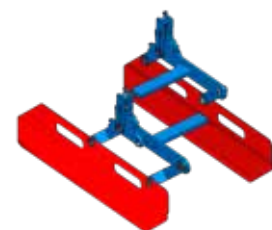
## CROPS GUARDS



Large clearance 45x12mm tine with:  
- Reversible straight share  
- Triangular ploughshare 150, 175, 200 or 250mm



Retractable discs crop guard Ø500mm suitable for all conditions  
Compatible with elements type E, L and X



Long retractable plant protector for optimal crop protection  
Compatible with elements type E, L and X

# Front ECONET



For a manual guiding system !

## THE FRAME

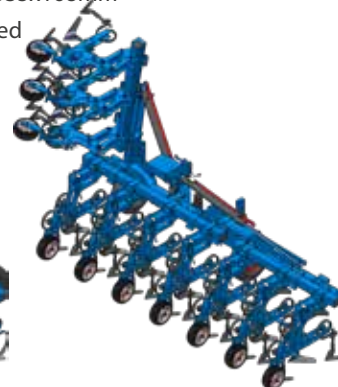
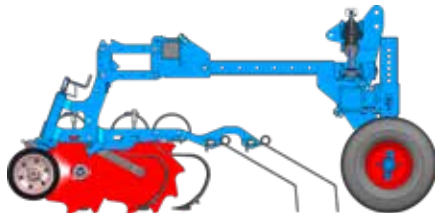
- 3 point coupling with anti-rotating arms cat n° 2/3
- Mechanically welded chassis with square tube 120X5mm and 100X5mm
- Rigid or with hydraulic folding from 2,5 to 3m (depending on

equipments)

- Linking arms adjustable in function of the hoeing element rear option
- Pair of wheels tyres 10 Ply Ø 535x168mm
- Road light and signals included

The link arm is fixed if there isn't an option behind the hoe section

Linking arm adjustable for option at the back



## THE SECTIONS

### E ELEMENT



For inter-rows spacing from 45 to 60cm  
Versatile on all type of soils  
3 tines 32x12mm  
Triangular ploughshare 150mm  
Several ploughshare width in option

### L ELEMENT



For inter-rows from 60 to 80 cm  
Versatile on all type of soils  
5 tines 32x12mm  
Triangular ploughshare 150mm  
Several ploughshare width in option

### I ELEMENT



For inter-rows spacing from 45 to 60cm  
Suitable for sandy or silt clay soil  
To cut-off with accuracy  
3 32X12 tines, with adjustable holder  
Flat triangular ploughshare 200mm  
Several ploughshare width in option  
L blades right and left

### B ELEMENT



For inter-rows from 60 to 80 cm  
Suitable for sandy or silt clay soil  
To cut-off with accuracy  
5 32X12 tines, with adjustable holder  
Flat triangular ploughshare 200mm  
Several ploughshare width in option  
L blades right and left

## OUR RECOMMENDATIONS

Number of rows	Spacing (cm)	Recommended elements	Power (Hp)	Weight (Kg)*
<b>Sugar Beet</b>				
12	45-50	E or I	120	1400 to 1500
<b>Sunflowers</b>				
7	60	E, I, L or B	90	850 to 1300
9			120	1200 to 1300
<b>Maize</b>				
6	75-80	L or B	100	1050 to 1150
8			120	1250 to 1400

\* According to equipment

# FIXED ECONET



## THE FRAME

- 3 point hitch with pins category N°1/2
- Welded frame in square beam 120x5mm

- Pair of stabilizer coulters Ø 500 mm included or directional piloted coulters with the SGI guiding system
- Road light and signals included

Stabilizers coulters as standard

Available with a slope correction  
Driven guiding coulters driven by the pushing bar from the 3 point hitch  
To correct path in slopes



Available with Integrated Guidance System SGI

## OUR RECOMMENDATIONS

Number of rows	Spacing (cm)	Recommended elements	Power (Hp)	Weight (Kg)*
<b>Sugar Beet</b>				
6	45-50	E or I	70	600 to 900
<b>Sunflowers</b>				
5	60	E, I, L or B	70	450 to 900
<b>Maize</b>				
4	75-80	L or B	70	450 to 900

\* According to equipment

# FOLDING SINGLE BEAM ECONET



Ideal to hoe with fixed inter-row and drive safely!



Double hydrau-mechanical safety locking (transport and work)

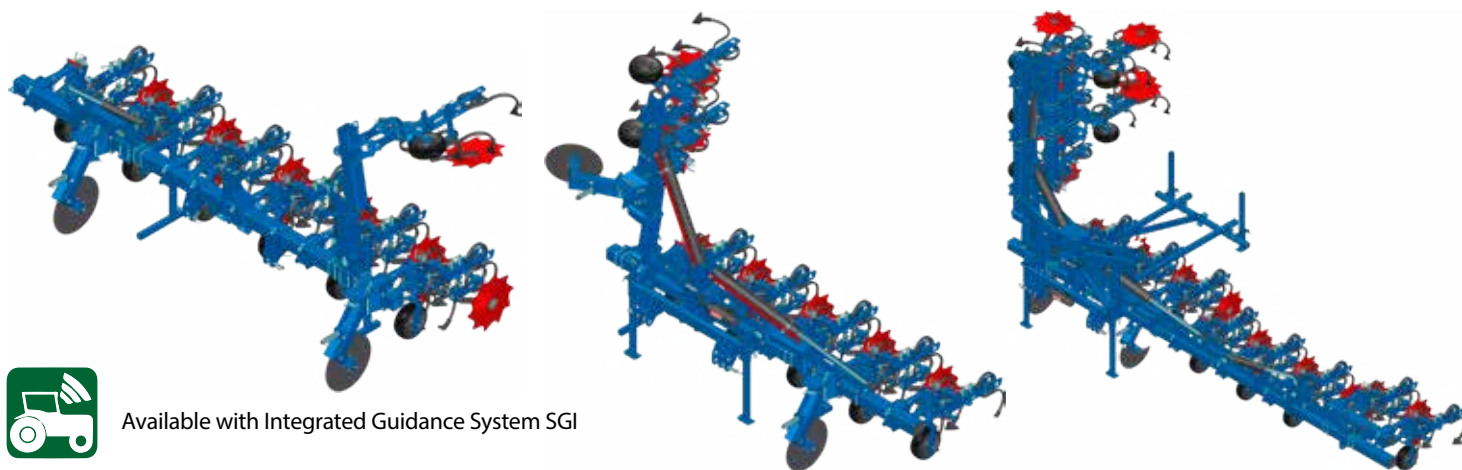
## THE FRAME

- 3 point hitch with anti-rotation pin category 2/3
- Welded frame in square beam 120x5mm
- Hydraulic folding to 3 m

- Pair of stabiliser coulters Ø500mm included
- Double folding chassis for 18 rows 45/50cm and 12 rows 75/80cm - Transport height 3,6m
- Road light and signals included

Economic hydraulic power folding

Single folding M1 or double folding M2 compact chassis



Available with Integrated Guidance System SGI

## OUR RECOMMENDATIONS

Number of rows	Spacing (cm)	Recommended elements	Power (Hp)	Weight (Kg)*
<b>Sugar Beet</b>				
12	45-50	E or I	110	900 to 1200
<b>Sunflowers</b>				
7	60	E, I, L or B	90	650 to 1100
9			110	750 to 1300
<b>Maize</b>				
6	75-80	L or B	90	750 to 950
8			110	950 to 1200
<b>Sugar Beet</b>				
18	45-50	E or I	160	2300 to 2800
<b>Maize</b>				
12	75-80	L or B	160	2200 to 2700

\* According to equipment



# FOLDING DOUBLE BEAM ECONET



Ideal to hoe with a changing number of row or inter-row spacing !



Double hydrau-mechanical safety locking (transport and work)

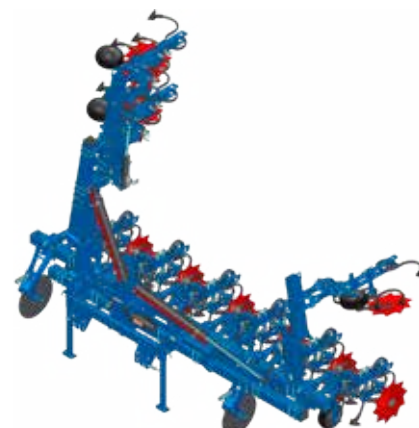
## THE FRAME

- 3 point hitch with anti-rotation pin category 2/3
- Welded frame in square beam 120x5mm and 140x8mm
- Hydraulic folding at 3m with beam B3 or 3,5m with beam B2, and 3,8m for version, 8, 6 rows maize with 4 element on the central part
- Pair of stabilisator coulter Ø500mm included
- Road light and signals included

B3 chassis for transport width at 3m

B2 chassis to hoe 6 and 4 rows

B2 chassis to allow hoeing 8, 6 and 4 rows with only one machine



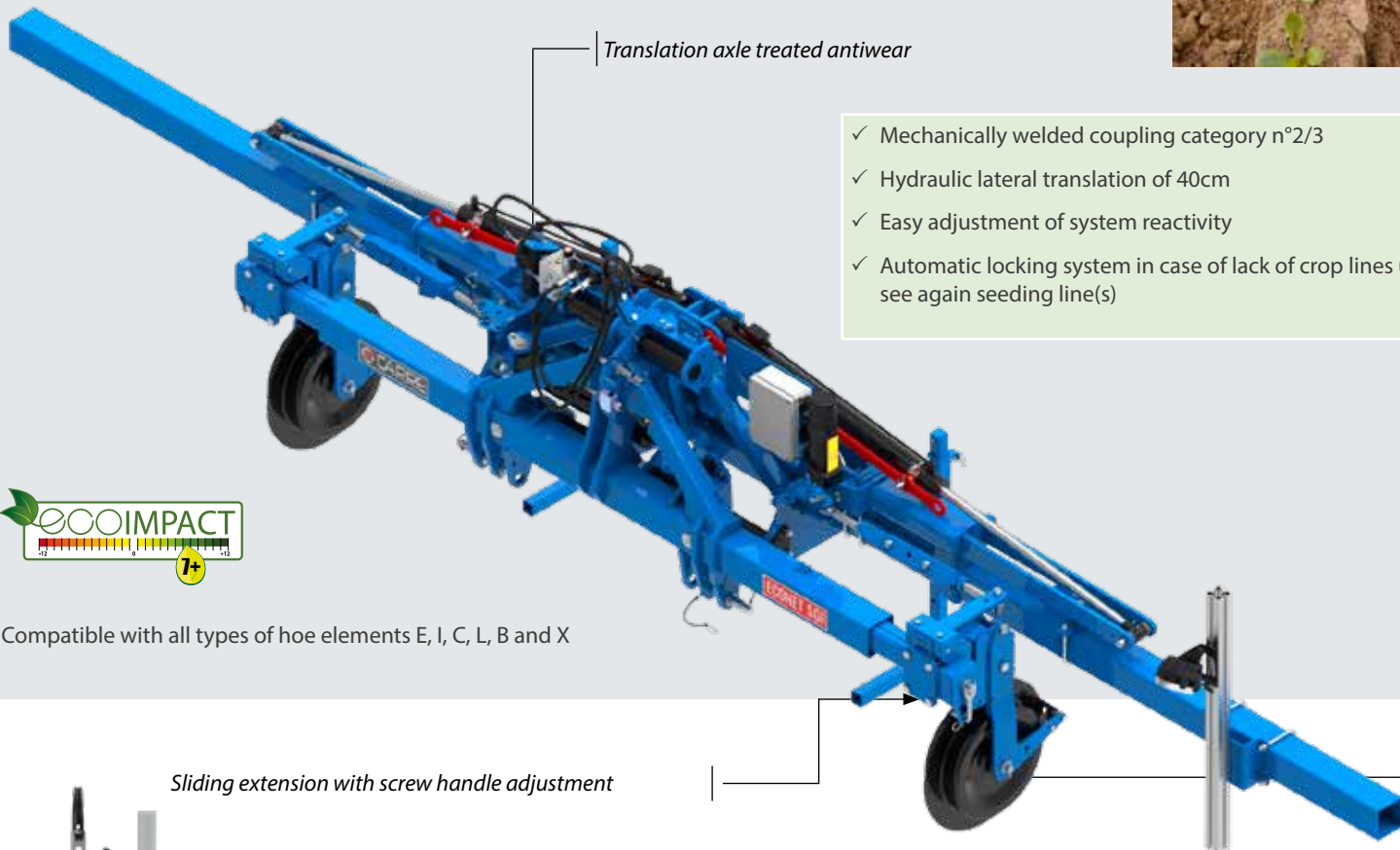
## OUR RECOMMENDATIONS

Number of rows	Spacing (cm)	Recommended elements	Power (Hp)	Weight (Kg)*
<b>Sugar Beet</b>				
12	45-50	E or I	120	950 to 1250
<b>Sunflowers</b>				
7	60	E, I, L or B	90	850 to 1100
9			110	900 to 1300
<b>Maize</b>				
6	75-80	L or B	100	800 to 950
8			120	950 to 1200

\* According to equipment

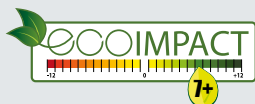
### INTEGRATED GUIDANCE SYSTEM - SGI

Integrated guiding system allow to have a compact hoeing chassis and to limit play for a maximum accuracy and comfort



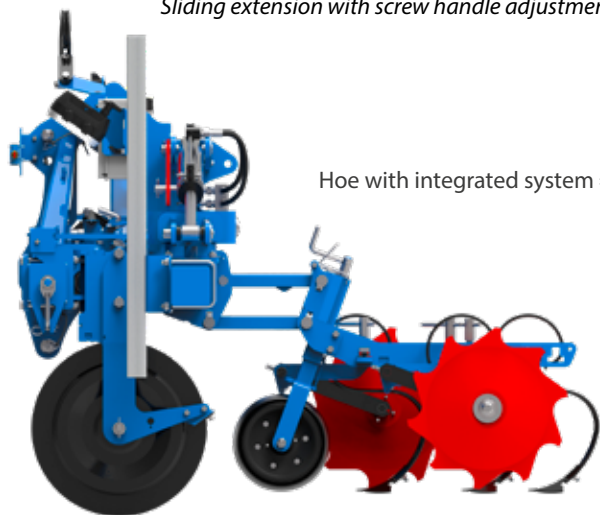
Translation axle treated antiwear

- ✓ Mechanically welded coupling category n°2/3
- ✓ Hydraulic lateral translation of 40cm
- ✓ Easy adjustment of system reactivity
- ✓ Automatic locking system in case of lack of crop lines up to see again seeding line(s)



Compatible with all types of hoe elements E, I, C, L, B and X

Sliding extension with screw handle adjustment



Hoe with integrated system = 1 machine

Twin eye camera high resolution allow to follow up to 8 crop line and work early as soon as the plant reach 3cm diameter.

Easy Setup: Automatic detection of camera angle and height.



Manual control joystick included

LED Light to work at night or when brightness is low



Available with dual camera

Touch-screen monitor in the cabin for real-time monitoring of the guidance with an integrated screen connected to the camera.



#### 2 applications :

2D mode: Track crop rows by detecting a configurable colour palette.

3D mode: Track crop rows by recognizing the shape of the plants for precise guidance even in the presence of important weeds.

# Y OF 3CM ON EACH SIDE OF THE ROW

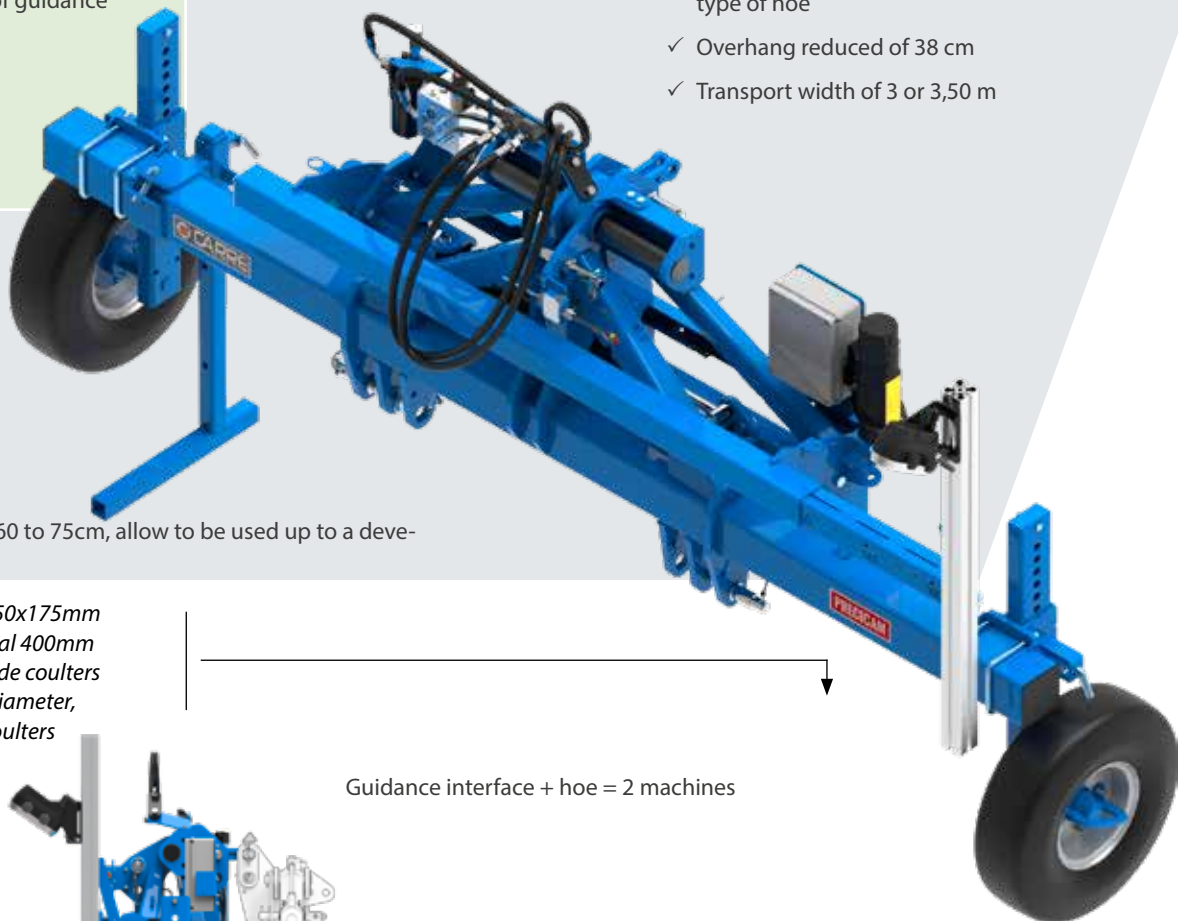
## PRECICAM INDEPENDANT GUIDING SYSTEM

**PRECICAM is a full autonomous guidance system which is coupled in between tractor and hoe. This kit is easy to couple or uncouple to the machine, which allow to couple different hoe configuration instantly.**



- ✓ Automatic stop and recenter of guidance system at the end of the field

- ✓ Back coupling category n° 2/3 to couple all type of hoe
- ✓ Overhang reduced of 38 cm
- ✓ Transport width of 3 or 3,50 m

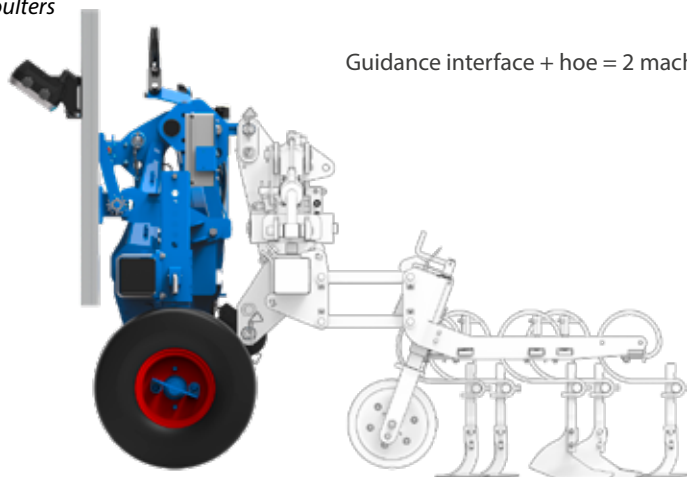


Under chassis clearance from 60 to 75cm, allow to be used up to a developed stadium of the crop

Control wheels use 10 ply 550x175mm tyres or controlled directional 400mm diameter, 100 or 150mm wide coulters for slopes or fixed 400mm diameter, 100 or 150mm wide fixed coulters



Guidance interface + hoe = 2 machines



The guidance quality depends on the camera's ability to detect the rows of growing plants.

2D: the crop must be sufficiently distinctive among weeds.

3D: the crop should at least be 10cm taller than weeds.

Guidance with sensors for crops with rigid stems such as maize or sunflower.

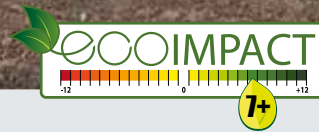
Mounted directly on the interface or on the element to take information as close as possible to tines.



# Wide width ECONET



To hoe wide width and drive safe!



Double hydrau-mechanical safety locking (transport and work)

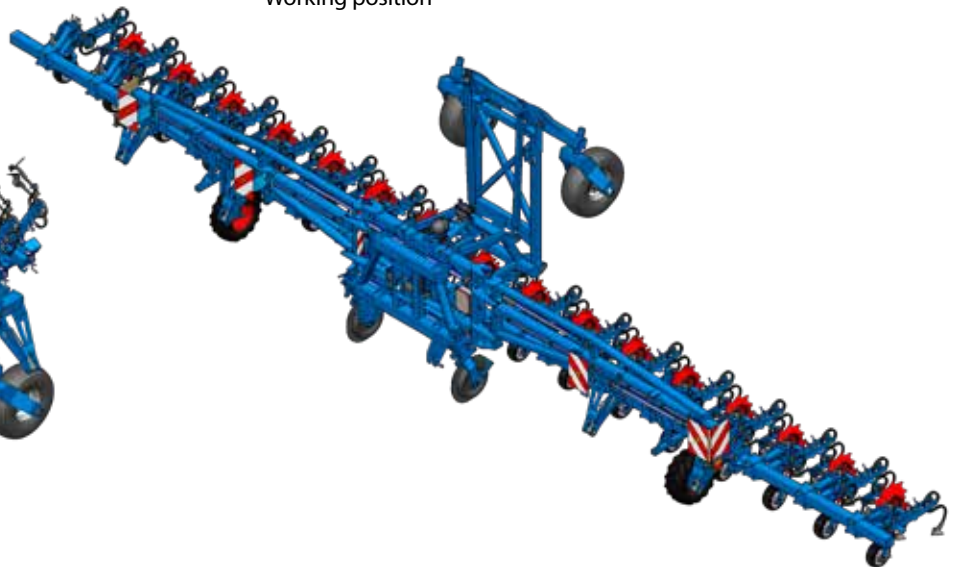
## THE FRAME

- 3 point hitch with anti-rotation pin category 2/3
- Welded frame in square beam 120x5mm and 140x8mm
- Sequential hydraulic folding to 3 m
- 3 stabilizer coulters Ø 500 mm included
- 2 pairs of depth control wheel Ø584x236mm
- Road light and signals included

Transport position



Working position



Available with Integrated Guidance System SGI

## OUR RECOMMENDATIONS

Number of rows	Spacing (cm)	Recommended elements	Power (Hp)	Weight (Kg)*
<b>Sugar Beet</b>				
24	45-50	E or I	180	3700 to 4000
<b>Maize</b>				
16	75-80	L or B	180	3600 to 3800

\* According to equipment



**An immediate result ! an immediate efficiency !**

Thermiloc can be used on precision drilled crops that are able to resist thermal shocks. Plants with a multi-leaf stem and those that can start from their roots are slow in their growth. This technique can be used with soya, sunflowers, sugar beet, leeks, maize.

Thermal weeding efficiency is closely linked to the earliness with which young adventitious weeds are treated. Optimum crops resistance depends on their type and their growth stage. In general, the sensitivity of plants to heat is dependent on many factors : species, vegetative stage, leaf and stem thickness and degree of lignification.

The survival of weeds in thermal weeding is largely due to their ability to regenerate after treatment : also, perennials are less sensitive to heat treatment than grasses (monocotyledons).

Thermiloc allows the destruction of weeds by plasmolysis, on the row, allowing an immediate result, whatever the meteorological conditions. This principle consist to create a thermal shock and maintain a hot bubble, in order to submit the outside part of the plant to a sufficient temperature to get a coagulation of proteins.

This bring explosion of cellular partition and vaporization of vegetal cells. A temperature of 800 to 1000°C during around 1 second is necessary. Thermiloc works with propane liquid gaz, with an average consumption of 30 KG/Ha, for a speed up to 6 km/hGaz tank, coupled on tractor front linkage, has to be bought by end user

## THE ELEMENT

- For inter-rows from 35 to 80 cm
- 4 burners with start electrode
- Work with liquid propane gaz to guarantee an efficient power flame (tank not provided)
- Mounted on parallelogram for a good ground follow-up
- Easy adjustment of burners position regarding the row
- Accurate adjustment of burner height with screw handle
- Manual section cut-off valve



## THE FRAME

### FIXED BEAM

- 3 point hitch with pins category N°1/2
- Square beam chassis 120X5mm
- Pair of stabilisator coulters Ø500mm included
- Road light and signals included

### FOLDING TWIN BEAM

- 3 point linkage category n°2/3
- Mechanically welded chassis with square tube 120X5mm and 140X8mm
- Hydraulic folding at 3.50m
- Pair of stabilisator coulters Ø500mm included
- Road light and signals included



## OUR RECOMMENDATIONS

Number of rows	Spacing (cm)	Recommended elements	Power (Hp)	Weight (Kg)*
<b>Maize</b>				
4	75-80	4 burners per row	60	600
6			70	1200
8			80	1400

\* According to equipment



## THE EQUIPMENT

Netline can work in the rigid or floating position on soft soil and can be retracted when required

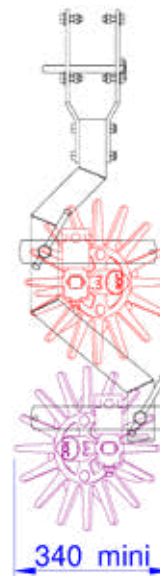
Flexible star Ø360mm 16 fingers, thickness 12mm

Fitted at the back of the element for inter-row from 0.45m to 0.69m.  
Compatible with ECONET F and ECONET with pushed linkage.



Not compatible with comb option

### S fitting type

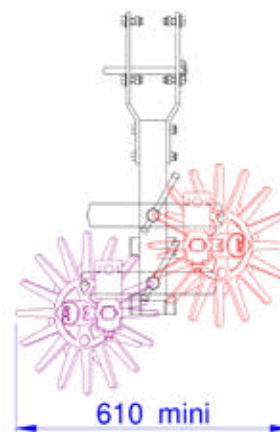


Mounted at rear of unit for inter-row of 0 m 70 to 1 m.  
Compatible with ECONET F and ECONET with push coupling.



Compatible with rear comb option

### Straight fitting type



# FERTILOC EQUIPMENT and FERTI KIT

## FERTILOC on RIGID ECONET : solid fertilization localized



*Fertiloc on rigid Econet*

### THE GOOD DOSIS AT THE RIGHT TIME IN THE RIGHT PLACE !

- ✓ For inter-rows from 45 to 80 cm up to 12 rows
- ✓ 250 l hopper with an anticorrosion treatment
- ✓ 2 or 3 metering units with independent adjustment
- ✓ 2 trapdoors for hopper emptying
- ✓ Screw handle on the tank outside to make tries
- ✓ Hopper grid
- ✓ Mechanical rate control by a pressure spring mounted wheel
- ✓ Agitation spiral in the hopper bottom for an even feed to the metering unit and optimising hopper emptying
- ✓ Hopper hood made from supple sheet in order to maximise hopper filling
- ✓ Rotation markers of distribution to double total volume

## FERTI KIT for FRONT HOPPER : solid fertilisation localizer



*FERTI KIT on folding ECONET*

### WEIGHT BALANCE AND ACCURATE DOSING !

- ✓ For inter-rows from 45 to 80 cm up to 16 rows
- ✓ Distribution head 16 outlets
- ✓ Hopper connecting column Ø130mm
- ✓ Descending pipe Ø40mm
- ✓ Outlet with decompression cyclon
- ✓ Diffuser pipe adjustable for a perfect fertiliser positioning

# SPRAY KIT

NEW



Localised liquid fertilising and spraying!

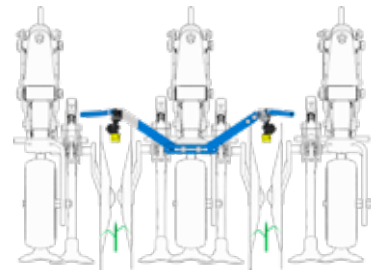
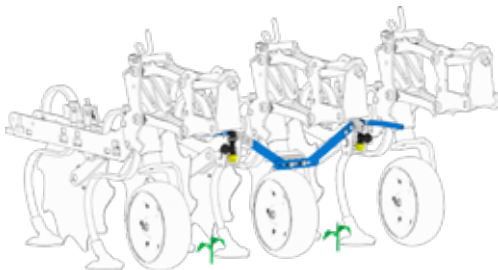
Piping protection tarp over the entire machine.

Quick coupling on Ø18mm central output

## THE EQUIPMENT

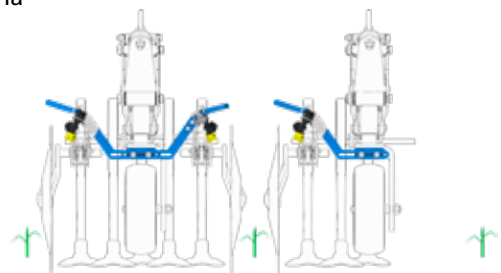
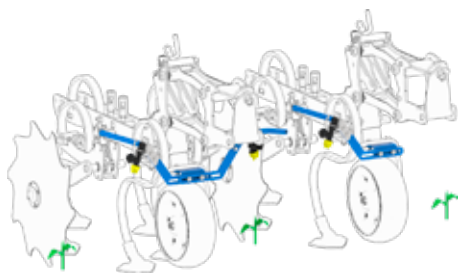
### Spraying over the 1 jet row

Stainless steel flat jet 40° with drip plate  
Flow rate from 40 to 150 L/ha



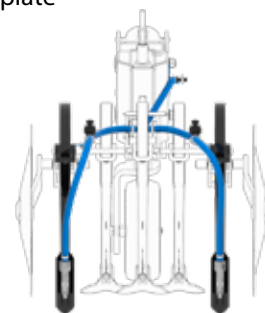
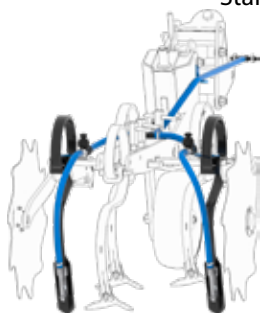
### Spraying on the 2-jet row

Stainless steel flat jet 40° with drip plate  
Flow rate from 40 to 150 L/ha



### Fertilisation with injector on either side of the row

Stainless steel injector fitted on straight tine 45x12mm  
Stainless steel pellet Ø1 or 1.5mm with built-in drip plate  
and cut-off valve  
Flow rate from 80 to 400 L/ha





# EQUIPMENTS - SEMLOC

Sowing seed by surface broadcasting at the same time of hoeing



2 dosing rollers for small and big seeds



8 splines distribution










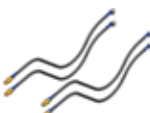


2 outlets per inter-row followed by 4 double comb harrows

## LIMIT SOIL EROSION AND TRAP NITRATE !















- ✓ 200L Hopper with splines distribution, driven by mechanical rate governor, allow dosing from 2 to 100 Kg/Ha
- ✓ Distribution fan driven by 2 electric motors
- ✓ Set of comb harrow to cover seeds
- ✓ Access platform with footbridge

# THE OPTIONS

Designation		Type	Use
Back chassis with track eradicator		Front F	Decompact and eradicate tractor wheel track
Sight gauge		Front F	To get a guidance landmark regarding the crop line
Rear view mirrors		Front F	Visualize dead angles to circulate safely
Depth control wheels 10PR Ø550x175mm		All	Guarantee a constant height of the beam
Transport wheels for Wide width ECONET GL		GL	Relieve tractor at transport with semi-mounted kit
Front Mounting Hitch		Rigid Single beam Double beam	Allow to use the hoe in the front of the tractor, by conserving possibility to hook at the back
Direction with collar wheel or coulter		Rigid twin beam	For an accurate guidance especially on market gardening crops
Bracket for the fixing of the tracking's modul or seat		Rigid Single beam Double beam SGI	To fasten the seat
Seat to fix on the bracket		Rigid Single beam Double beam SGI	To install an operator on the machine and guide the hoe with a manual electric control
Independent hydraulic folding of the extensions		All	Fold extension independently



# THE OPTIONS

Designation		Type	Use
Ridging ploughshare 350mm		L, B or X	For economic ridging for inter-row fro 60 to 80cm
Ridging ploughshare 600mm with adjustable wings		L, B or X	For economic ridging for inter-rows from 80cm to 1m
Discs Ø300mm		L, B or X	For precise ridging or ridge clearance
NETLINE star Ø360mm for fitting on Ø300 disc holder		L, B or X	For mechanical weeding on the crop row using soft tines. To be fitted on disc holder
Discs Ø510mm		L, B or X	For important ridging
Comb harrow in the inter-row		All	Break up the clods and put weeds roots on surface
Comb harrow on the row		All	Break up the clods and put weeds roots on surface
Adaptation for combination of discs Ø300mm and comb harrow		All	To assemble comb harrow behind the discs Ø300mm
Comb lowering kit if XL element		All	To lower the combs on the XL element
Wheel mounted area meter		All	Measure surface done
Deflector for L blade		I and B	Limit soil projection on the row
300mm diameter opening discs		All	Cut the surface of the ground before running the tine through it
Pressure spring kit		All	Increase the ground pressure for the tines under difficult conditions
Advanced hitch 200mm		PRECICAM ECONET SGI	Adapts itself to the tractor's constraints



To guarantee a reliable machine, robust and conform to your needs, our team do their best!



We use durable and environmentally friendly industrial methods because we are aware of the efforts that you make for the environment!



Our role : To guide you towards methods that are effective and environmentally friendly.



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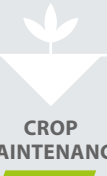
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