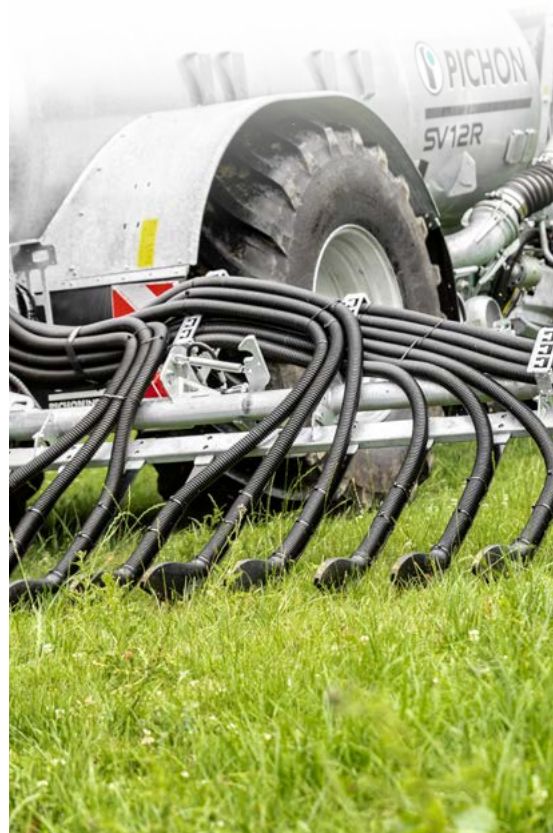


# **PICHON**<sup>®</sup>

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APPLICATION EQUIPMENT





# APPLICATION EQUIPMENT

1 - Natural fertilisers	04
2 - Drag hose boom	06
3 - Trailing shoe boom	08
4 - Disc injector	10
5 - Disc incorporator	14
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7 - Injectors and incorporators	18
8 - Application equipment interfaces	19

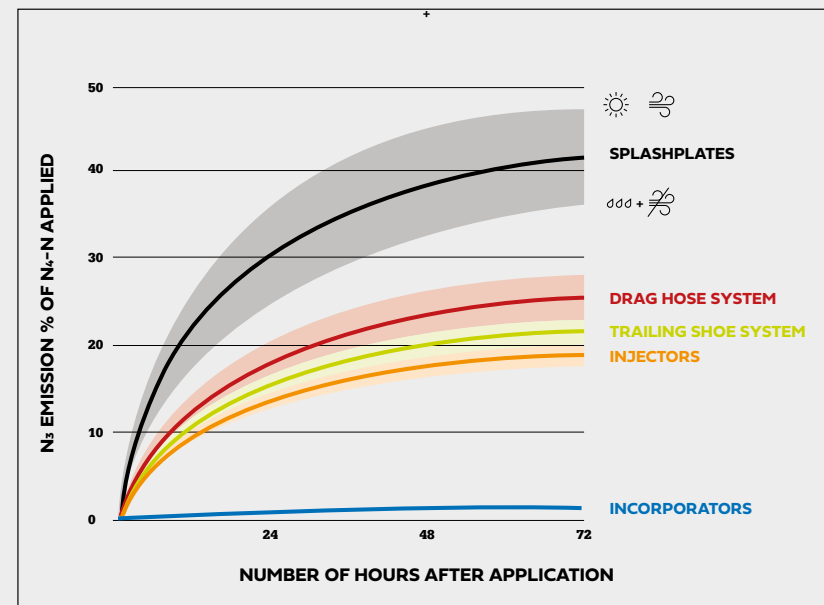


# OPTIMUM USE OF NUTRIENTS

## AN ASSET FOR YOUR SOIL AND YOUR PLANTS

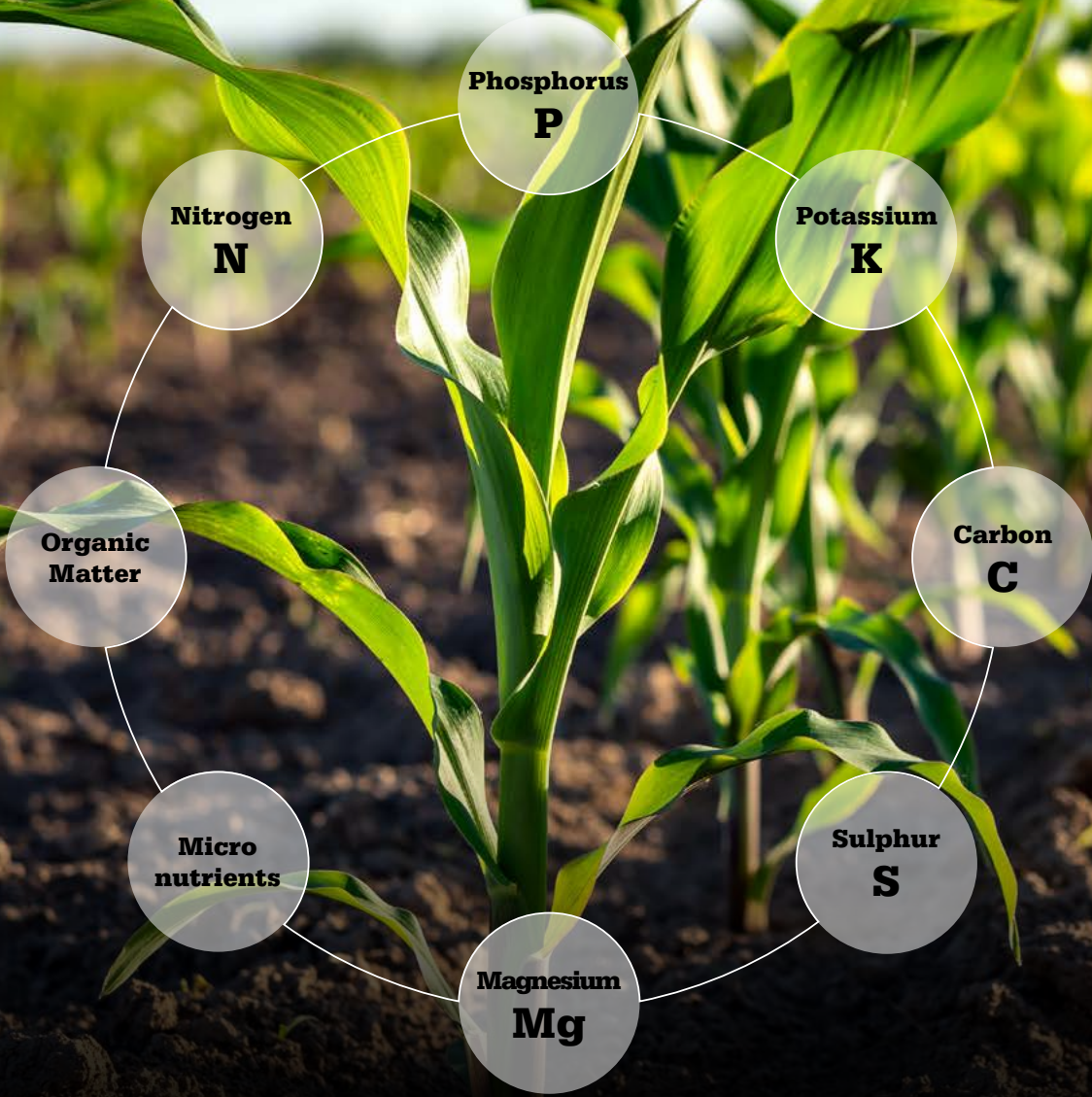
Our surface application, injection and incorporation techniques optimise plants' use of nutrients. They improve soil fertility and reduce ammonia emissions. In addition to improving air quality, they provide an effective supply of natural fertiliser to help the plot reach its maximum potential.

## THE CHOICE OF EQUIPMENT IS IMPORTANT



The ALFALFA project - Ammonia losses due to the application of slurry in the field





## BROWN GOLD AT YOUR FINGERTIPS

- **HIGH LEVELS OF NUTRIENTS**
- **IMPROVED SOIL FERTILITY AND STRUCTURE**
- **RECIRCULATION OF RESOURCES**
- Carbon sequestration in the soil
- Improved soil microbial life
- Lower mineral fertiliser costs

Macro nutrients = (N) (P) (K) (S) (Mg) high concentrations added in kg per ha  
 Micro nutrients = (Cu) (Zn) low concentrations, added in g per ha  
 Organic matter = Plant residues and liquid manure that have not yet decomposed

# SIMPLICITY AND PRODUCTIVITY



## APPLICATION AT GROUND LEVEL

Using a drag hose boom allows you to obtain a non-fractionated slurry that promotes the effectiveness of the nutrients and dry matter contained in natural fertilisers. Depositing the slurry at ground level reduces ammonia emissions and facilitates infiltration of the fertiliser into the soil. The close spacing of the pipes ensures even transverse distribution over large widths.

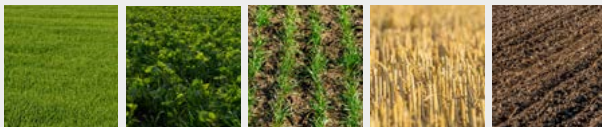
## DESIGN

- Fully galvanised structure
- Simple, robust design
- Minimal maintenance
- Wide working widths
- ADS (anti-drip system)
- Hydraulic lock

## ADVANTAGES

- High site throughput
- Even lateral distribution
- Limits nitrogen losses
- Improves the use of nutrients
- Reduces odours
- Low power requirements

## SOIL TYPES:



Short, tall grass

Catch crops

Winter/spring crops

Stubble

Ploughed or cultivated land





**VERTICAL DISTRIBUTOR**

- Increases performance
- Large capacity pebble trap
- Neutralises foreign bodies
- Guarantees homogeneous slurry
- Ensures even distribution



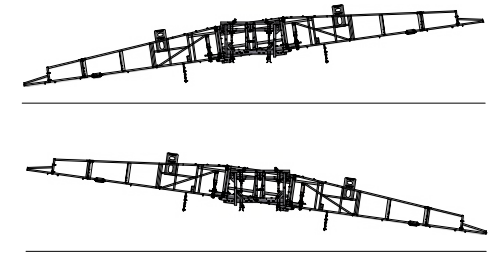
**HALF-WIDTH SECTION CUT-OFF\***

- Feeds from one side of the boom only
- Facilitates end-of-job operations
- Limits overlapping
- Prevents overdosing
- Optimises slurry application



**SECTION CUT-OFF\***

- Manual shut-off valves
- Standard on telescopic booms
- Optional behind the wheels
- Prevents overdosing
- Ensures better contour following



**ACTIVE TILT CORRECTOR\***

- Boom positioned parallel to the ground
- Structure pivots (+/- 8°)
- Improves contour following
- Optimises application on hilly terrain
- Controlled by PHONIC iControl 7S

TECHNICAL SPECIFICATIONS	DHB1				DHB2			
	Working width (m)	9	12	12-15	15	12-15	15	15-18
Transport width (m)	< 3				< 3			
Number of distributors	1				2			
Number of trailing hoses	30	40	48	48	48	48	48	48
Row spacing (mm)	310	300	310	320	310	320	380	380
Hose diameter (mm)	40	50	40	50	40	50	50	50
Empty weight (kg)	950	1100	1200	1350	1350	1400	1550	1650



\*Optional

# ACCURACY AND VERSATILITY



## TARGETED APPLICATION

The trailing shoe boom ensures precise surface application of natural fertiliser and can be used on all types of soil. The design of the boom and trailing shoe ensures excellent ground contour following, making it a valuable ally in hilly areas. Using a trailing shoe system boosts the yield potential of your crops.

## DESIGN

- Universal installation
- Vertical distributor
- Simple and reliable design
- Compact size
- ADS (anti-drip system)
- Hydraulic lock

## ADVANTAGES

- Precise surface application
- Better infiltration into the soil
- Odour reduction
- Minimal ammonia emission
- Takes care of your plants
- Eco-friendly fertiliser cycle

## SOIL TYPES:



Short, tall  
grass

Winter/spring  
crops

Stubble

Ploughed  
or cultivated  
land







## A UNIQUE DESIGN

The trailing shoe design has been developed to combine performance and minimum maintenance costs. A warning light alerts the operator when the central wear part reaches end of life. Switching is simple and takes less than a minute. The central wear part guarantees a consistent ground pressure surface throughout its life.

## EXCELLENT SOIL MONITORING

The central pivot point gives flexibility to the boom frame. Its guided movement effortlessly adapts to the natural contours of the terrain.

## TRANSPORT SAFETY

Simple hydraulic folding forms a compact triangle at the back of the tanker. The driver gains optimal visibility during transport. The hydraulic locking system stabilises the boom and makes your journeys on the road safer.

## UNIVERSAL INSTALLATION

Our TSB1 models can be assembled on all tankers with ease, whether they're new or already operational. They are compatible with different fixed or hydraulic connection systems.

TECHNICAL SPECIFICATIONS	TSB1	
Working width (m)	7.5	9
Transport width (m)	< 3 m	
Height (m)	3.23	3.95
Working height (mm)	840 (+/-20)	
Number of distributors	1	
Number of trailing shoes	30	36
Row spacing (mm)	250	
Hose diameter (mm)	43	
Empty weight (kg)	1150	1300

# PROTECTION AND VALUE



## REASONED APPLICATION

The IDs has a maximum injection depth of 5 cm. The combination of the two conical discs and the cutting disc ensures that the slurry is applied to the heart of the furrow. This avoids splashing and protects the plant cover. Odour emissions and ammonia losses are reduced to a minimum. The injection technique is ideal in terms of efficiency and environmental friendliness.

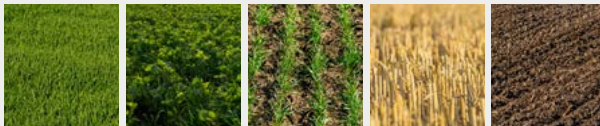
## DESIGN

- Coupling with 4-point interface
- Vertical distributor
- Lightweight, stable construction
- ADS (anti-drip system)
- Hydraulic lock
- Pivoting chassis

## ADVANTAGES

- Homogeneous, reasoned deposit
- Rapid infiltration in the soil
- Low nutrient evaporation
- Improves forage quality
- Odours reduced to a minimum
- Good tracking of plot curves

## SOIL TYPES:



Short, tall grass

Catch crops

Winter/spring crops

Short stubble

Ploughed or cultivated land





### DISCS

- Discs mounted in pairs
- Individually mounted sections
- Easy-to-replace wear part
- Reduced maintenance costs
- Uniform disc pressure

### INJECTION NOZZLES

- Nozzles for improved liquid outlet
- Hoses with smooth inner surface
- Flexible material for contour following
- Black colour for UV resistance
- Optimised work rates

### DEPTH ADJUSTMENT

- Depth control by sensor
- Self-regulating machine
- Constant working depth
- Optimises slurry injection
- Adapts to different soil types

### TRANSPORT

- Locking system
- Compact footprint
- Lightweight, stable unit
- Optimum driving comfort
- Secure road routes

### TECHNICAL SPECIFICATIONS

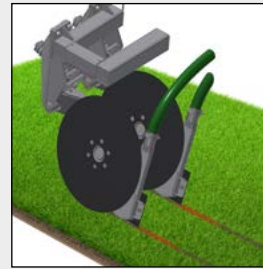
	IDs
Working width (m)	8
Transport width (m)	< 3
Transport length (m)	1.35
Transport height (m)	3.80
Number of distributors	1
Number of discs	32
Disc diameter (mm)	385
Row spacing (mm)	250
Hose diameter (mm)	43
Working depth (cm)	2-5
Working speed (km/h)	5-12
Empty weight (kg)	1850



### TECHNICAL SPECIFICATIONS

	EL71	
Working width (m)	4	5.70
Transport width (m)	2.85	
Transport length (m)	1.95	
Transport height (m)	< 4	
Number of distributors	1	
Number of discs	10	14
Disc diameter (mm)	640	
Row spacing (mm)	400	
Hose diameter (mm)	50	
Working depth (cm)	5-10	
Working speed (km/h)	5-12	
Empty weight (kg)	1950	2420

# CONSISTENCY AND EFFICIENCY



### PRECISION APPLICATION

The EL71 model is ideal for injecting natural fertiliser after harvesting or on bare soil. It shears the soil without disturbing it. The slurry has easier access to the roots and the plant cover is protected. Contamination and nitrogen losses are greatly reduced and the agronomic powers of the fertiliser maximised.

### DESIGN

- Flat opening discs
- Aggressive disc profile
- Stable, lightweight design
- High clearance
- Vertical distributor
- Depth control with wheels

### ADVANTAGES

- Precise injection at the root
- Respects soil structure
- Reduces the risk of leaching
- Minimal ammonia emission
- Optimum crossing capacity
- Improves forage quality

### SOIL TYPES:



Short, tall  
grass

Catch  
crops

Winter  
crops

Short, tall  
stubble

Loose  
cultivated  
soil

“ Our aim is to offer the agricultural industry state-of-the-art natural fertiliser spreading machines and technologies for applying natural fertilisers that take account of the environment and people. ”



# APPLICATION AND WORKING THE SOIL



## THE KEY TO EFFICIENT WORK

Designed to work on surfaces clogged with plant debris, stubble, after maize harvesting, etc., the CDf has 2 rows of discs: injectors and coverer. The discs of the first row open a furrow in the earth and the diffuser applies the slurry. The second row covers the furrow.

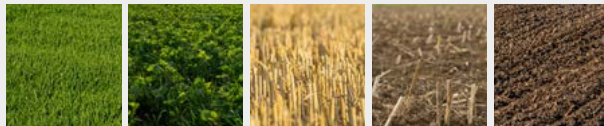
## DESIGN

- Two rows of discs
- Compact, robust design
- Lightweight construction
- 4-point interface
- Vertical distributor
- Depth adjustment

## ADVANTAGES

- Incorporation and covering
- Fertilisation of plant residues
- Optimum use of nutrients
- Minimal or non-existent losses
- Better decomposition of debris
- Increases application surface area

## SOIL TYPES:



Short  
grass

Catch  
crops

Short, tall  
stubble

Maize  
stubble

Ploughed or  
cultivated  
soil





### DISCS

- Notched discs mounted in pairs
- Aggressive disc profile
- Soil worked every 12.5 cm
- Excellent mixing of plant matter
- Vibration absorption by silent blocks



### EDGE DISC (optional)

- Left-mounted star disc
- Excellent ground levelling
- Monitors soil irregularities
- No ridges between passes
- Limits soil projections



### DEPTH ADJUSTMENT

- Quick, easy adjustment (-50 to +150mm)
- Precise depth control
- Constant working depth
- Adapts to all types of soil
- Optimises slurry incorporation



TECHNICAL SPECIFICATIONS	CDf	
	4.5	6
Working width (m)	4.5	6
Transport width (m)	3	
Transport length (m)	2.4	
Transport height (m)	< 4	
Number of distributors	1	
Number of discs	35	47
Disc diameter (mm)	510	
Row spacing (mm)	250	
Hose diameter (mm)	43	
Height under chassis (mm)	660	
Working depth (cm)	3-12	
Working speed (km/h)	10-14	
Empty weight (kg)	1900	2500

# WORK DEEP



## 1 EQUIPMENT FOR 2 TASKS

The strength of this model is undoubtedly its ability to work the soil and incorporate the slurry in a single pass. This tine incorporator works the soil efficiently and facilitates the decomposition of plant debris. The soil is prepared for new seeds. This application technique optimises fertiliser performance by reducing nitrogen losses to a minimum.

## DESIGN

- 2 rows of tines
- Vibroflex or square tines
- Galvanised structure
- High clearance
- Vertical distributor
- Pneumatic depth control wheels

## ADVANTAGES

- Precise incorporation
- Optimum use of nutrients
- Minimal or non-existent losses
- Loosens the soil
- Prepares a seed bed
- Easy passage of crop residues

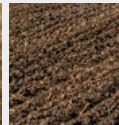
## SOIL TYPES:



Short  
stubble



Maize  
stubble



Ploughed or  
cultivated  
soil







### “VIBROFLEX” TINES

- Bare or cultivated soil
- Working depth: 5 to 10 cm
- Adjustable height
- Flexible tines
- Crumbling of the top layer
- Vibratory stubble cultivation
- Reversible share tips



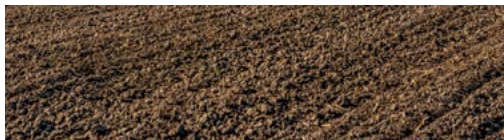
### “SQUARE” TINES

- Heavy and clay soil
- Working depth: 10 to 15 cm
- Adjustable height
- Rigid, reinforced tines
- Hardened steel pivoting wear point
- Decompacting
- Uproots plant debris

	EL61			
Working width (m)	3	4	5	6
Transport width (m)	2.95			
Transport length (m)	1.99			
Transport height (m)	< 4			
Number of distributors	1			
Number of tines	7	9	11	13
Row spacing (mm)	450			
Hose diameter (mm)	50			
Height under chassis (mm)	700			
Working depth (cm)	5-15			
Working speed (km/h)	6-12			
Empty weight (kg)	1020	1290	1365	1460



# OPERATING CONDITIONS



- Unsuitable
- Suitable
- Ideal

	EL61	CDf	EL71	IDs
	Incorporators		Injectors	
Forward speed (km/h)	6-12	10-12	5-12	5-12
Working depth (m)	5-15	3-12	5-10	2-5
Power required (hp/m)	10-20	20-30	6-8	6-8
Max. disc pressure (kg/disc)	-	52	172	220
Tall stubble and long straw - Sandy soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Short stubble and short straw - Sandy soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tall stubble and long straw - Clay soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Short stubble and short straw - Clay soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Maize stubble with chopped stubble - Sandy soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Short maize stubble - Sandy soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Maize stubble with chopped stubble - Clay soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Short maize stubble - Clay soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ploughed soil - Sandy soil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Loose cultivated soil - Sandy soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ploughed soil - Clay soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Loose cultivated soil - Clay soil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Catch crops- Sandy soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Catch crops- Sandy soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Catch crops- Clay soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Catch crops- Clay soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Short grass, recently cut - Sandy soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tall grasses - Sandy soil	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Short, recently cut grass - Clay soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tall grasses - Clay soil	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Winter crops - Sandy soil	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Spring crops - Sandy soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Winter crops - Clay soil	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Spring crops - Clay soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



# PREPARE FOR THE FUTURE

For some years now, the emphasis has been on techniques for injecting and incorporating natural fertilisers into the soil. Among their many benefits, they reduce ammonia emissions and optimise crop yields. To prepare your equipment for these developments, we offer a range of coupling systems that allow you to add application equipment as original equipment or retrofit.

## **PICHON UNIVERSAL LINKAGE**

SV models are fitted with a linkage slot as standard. This interface is essential for connecting all PICHON application equipment. We recommend this option when you buy your machine to increase its versatility. Our universal linkage is compatible with all our application techniques: boom, injectors and incorporators. To adapt the equipment to seasonal conditions and make your uncoupling/coupling operations easier, external linkage control is located at the rear of the tank\*.

## **FIXED SLOT SYSTEM**

We also offer a fixed CATIII- slot system compatible with our BATS trailing shoe system. Its compact design is easy to install and includes basic hydraulic functions. This slot system increases the versatility of your tanker.



*\*Optional*



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PICHON DO CROISSIEN