

### **Eco-Mix** shallow mixing

- · Time saving
- Good mixing
- · Improves the water balance
- · Incorporates organic material
- · Seedbed in one pass
- Quality and robust
- · Good soil structure
- · Elimination of compaction
- Fuel saving
- · Cost effective
- No ploughing
- · Promotes soil life

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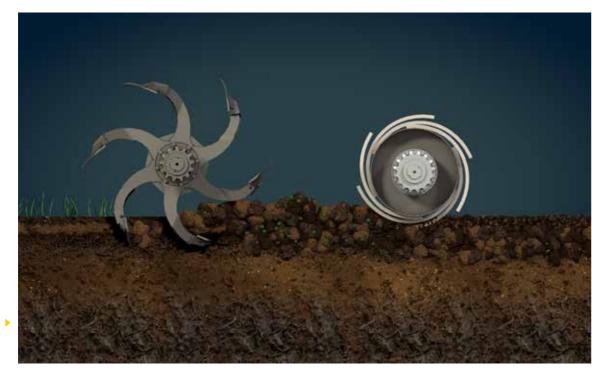
THE IMANTS PHILOSOPHY

# Digging is more than spading

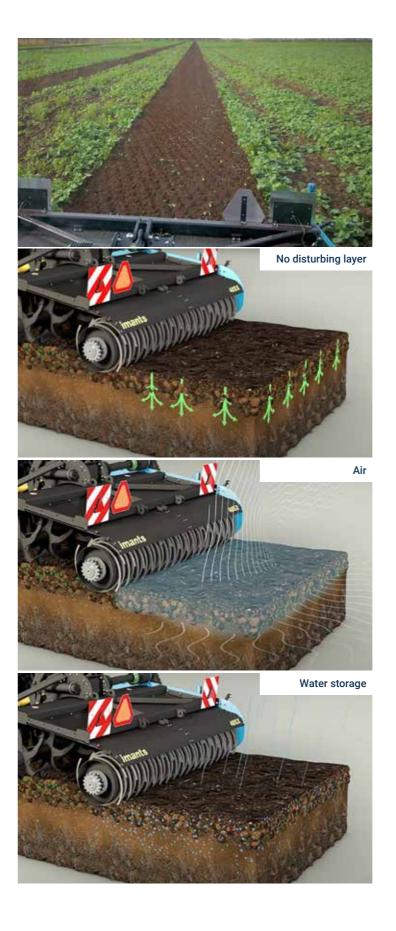
More than 60 years of experience with spitting machines is something Imants can look back on. From that experience we learned that digging is more than just turning soil. Much more even. Digging means mixing organic material with the living topsoil, it means working crop residues under and creating a seedbed, it means mixing in green manure so that it can be broken down into nutrients for the next crop.

In short, both on the soil and in the furrow you can speak of an even, homogeneous and healthy soil after treatment with Imants diggers.

The Culter Eco-Mix combination allows for shallow mixing and deep cultivation. The spading machine is suitable for non-inversion soil treatment (the so-called non-inversion tillage).



from spading axle with power harrow



BENEFITS OF SPADIN

# Imants spading machines take care of your soil

Imants offers you the solution for the soil cultivation you need. Whether deep or shallow, active or passive, intensive or extensive, mixing or non-mixing. All solutions are available with us.

To mix the soil shallow and intensively and to dig deep, Imants has developed the Eco-Mix spading machine in combination with the Culter subsoiler.

In general the following can be said about tillage:

- 1. As little organic material as possible should be taken from the land. This means that plant residues should remain on the land as much as possible.
- 2. If organic material is present, it should preferably be mixed into the soil before it oxidizes and is released into the atmosphere. This careful mixing also allows air and water to flow freely which improves both air permeability and water holding capacity.
- 3. It is a good idea to press the soil again after careful mixing. This leads to the fact that the organic material does not oxidize so quickly and is converted by soil organisms into nutrients for soil life.

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4. The root has a large share in the binding of carbon in the soil. Therefore, everything be done to give the root as much space as possible. This means especially that compacted layers often caused by heavy equipment removed and that the proper soil aggregates are formed. Fewer passes with machines ensure that there is less chance of compaction and, partly as a result better water infiltration.

# With an Imants spading machine the soil can be be made ready for planting in one operation

In recent years we at Imants have developed exactly the machine needed for these tasks: the Eco-Mix Culter combination.

The Eco-Mix creates the appropriate soil structure where organic material is incorporated shallowly. This keeps all nutrients in the upper layer. By keeping this organic material in the top layer, the soil also becomes less prone to drifting. The power harrow ensures a pressed upper layer.

This means that tillage with Imants machines not only protects the soil and increases the yield, but also contributes to climate protection.

This Eco-mix in combination with the Culter is also good to combine with seeders. By combining tillage you not only save time and money, but also the soil structure.









X SPADING TECHNOLOGY

# The construction of the Eco-Mix spading machine

The Eco-Mix from Imants is a rotary spading machine, specially developed for flat, non-inversion tillage. The machine is ideal for traditional and/or organic agriculture and horticulture.

Depending on what you need on your farm, Imants can recommend the right Eco-Mix. For example, there are Eco-Mix spading machines that are suitable for use behind light (L) or heavy (Z) tractors.

The spading machine works the soil by means of spades which are attached to the spading machine via a spade bracket. With the Eco-Mix, 4 spade brackets form a wreath. Because of the slowly rotating and superficially working spading axle, the soil life is minimally disturbed.

The SX-spade blade
To be used on
all soil types
except wet clay.
The spade blades
are easy to
replaced.





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**SPECIFICATIONS** 

### **Eco-Mix specifications**

#### **Eco-Mix series**

#### Power

#### Eco-Mix L type

max. 90 hp (without Culter) 125-175 hp (in combination with Culter)

#### Eco-Mix Z type

max. 150 hp (without Culter) 125-235 hp (in combination with Culter)

#### Working width

300 cm / 118 inch



DEEPER WORK

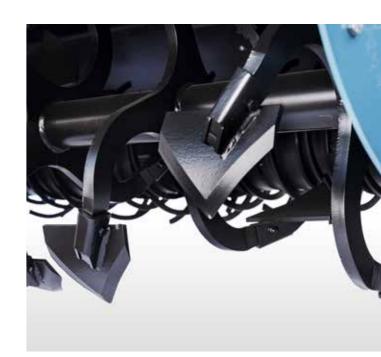
### **Subsoiling**

The ideal working depth of the Eco-Mix is 12 cm (5 inch) with a working depth range of 8 to 20 cm (3 to 8 inch). To achieve a good connection with the deeper soil layers, the use of the Eco-Mix is recommended in combination with the Imants Culter, subsoiler.

The legs break up disturbing layers of soil that are below the working range of the spade blades, promoting root growth, water storage and capillary action.

The working depth of Eco-Mix and Culter can be adjusted independently. The Culter can be adjusted to a maximum working depth of 60 cm (24 inch). The ideal driving speed is 6 km/u (4 m/h).

The Culter is a separate subsoiling cultivator. It can also be used solo or in combination with other machines (see brochure of the Imants Culter).



The Eco-Mix spading axle



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**FIXATION** 

### The end result

#### **Driven power harrow**

The Imants Eco-Mix spading machine is equipped with a driven power harrow. The unique springy teeth press the crop residues into the top layer and ensure a fine and even seedbed. This roller levels, crumbles and thus works crop residues in. It is the ideal roller for sandy and loamy soils.







#### Below the surface

A balanced soil structure is created both on the surface and in the furrow. Below the surface, it is very important for all crops that the roots can grow freely so that they can find fertilizers and moisture. Aerobic soil life must feel good. Therefore, a balance of pores (air), moisture and nutrients is important. By lifting the disturbing layers, mixing the organic material and lightly pressing the top layer, these criteria are met.

The Eco-Mix in combination with the Culter rotary cultivator takes care of that.

SX OPTIONS

### Options for all Eco-Mix models

To make the Eco-Mix spading machine fit your farm, you can choose from several options. Depending on the desired result, you can not only choose from several different trailing rollers, but also from a linkage that makes it possible to build up seeders or planters. This allows you to keep the number of working passes to a minimum.

HYDRAULIC ADJUSTABLE LIFT FOR SEED BAR OR TRAILING ROLLER ROLLER PRESSURE CONTROL: HYDRAULIC SYSTEM TO ADJUST PRESSURE ON ROLL REGULATE The EM-SX300LH has been chosen as the image. Please contact us for the options of the model of your choice.

LIFTING DEVICE:

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**ECO-MIX OPERATIONS** 

# **Combining** working passes

The Eco-Mix spading machines can be used to prepare the soil for sowing or planting. But the spading machines can also be the heart of combinations to do all operations in one pass. An Imants rotary tiller loosens the soil before it is ploughed. Then the rake roller provides a nice seedbed. A mounted seeder ensures that in 1 working passage all operations are done. Combining operations saves not only money and time but also the soil structure. Tillage with Imants machines protects the soil and climate, and increases your yield in one pass.

Here you see some possible combinations with the Eco-Mix spading machine.

- 1. With seeder
- 2. With Culter and seed drill





#### **Specifications Eco-Mix spading machine without Culter**

Туре	Working width	Overall width	# spades	Max. power (hp)
EM-SX300LH	300 cm / 118 inch	324 cm / 128 inch	32	90
EM-SX300ZH	300 cm / 118 inch	327 cm / 128 inch	32	150

Weight (kg/lbs)	Power harrow	Subsoiling legs	Other
1590 / 3505	yes	no	Spading depth for L&Z:
1870 / 4122	yes	no	8-15 cm (3-6 inch)

#### **Specifications Culter Eco-Mix combination**

Туре	Working width	Overall width	# spades	Power (hp)
Culter Eco-Mix L	300 cm / 118 inch	324 cm / 128 inch	32	125-175*
Culter Eco-Mix Z	300 cm / 118 inch	327 cm / 128 inch	32	125-235*

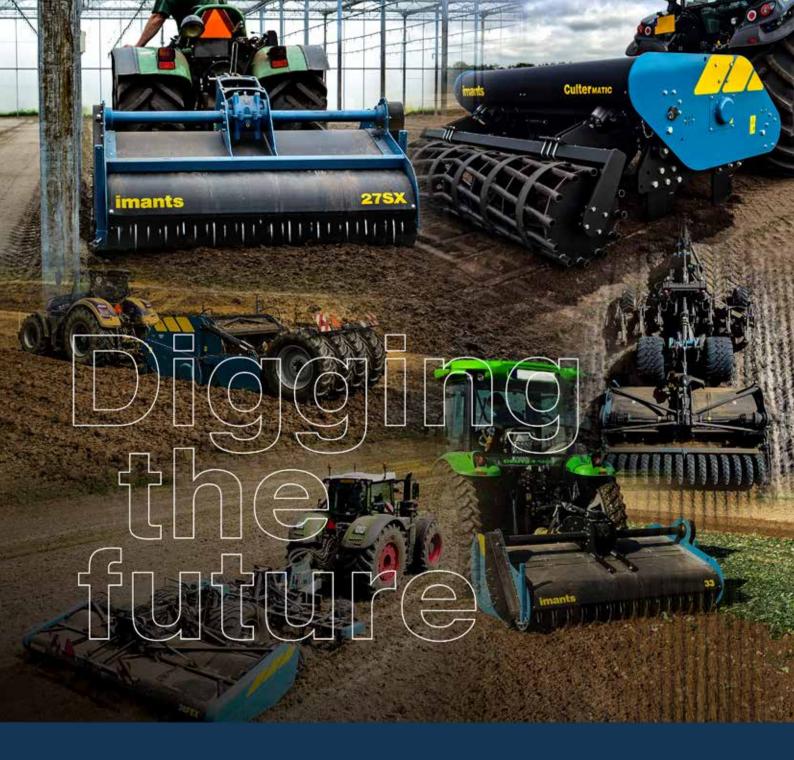
Weight (kg/lbs)	Power harrow	Subsoiling legs	Other
2470 / 5445	yes	6	Spading depth: 8-15 cm (3-6 inch) (L&Z)
2750 / 6062	yes	6	Subsoiling depth max. 60 cm (24 inch) (L&Z)

#### **Specifications Culter subsoiling cultivator**

Туре	Working width	Overall width	# spades	Max. power (hp)
Culter	300 cm / 118 inch	278 cm / 109 inch	n.a.	350
Weight (kg/lbs)	Power harrow	Subsoiling legs	Other	
880 / 1940	n.a.	6	Subsoiling depth max. 60 cm (24 inch)	

Culter is available as CAT II - II, CAT III - III. CAT III - III. For other options, please refer to the Culter pre-soiler brochure or contact us.

Spading machine including: Walterscheid power take-off with cam clutch, Quick change system for the spading blades (SX), LED lighting kit and width markings



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Dealer:

