

The innovative solution to higher yielding energy rich crops ENTERPRISE IRELAND Innovation Arena Awards

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The **SAMCO** pneumatic drills have been in development over **23 years** to provide customers with a consistent quality of sowing even in difficult conditions.

A roller in the front of the drill allows the seed to be sown into a firm seed bed with a constant depth of sowing. This roller is also the drive train for the seeding elements.

Equipped with *Kverneland* seed units, the drill offers a very good quality of sowing regardless the type and size of the seed.

All machines are equipped with the newest and up to date *Geoline* spraying system. Certain aspects of the machine hydraulic system have been interlinked with the in-cab *Geoline* monitors.



MAIZE DRILLS

SEEDER	
SPRAYER	<u>.</u>
FILM LAYER	
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22HD	<u>.</u>
4800	<u>.</u>
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SPRAYER

Precimat

SAMCO also offer the Muller Precimat seed monitor. In the cab computer monitors the number of seeds being sown on each seed box unit which is displayed to the operator via the screen. Sensors fitted to each seed box units of the machine allows the operator to know when a unit is empty or blocked by sounding an alarm. The computer also measures the hectares sown and forward speed. Information provided by the computer:

- Seed rate per ha for each seeding unit
- The number of ha per day
- The number of total hectares
- The actual speed per hour
- Area per hour
- The number of hours worked



GeoSystem 260

All machines are equipped with the Geosystem monitor for applying herbicide while sowing. The monitor automatically takes into account the forward speed to regulate spray volume per hectare which is set in the program. This new monitor has easy touch toggle switches which enables the operator to change settings while working.

It takes into account the forward working speed to regulate and spray the correct volume per hectare programmed. A progress of 0.2 km / h speed is required to trigger spray. Regulating the volume starts as soon as the forward speed to 3.5 km / h. This is necessary to ensure even application of the volume of herbicide and a good covering of the entire surface to reduce the risk ofweed growth.

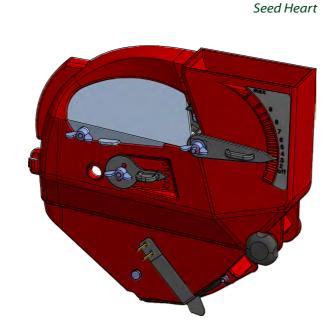
The *Geoline* monitor is designed to make the simplest possible operation to the operator.

Many functions are managed directly by the computer:

- Management of spray volume
- Management of Ha worked and total daily
- Management of herbicide volume remaining in the front tank
- Illustrating the pressure on the sprayer system while working



Seed Box OPTIMA





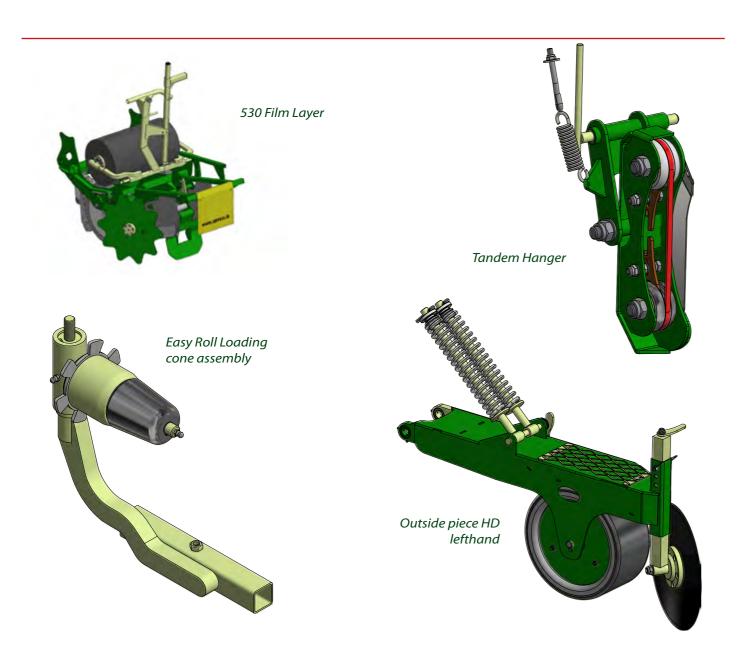


FILM LAYER

The film metering units on the **SAMCO** machine are designed to lay the film on the soil and to cover the edges securely. This prevents wind damage to the film, even while travelling at high speeds, to maintain daily output. Each roll of film covers two rows of maize corn.

With the "Easy Roll Loading System," it allows the operator to change the rolls of film with ease. Spring loaded roll holder units place the new roll in the correct position.

Spring tensioned wheels allow the film to be fed into position and to maintain this position while working, eliminating the need of the operator to re- adjust the roll during operation.







Working width: 1.6 meters

Weight: 850 kilo

Sprayer tank capacity: 200 litre

Tractor HP: >50

Seed width rows: 80cm

Options:

Granular fertilizer Front tank: 600 litre



Working width: 1.6 meters Weight: 1,000 kilo

Sprayer tank capacity: 100 litre

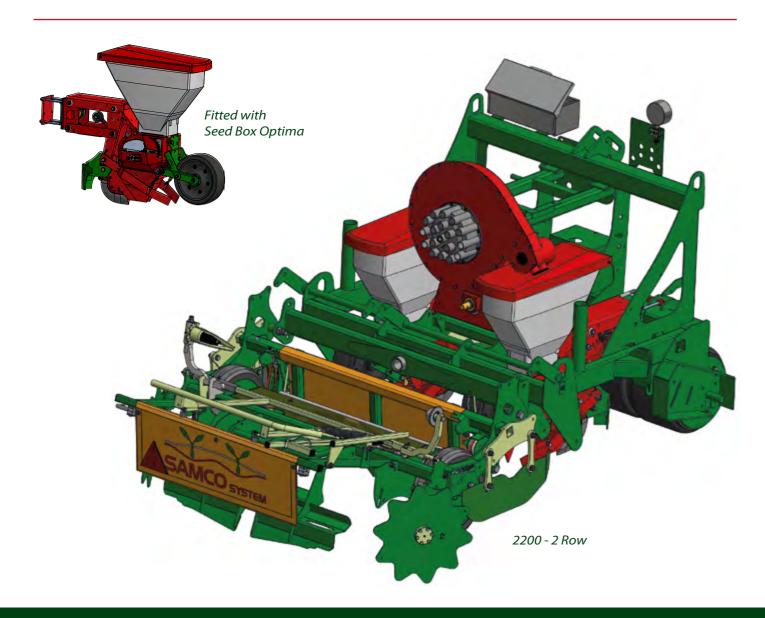
Tractor HP: >75

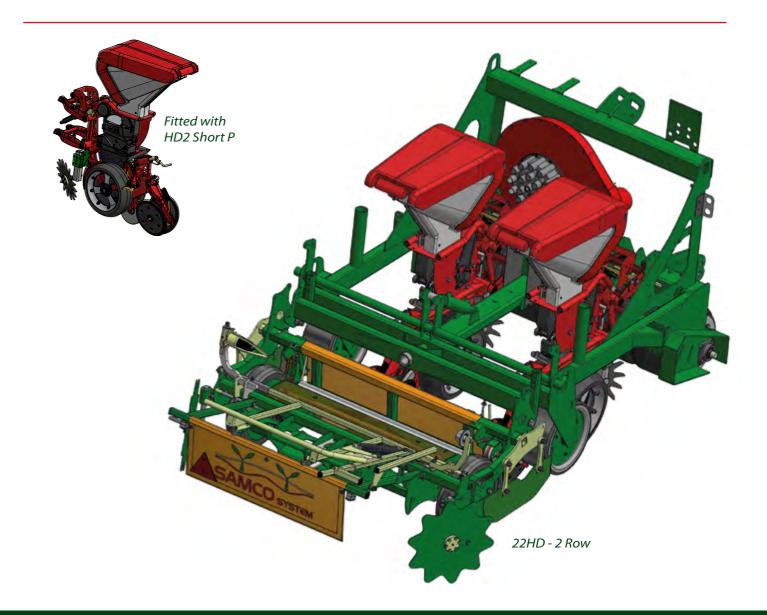
Seed width rows: 80cm

Options:

Granular fertilizer Liquid fertilizer Front tank: 600 litre







Working width: 3.2 meters

Weight: 2,200 kilo

Front linkage Sprayer tank capacity: 1,200 litre

Tractor HP: >130 Seed width rows: 80cm

Options:

Micro granular fertilizer CarryAll compatible



Working width: 3.2 meters

Weight: 2,200 kilo

Front linkage Sprayer tank capacity: 1,200 litre

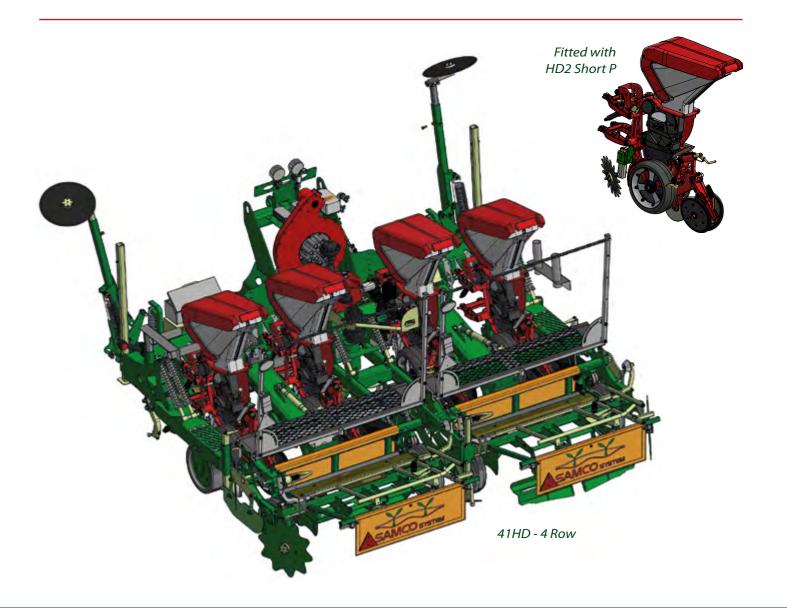
Tractor HP: >130 Seed width rows: 80cm

Options:

Granular fertilizer Micro granular fertilizer Liquid fertilizer CarryAll compatible







Working width: 4.5 meters / folding 3.2 meters

Weight: 3,300 kilo

Front linkage Sprayer tank capacity: 1,200 litre

Tractor HP: >180 Seed width rows: 75cm

Options:

Micro granular fertilizer CarryAll compatible



Working width: 4.5 meters / folding 3.2 meters Weight: 3,600 kilo Front linkage Sprayer tank capacity: 1,200 litre Tractor HP: >180

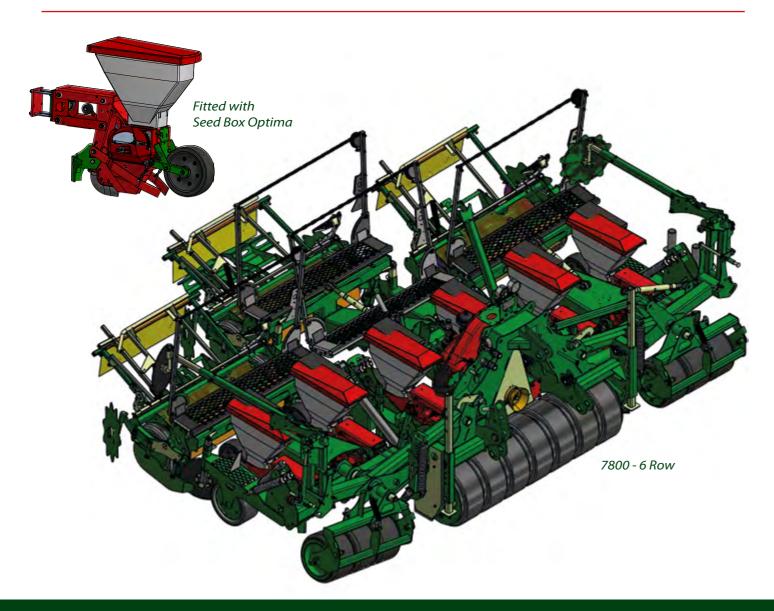
Seed width rows: 75cm

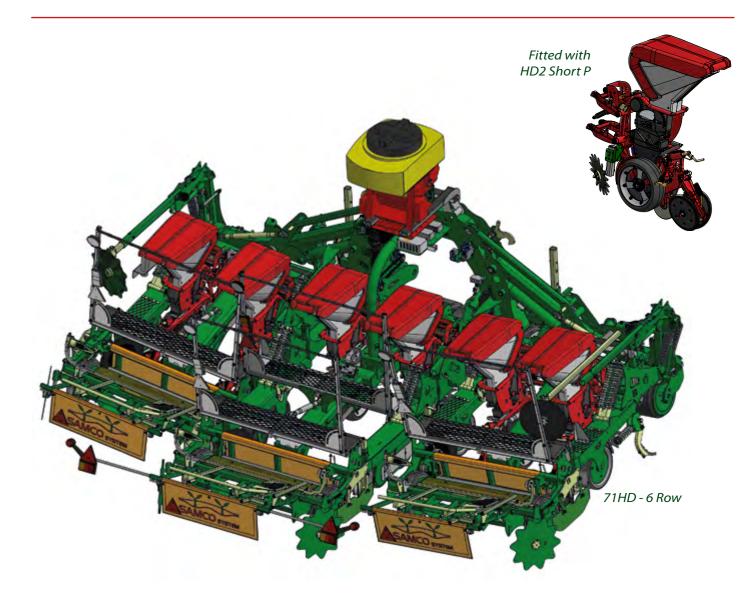
Options:

Micro granular fertilizer Liquid fertilizer CarryAll compatible



7IHD





FRONT TANK OPTIONS

Tank options include:

Drill mounted

200 Litre mounted tank

• Only available on 2 row machines

300 Litre x 2 mounted tank

 Available on 4 row machines for Pre-emergence herbicide or liquid fertilizer option

Front linkage

1,200 Litre tank - Available 4 & 6 row models

- 120 Litre rinse out tank
- Hand rinse 15 Litre
- Mixing pot for adding the herbicide to the front tank
- A valve for self-filling using the machines P.T.O driven pump

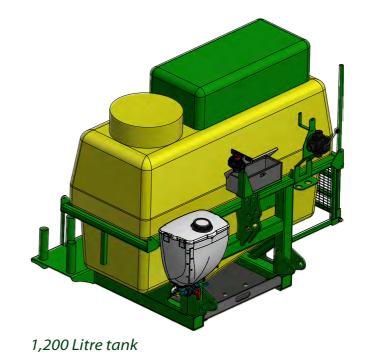
2,000 Litre tank - Available 4 & 6 row models

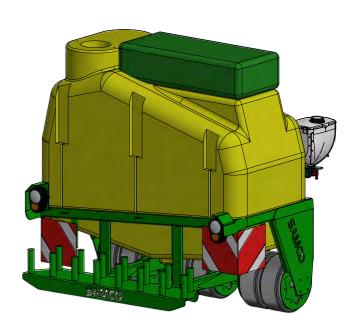
- 200 Litre rinse out tank
- Hand rinse 15 Litre
- Mixing pot for adding the herbicide to the front tank
- A valve for self-filling using the machines P.T.O driven pump

CarryAll

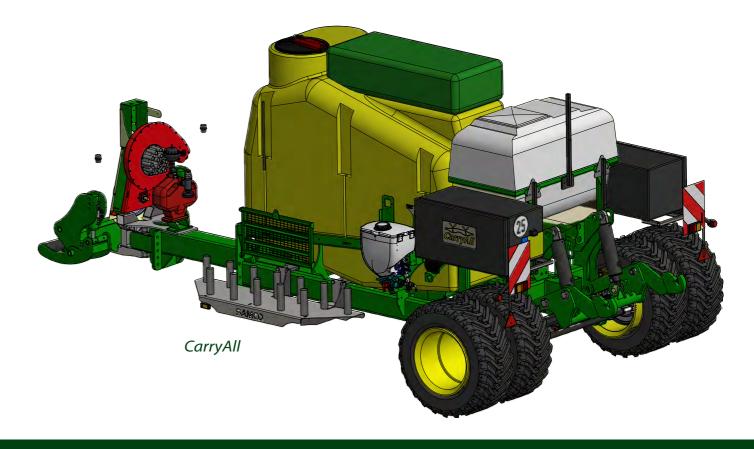
2,000 Litre & 3,000 Litre Available

- Hand rinse 15 Litre
- Mixing pot for adding the herbicide to the front tank
- A valve for self-filling using the machines P.T.O driven pump
- Optional Liquid fertiliser tank





2,000 Litre tank



FERTILISER OPTIONS

Large Granular

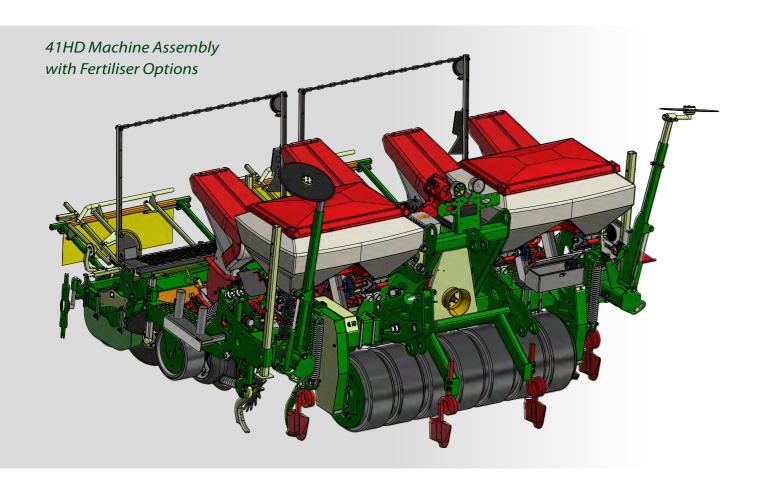
• Available on 2 row, and 4 row models.

Liquid

• Available on 2 row, 4 row, and 6 row models.

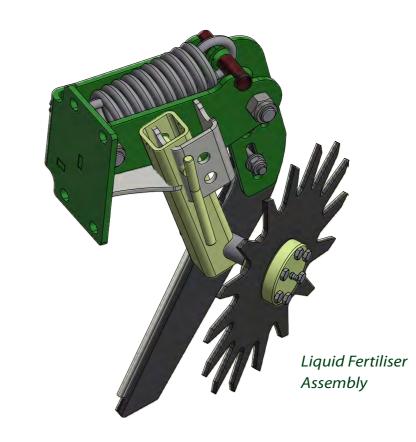
Micro Granular

• Available on 2 row, 4 row, and 6 row models & Punch model machines.









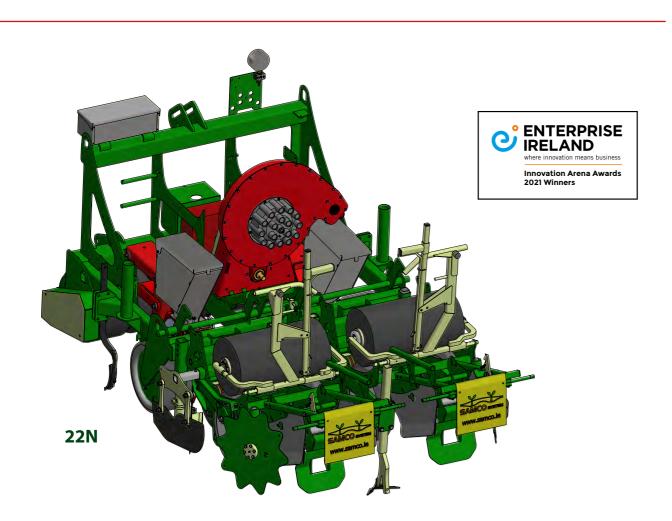
NARROW FILM SYSTEM

Introduction

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This newly designed system allows the grower to use 25% less mulch film per Ha which has a dramatic cost saving and increases long term sustainability on farm. This new design will allow the farmer to sow maize with mulch film in low cultivation and min till situations which will increase efficiency on farm.

Another benefit of this new design is it will allow the farmers reduce up to 25% less chemical herbicide which is being sprayed at the time of sowing. This will then allow the grower to choose a more effective post emergence herbicide or to use an interrow cultivator to keep the weeds away. Each film layer is accompanied with two small top links which allows the operator to make small and slight adjustments to the metering unit so that laying of the film can be achieved with high accuracy which also will reduce the amount of wind damage.





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41HDN

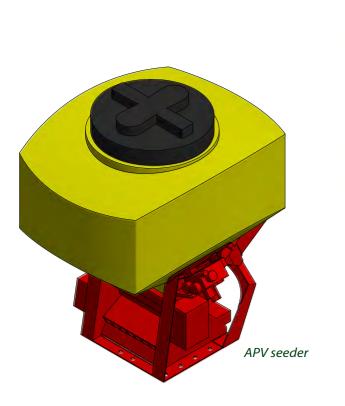


SEEDER

SAMCO design many types Punch Seeders to suit every growers' requirements. The Punch Hole units capable of seed row spacing's from 23cms to 75cms and seed spacing's in the row from 10cm to 250cm. Easily adjustable Punch Hole units allow for a wide choice of seed depth settings, meaning that this machine can be used with a comprehensive range of seed types, regardless of soil conditions in a range of agronomic systems.

Two types of Seed delivery

1. A popular method employed is Air Assisted seed distribution to the Punch Hole units. This allows the user to select the number of seeds sown per punch hole/kg/ha. This is to allow the grower achieve the target germination percentages, or to suit the growing system in place, from 1 to 20 seeds per punch hole. This is achieved by simply choosing the correct cell wheel to match the seed and the desired rate per ha. The speed of seed delivery is matched to the forward speed which means that the system is fully automatic regardless of forward speed variations, and has various functions such as low hoppers level, blockage sensors and can allow the operator to vary the seed rate per ha while on the move.



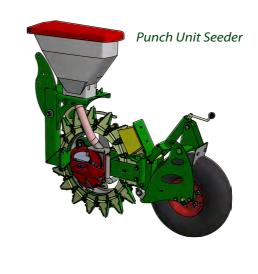


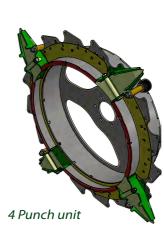
APV 5.2 monitor

2. The second is a **Precision Planting System** that uses the reliable **Kverneland Accord** equipment.

This allows precise single seed placement for each unit where a high level of seed singularity is required. By changing the seed disc, different size seeds can be easily planted and also with specialised seed discs more than one seed can be placed per punch hole. Further configurations of this versatile machine are also available. Versions with added Herbicide Application equipment, Fertiliser Placement capability and Drip Tape dispenser gear provide the grower with the ability to use this machine in a wide range of farming systems. Due to the clever design of the main chassis, all of these systems may be added or removed to suit the desired operating conditions and requirements.

Punch chart at seed depth of 30mm		
Punch number	Distance between the holes (mm)	Seeds per Ha at 75cm from row to row (1.6 meter working width)
2	1181 mm	10,822
4	591 mm	21,644
8	295 mm	43,289
12	197 mm	64,934
16	148 mm	86,578







PMII40

Working width: 1.6 meters

Weight: 850 kilo Tractor HP: >80

Seed width rows: < 35cm

Options:

Micro granular fertilizer



Working width: 1.6 meters
Weight: 950 kilo

Tractor HP: >80

Seed width rows: < 35cm

Options:

Micro Granular fertilizer







PM4I40 PM8220

Working width: 3.2 meters Weight: 2,600 kilo Tractor HP: >170 Seed width rows: < 35cm

Options:

Micro granular fertilizer

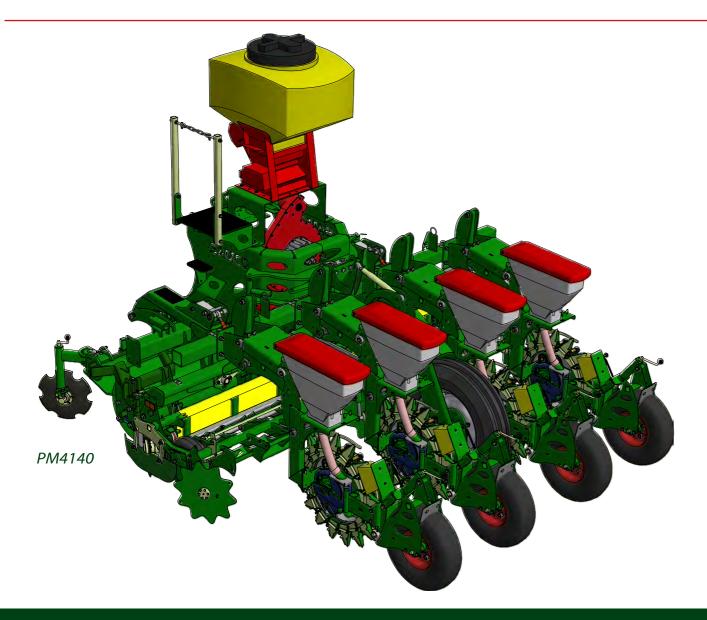


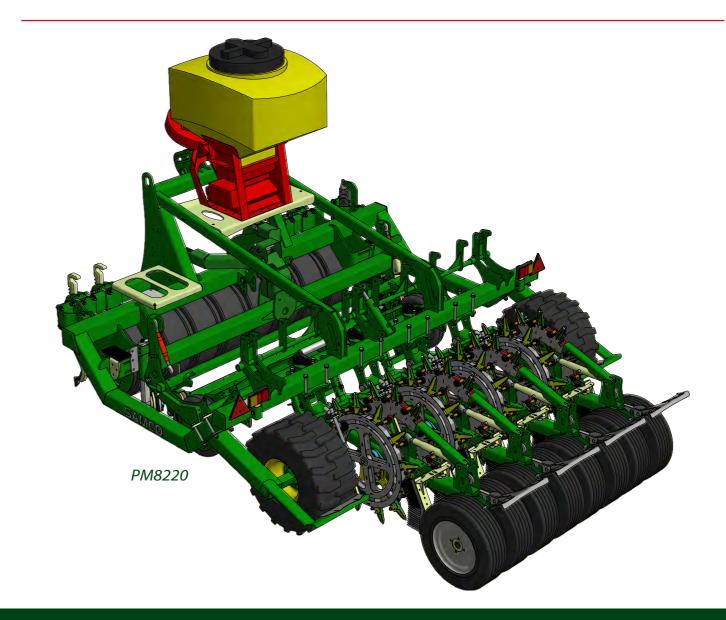
Working width: 2.4 meters
Weight: 2,600 kilo
Tractor HP: >170
Seed width rows: < 35cm

Options:

Micro Granular fertilizer











Innovation Arena Awards 2021 Winners

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