

IMPERADOR 3.0

The only 3-in-1 self-propelled machine in the world





IMPERADOR 3.0

Stara

IMPERADOR 3.0

THE EXCELLENT SPRAYING EFFICIENCY, THE HIGHEST SPREADING PRECISION, AND UNIFORM SEEDING. ALL OF THEM YOU CAN FIND ON A SINGLE MACHINE, IMPERADOR 3.0.

THE ONLY SELF-PROPELLED MACHINE IN THE WORLD THAT GATHERS A CENTRAL-BOOM SPRAYER, A SPREADER, AND A PNEUMATIC SEEDER.

IMPERADOR 3.0 PROVIDES THREE OPERATIONS AT DIFFERENT TIMES, BY USING THE SAME PATH, AS A CONSEQUENCE, ENSURING MANAGEMENT EFFICIENCY AND REDUCING OPERATING COST.

Imperador 3.0 with Ponte Verde System

IMPERADOR 3.0

Engine

The machine is equipped with Cummins® electronic engine with **223 cv and turbo charger**. In addition to more durability, it emits low pollutants, causes less vibrations, and generates lower noise.

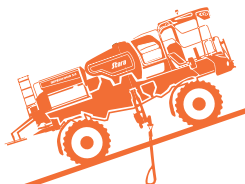
Eco Mode*

It improves the performance of the transmission and engine assembly, reducing the fuel consumption **up to 12%**.

**Depending on terrain conditions, product and variable rate applied.*

THE HIGHEST RAMP CAPACITY OF ITS CATEGORY

It allows operations on rough terrains.



**Without Up & Down - Hydraulic Lift System*

Hydraulic system

4x4 hydro transmission system with traction control.*

It features a hydraulic load sensing pump, a smart system that provides higher efficiency and reduces fuel consumption.

** Available for Intermediate and Top models*

Self-supply pump*

The pump is coupled on the machine. It allows for full chemical solution tank filling in **less than 5 minutes**.

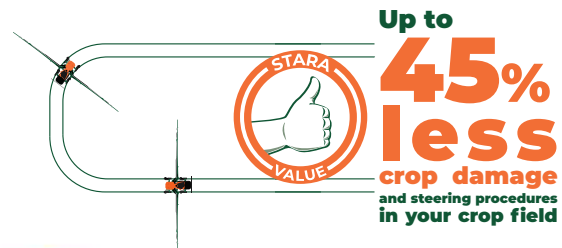
** Available for Intermediate and Top models. Available for all models of Imperador 3.0 CA*

Hydraulic oil reservoir tank

Single hydraulic system with **180-litre** capacity.

Smart 4-Wheel-Steering System*

It allows for a turning radius **42% shorter** than conventional systems.



Ground clearance: **1.52 metres**
Without Up & Down - Hydraulic Lift System

Hydraulic wheel tread width extending **2.80 metres** for transport and **2.90 to 3.50 metres** for operations.

UP & DOWN HYDRAULIC LIFT SYSTEM*

**Optional feature*

It lifts the ground clearance to **40 centimetres**, from **1.43 metres** to **1.83 metres**. This system is activated by Topper 5500 VT.

ADVANTAGES

- Nitrogen instalment and application on maize tasselling stage;
- Pest and disease control on pre and post maize crop tasselling stage;
- Plants less susceptible to the influence of pests and diseases and crop yield increase.



**FROM
1.43 METRES**

**APPLICATION
HEIGHT
FROM 0.8 TO 2.36
METRES**

**WHEN NECESSARY,
JUST LIFT IT!
EXTRA
60
CENTIMETRES**



**TO
1.79 METRES**

SPRAYING

Booms

The Imperador lineup is the only one in the world with central booms, which ensure more stability during applications, and guarantee

58% 

more of the chemical solution on target.*
Data provided by FAPA - Portuguese acronym which stands for Agrarian Foundation of Agricultural Research

Clean water tank

240-litre capacity

Chemical solution tank

2,400-litre capacity. Its exclusive design works as wave breakers.

Blue Beam*

Boom-oriented lighting that allows for wide visibility during nighttime applications.

* Available for Intermediate and Top models

Continuous Recirculating System*

This exclusive system keeps the chemical solution constantly moving inside the tank and piping system. It provides you with:

- Homogeneous and the exact chemical concentration during application;
- Cleaner spray system, with no residues from previous applications;
- Longer component lifespan.

* Available for Nozzle-by-Nozzle Control System

Watch the video about the Continuous Recirculating System

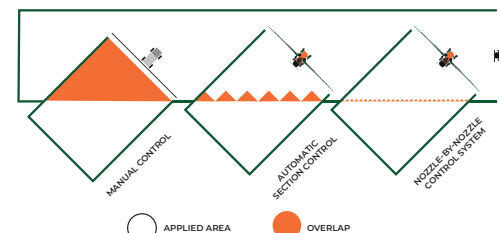


Nozzle-by-Nozzle Control System*

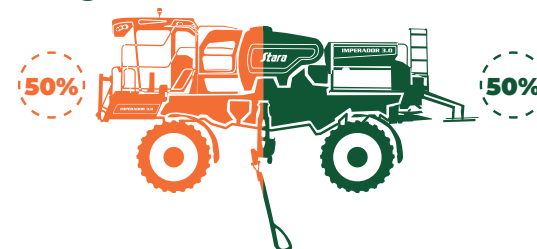
It shuts off the spray nozzle automatically, when Topper 5500 VT controller identifies an area where the chemical has already been applied, preventing overlap and reducing product waste.

* Available for Top configuration

SAVINGS 5% ON CHEMICALS



Weight distribution



When spraying, the weight is distributed 50% on the machine front axle, and the other 50% on the rear axle.

Application height without Up & Down - Hydraulic Lift System: 0.87 to 2.30 metres
Application height with Up & Down - Hydraulic Lift System: 0.80 to 2.63 metres

Mechanical solution mixer*

In addition to the hydraulic agitator, the machine is also equipped with a mechanical mixer with a propeller, which guarantees a better solution homogeneity for high-quality application.

* Available for Intermediate and Top models

Spacing between nozzles: 0.5 metres

Total boom length 27 and 30 metres



SPREADING

Hopper

Made of corrosion-resistant stainless steel, it has a capacity of **2,700** litres.

Twin feedgate*



The Dual Gate system allows only one side of the hopper to be closed, preventing fertiliser application in areas already covered and resulting in

FERTILISER SAVINGS UP TO 2.58%

* Available for Intermediate and Top models. Available for all models of Imperador 3.0 CA

Conveyor belt system

It is equipped with an exclusive auto-centering device for the conveyor belt, providing greater precision when spreading.

Spinner disks*

It comprises a vane adjustment system, which provides an application range of up to **30 metres**.

The 18-24 spinner disk is available through the Department of Parts.

Weight distribution



When spreading, the weight is distributed 44% on the machine front axle, and the other 56% on the rear axle.

Variable rate

By means of **Topper 5500 VT**, Imperador 3.0 performs applications with fixed or variable rates. **Its greatest advantage is application precision indicated by the metering prescription maps. This allows the machine to apply only what is needed in each area, resulting in fertiliser savings and increased productivity.**



Stara Spreading App

Agility and assertiveness when calibrating your Stara Spreader.

PNEUMATIC SEEDING

Ponte Verde System*



To achieve an effective cover seeding, Imperador 3.0 features a pneumatic system that provides light seeds sowing along the length of the spray boom with high efficiency and precision.

This process is carried out on the same spraying path, which reduces operational time, fuel consumption, and crop damage losses.

* Optional feature

**EXCELLENT
SEEDING
UNIFORMITY
MAXIMUM OF**

10%

**COEFFICIENT
OF VARIATION**

Data provided by FAPA - Portuguese acronym which stands for Agrarian Foundation of Agricultural Research a MT Foundation study. It may vary according to the seed type and weather condition.

**HIGH
OPERATIONAL YIELD**
40 ha/h*

**It may vary according to the seeding rate*

SPEED AND SEEDING RATE RATIO

PARAMETERS FOR PNEUMATIC SEEDING

TECHNICAL SPECIFICATIONS*

Speed (km/h)	Application rate (kg/ha)
4	300
6	200
8	150
10	120
12	100
14	85
16	75
18	66
20	60
22	55
24	50
26	46

Note: Seeding uniformity may vary according to the product quality and terrain conditions such as steep hills or slopes, wind speed, etc.

*Values regarding white oats seeding.



**COVER SEEDING OF
27 and 30 metres**

IMPERADOR 3.0 CA

Imperador 3.0 CA is as versatile as Imperador 3.0. It can be used for sugar cane and rice crops. It applies pesticides more accurately, once its **boom damping system** reduces oscillations during applications, keeping the booms steady. As a result, it prevents phytotoxicity during plant growth.

Imperador 3.0 CA features variable boom heights ranging from 0.62 to 2.05 metres, or from 0.72 to 2.15 metres depending on the tyre, to suit the specific requirements of sugar cane and rice crops. The machine allows for split urea application on crops from emergence to harvest.

ADVANTAGES

- Better terrain copy;
- Superior boom balance for operations on ridges;
- Enhanced machine weight distribution, to avoid crop ridge damage;
- Higher application speed due to the machine wheelset and central booms. The 540 tyre model minimizes ground pressure;

- The exclusive Ponte Verde System provides pneumatic seeding of pasture. It advances the cycle up to 20 days;
- Ground clearance from **1.27 to 1.37 metres**.



TECHNOLOGY

TOPPER 5500 VT

The complete controller for Precision Agriculture, designed and manufactured by Stara. Its touch screen provides efficiency and more interactivity between the machine and the operator.

TD3 auto steering

A robust and electro-hydraulic system that ensures a shorter response time for operations by using auto steering. As a result, it reduces failures and overlaps. Additionally, it reduces crop damage and allows for the following machine traffic for operations.

CONECTA

Conecta is a remote access service that connects you, in real-time, to the After-Sales technician in the factory. The connection is established through Topper 5500, ensuring fast and assertive support.

If you need, just connect it! Conecta, the fast and at no cost After-Sales available straight to your machine cab!

TELEMETRIA STARA

The farm in the palm of your hand. Through this system, you can manage your operations in the crop field in real-time. Any device that has Internet access will provide you with.

Weather condition sensors

The Weather Condition Sensors offer temperature and humidity functions, which boost the application efficiency of Imperador machines. Additionally, it provides as an optional feature, wind speed and wind direction functions.

Signal correction*

It adds the best experience in signal correction, ensuring higher precision in crop field operations. It is recommended for auto steering operations and that require path following. Its precision is 2.5 cm**, which reduces crop damage and overlap, as a consequence, providing higher operational yield.

**Optional feature*

*** The base station for signal repetition is not required. Precision may vary according to the receptors capacity and weather conditions.*



LEARN MORE

Position your mobile phone on the QR code to read it and check it out!

Video

See for yourself Imperador 3.0 operation quality in the crop field.



360° machine cab view

It adds great peripheral view, more comfort and ergonomics for the operator, which eases the operation control unit access.



Website

Access Imperador 3.0 homepage on Stara website for more information.



Stara Maintenance Program

Your machine ready for operations at all times. Access and learn more.



APP Pulverização Stara

Aponte a câmera de seu celular para o QR Code, baixe o APP Pulverização Stara e veja a economia que o Imperador pode trazer para a sua lavoura.



TECHNICAL SPECIFICATIONS

Configuration	Controller
Imperador 3.0	Topper 5500 VT
Weight	Self-supplying
9,980 kg / 13,490 (with Up & Down - Hydraulic Lift System)	Available for Intermediate and Top models
Length	Application height
9 m	0.87 to 2.30 m (without Up & Down - Hydraulic Lift System) 0.80 to 2.63 m (with Up & Down - Hydraulic Lift System)
Booms	Product flow (broadcast spreading)
27 and 30 m	From 13 to 750 kg/ha (depending on the product and speed)
Width (folded booms)	Product flow (pneumatic spreading)
3.2 m	From 5 to 300 kg/ha (depending on the product and speed)
Height (without beacon light and antenna)	Spreading width
4 m	Granulated products and lightweight seeds: up to 30 metres
Distance between the axles	Spinner disks
3.95 m	24-36
Hydraulic wheel tread width adjustment	Spray technology
Hydraulic wheel tread width extending 2.80 metres for transport and 2.90 to 3.50 metres for operations.*	Continuous Recirculating System - 7 sections - Standard and Intermediate config Continuous Recirculating System - Nozzle-by-Nozzle Control System - Top config.
Ground clearance	Auto Steering
Without Up & Down - Hydraulic Lift System: 1.52 metres With Up & Down - Hydraulic Lift System: 1.43 to 1.83 metres	TD2 for Standard configuration TD3 for Intermediate and Top configurations
Spraying/spreading operating speed	Traction control
8 to 25 km/h	Available for Intermediate and Top configurations
Transport speed (empty hopper/tank)	Smart 4-Wheel-Steering System
42 km/h	Available for Top configuration only
Fertiliser/seed hopper	Twin feedgate
2,700 L	Available for Intermediate and Top configurations
Chemical solution tank	Camera
2,400 L	Available for Intermediate and Top configurations
Fuel tank	Roll tarp
340 L	Available for Intermediate and Top configurations
Water tank	Weather condition sensors***
240 L	Available for all configurations
Product incorporator and rinse tank	Agitator system
35 L	Hydraulic agitator available for all configurations. Mechanical mixer with propeller available for Intermediate and Top configurations.
Trijet nozzle holders	Blue Beam
Spacing of 0.5 metres	Available for Intermediate and Top configurations
Spray pump	Optional features
430 L/min, made of stainless steel	Ponte Verde System Up & Down - Hydraulic Lift System ** Signal Correction
Engine	
Cummins® electronic engine with 223 cv	
Tyres	
380/80 R38	

TECHNICAL SPECIFICATIONS

Configuration	Controller
Imperador 3.0 CA	Topper 5500 VT
Weight	Self-supplying
9,980 kg	Available for all models
Length	Application height
9 m	0.72 to 2.15 m (Tyre - 380/80 R38) 0.62 to 2.05 m (Tyre - 540/65 R28)
Booms	Product flow (broadcast spreading)
27 m	From 13 to 750 kg/ha (depending on the product and speed)
Width (folded booms)	Product flow (pneumatic spreading)
3.2 m	From 5 to 300 kg/ha (depending on the product and speed)
Height (without beacon light and antenna)	Spreading width
3.75 or 3.85 m*	Granulated products and lightweight seeds: up to 27 metres
Distance between the axles	Spinner disks
3.95 m	24-36
Hydraulic wheel tread width adjustment	Spray technology
Hydraulic wheel tread width extending 2.80 metres for transport and 2.90 to 3.50 metres for operations.*	Continuous Recirculating System - 7 sections - Standard and Intermediate config Continuous Recirculating System - Nozzle-by-Nozzle Control System - Top config.
Ground clearance	Auto steering
1.27 m (Tyre 540/65 R28) 1.37 m (Tyre 380/80 R38)	TD2 for Standard configuration TD3 for Intermediate and Top configurations
Spraying/spreading operating speed	Traction control
8 to 25 km/h	Available for Intermediate and Top configurations
Transport speed (empty hopper/tank)	Smart 4-Wheel-Steering System
42 km/h*	-
Fertiliser/seed hopper	Twin feedgate
2,700 L	Available for all configurations
Chemical solution tank	Camera
2,400 L	Available for all configurations
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35 L	Hydraulic agitator available for all configurations. Mechanical mixer with propeller available for Intermediate and Top models.
Trijet nozzle holders	Blue Beam
Spacing of 0.5 metres	Available for Intermediate and Top configurations
Spray pump	Optional features
430 L/min, made of stainless steel	Ponte Verde System ** Signal Correction
Tyres	
380/80 R38 and 540/65 R28	
Engine	
Cummins® electronic engine 223 cv turbocharger	

*It varies according to the model and tyre calibration.
** Check the availability according to the machine configuration.
*** The weather condition sensors set is an optional feature factory-installed with a temperature and humidity sensor.



THIS SPACE IS INTENDED FOR DEALERSHIP DATA

www.stara.com.br/en

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