

GASPARDO



TEMPO ULTRA ISOTRONIC

Mounted sprayer

TEMPO ULTRA ISOTRONIC: mounted sprayer

MAXIMUM PRECISION FOR MAXIMUM YIELD

Crop protection is a delicate and extremely important operation that allows for maximum harvesting yield, managing weeds, fungi and insects in the best possible way. For open field crops, MASCHIO GASPARDO presents the new high-range mounted sprayer TEMPO ULTRA ISOTRONIC, which combines high functional efficiency, precision and comfort of use regardless of soil conditions. Multi-purpose machine with professional functional features, it is suitable for medium and large companies ensuring low management costs.

High quality distribution is among the decisive factors to ensure yield, effectiveness in crop protection and respect for the environment, aspects that meet the needs of the most attentive professionals in the sector.



TEMPO ULTRA ISOTRONIC

CONTENTS

New design	4
Water panel	6
Spraying circuit	8
Management computer	10
"ALA 400" bar	12
Full control	14



FINANCIAL / ENVIRONMENTAL BENEFITS



- Even distribution
- Excellent stability of the bar
- High manoeuvrability and agility at the end of the field
- ISOBUS communication for simplified machine management
- Centre of gravity close to the tractor for greater handling, safety and stability in work and transport
- Machine suitable for Precision Farming

NEW DESIGN ... technology, innovation and ergonomics

CAREFUL DESIGN

TEMPO ULTRA ISOTRONIC is the new high-end mounted sprayer designed and built by GASPARDO engineers. The frame is built into the new design of the tanks, improving overall ergonomics and comfort of use. Available with 1600 and 2000 litre tanks, thanks to its compact dimensions TEMPO ULTRA ISOTRONIC is versatile and efficient during all treatments. With the semi-automatic «Re.D» recirculation system, the uniformity of the product to be distributed is also guaranteed during the initial and final work stages and when turning at the end of the field.

COMFORT OVER TIME

The compact structure and the use of high-strength steel guarantee high reliability and ease of use. Special anti-vibration systems, built with innovative materials, help to reduce the dynamic stresses in the structural parts, ensuring high mechanical resistance to stress and wear.

SMART DESIGN

The rounded design of the polyethylene tank, free of ponding points, guarantees strength and ease of cleaning inside, avoiding the deposit of any plant protection product residues after the washing phase.

QUICK COUPLING SYSTEM TO THE TRACTOR

The quick and functional coupling system guarantees a safe connection to the tractor allowing the user to operate in complete safety.

PARKING WHEELS

Available on request, the wheels facilitate the ground handling of the machine in storage.



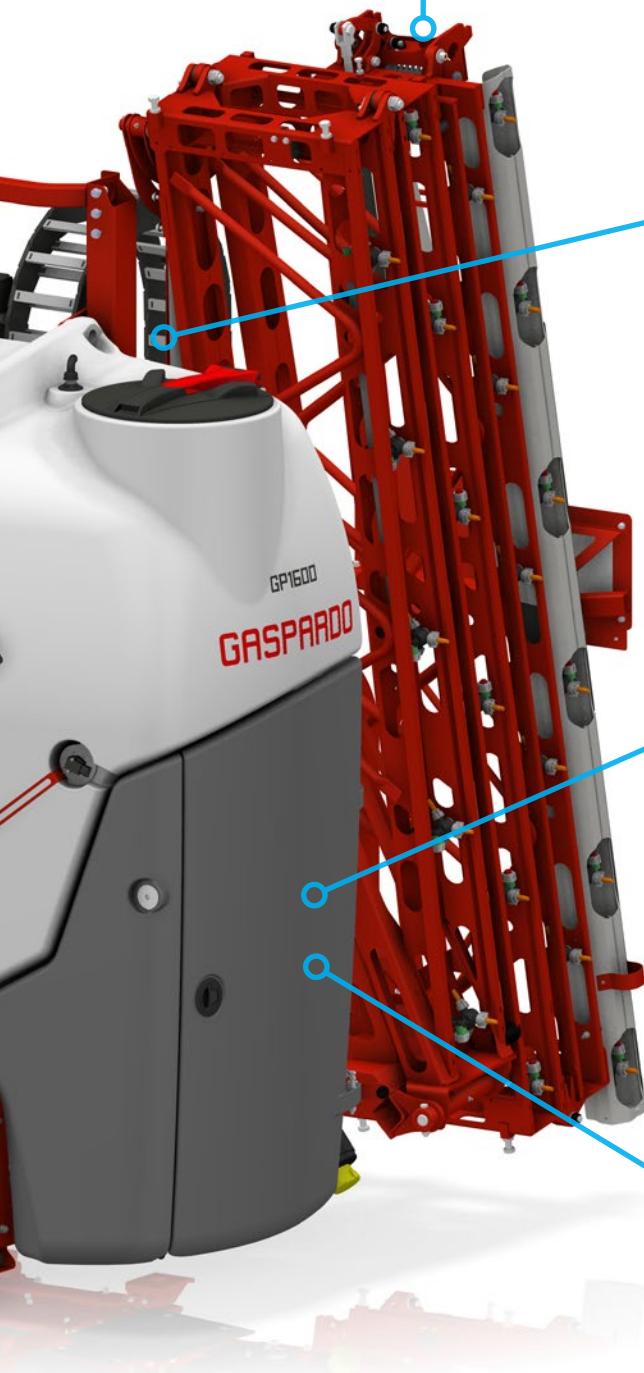
Painstaking attention to detail

STABILITY AND LIGHTNESS

The lightness of the new ALA 400 bar ensures performance and maximum reliability. The particular shape minimizes the transport dimensions of the machine by bringing the centre of gravity closer to the tractor.

EXTERNAL WASHING KIT

On request, a washing kit is available with a nozzle for cleaning the entire equipment, in order to eliminate any traces of dirt or plant protection product deposited on the external surfaces.



WATER PANEL

Panel designed to reduce working times and facilitate the various operations, available with manual (M-PANEL) or electronic (E-PANEL) control.

MAXIMUM ERGONOMICS

Through a special side compartment it is possible to access the various controls. All management functions are simple and intuitive.

WATER PANEL: ***maximum ease of use***

EASY AND CENTRALIZED OPERATION

The new WATER PANEL has been designed to facilitate the functional and operational phases of the machine and reduce working times. Two types of panels are available: the first with manual control (M-PANEL) as standard, the second with electronic control (E-PANEL) available with the optional «PROFESSIONAL PACK» kit. With the E-PANEL, the parameters and functional-operational cycles are managed directly by the monitor on board the machine and/or automatically by the monitor in the cab allowing comfortable use of the machine. This reduces the time required for set-up and cleaning, as well as the risk of accidental contact with the chemical product and incorrect operations.



M-PANEL



E-PANEL

PAINSTAKING ATTENTION TO DETAIL

Thanks to its modern rounded design, the water panel is perfectly integrated into the machine body and is easily accessible and usable while preserving the controls from bad weather and dirt and mud coming from the tractor wheels.

STORAGE COMPARTMENT

Made of easily washable stainless steel, it accommodates clothing and personal protective equipment.

PULL-OUT LADDER

Sturdy and convenient to use and store, it allows the user to access the hatch of the main tank in complete safety. All controls and services are concentrated on the left side of the machine for greater operator comfort.

FILTERS IN SHELTERED POSITION

The filters that can be inspected in the external position are easy to access and protected from accidental impacts. For greater efficiency and comfort for the operator, the delivery filter is self-cleaning.



Double solution

EASY PACK

Convenient solution in which the operator manages the various functional cycles in a simplified manual way.

Additional features:

- Oil filter
- Locking and levelling sensor
- Parking wheels
- Pressure sensor

PROFESSIONAL PACK

It makes the operator's work easier and more comfortable thanks to the fully electronic management of functional operations and washing of the tank and the machine circuit.

Additional features:

- E-PANEL: electronic panel
- Locking and levelling sensor
- Parking wheels
- Oil filter
- Pressure sensor

FUNCTIONS OF THE ELECTRONIC E-PANEL

- Monitoring of working parameters
- Filling and emptying control system
- Anti-sediment function
- Proportional stirring of the main tank
- Selectable automatic cleaning cycles
- Lighting management
- Interface management



PARAMETERS THAT CAN BE MANAGED FROM THE VIRTUAL TERMINAL IN THE CAB

- Monitoring of working parameters
- Anti-sediment operation
- Proportional stirring of the main tank
- Selectable automatic cleaning cycles
- Lighting management



Empty container
cleaning nozzle

Cleaning
gun

Stirring
nozzle

Rotating
“wet wall” flow



VALVE MANIFOLD

Stirrer activation tap

Internal washing activation tap

SPRAYING CIRCUIT

The tanks integrated into the frame make TEMPO ULTRA ISOTRONIC compact with a design studied in every detail. It is possible to clean the spraying circuit without any dilution of the plant protection mixture inside the main tank. The offer of two models of 1600 and 2000 litres makes the equipment suitable for the individual needs of the user.



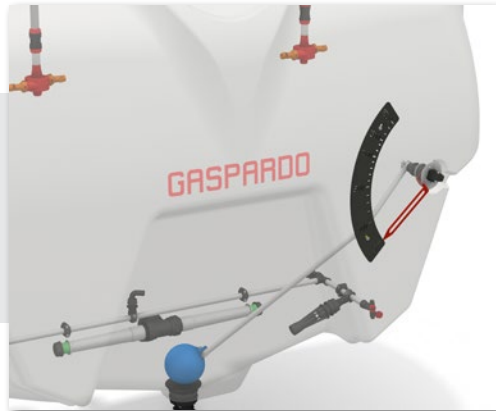
SYSTEM-WASH TANK

The cleaning of the water system is ensured by a special 310-litre tank for clean water only; filling guaranteed by a dedicated hatch or directly from the water panel.



CLEAN WATER TANK

With a capacity of 20 litres, the tank has an external filling hatch and a dispensing tap activated from the convenient water panel inside the door.



GUARANTEED CLEANING

Thanks to the absence of edges and the presence of rotating nozzles, efficient cleaning is always guaranteed in all internal parts of the main tank.

POWERFUL AND RELIABLE PUMP

Three different pumps are characterized by:

- long life
- self-priming at the start of the process
- resistance to the plant protection product



BPS 200



BPS 260

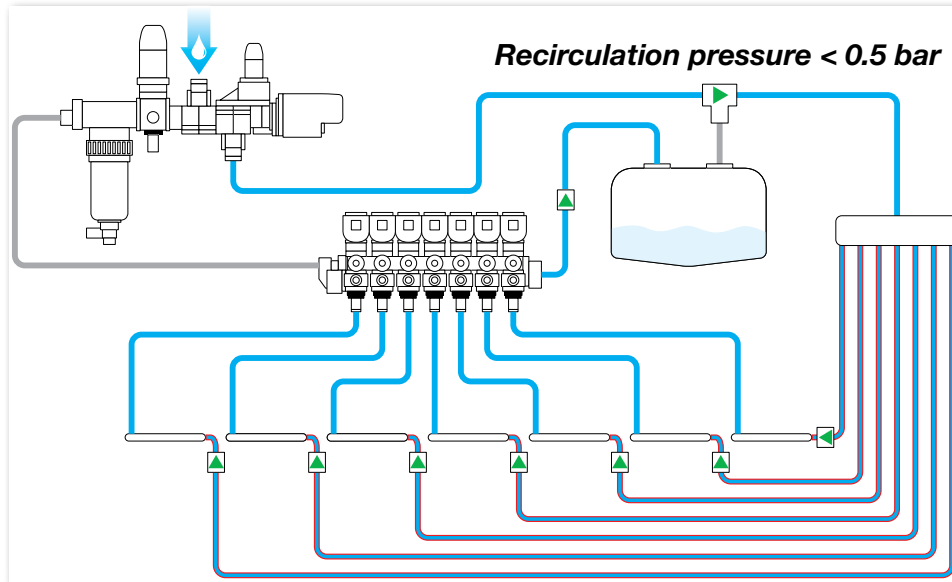


BP 281

PRESSURE RECIRCULATION SYSTEM: Re.D

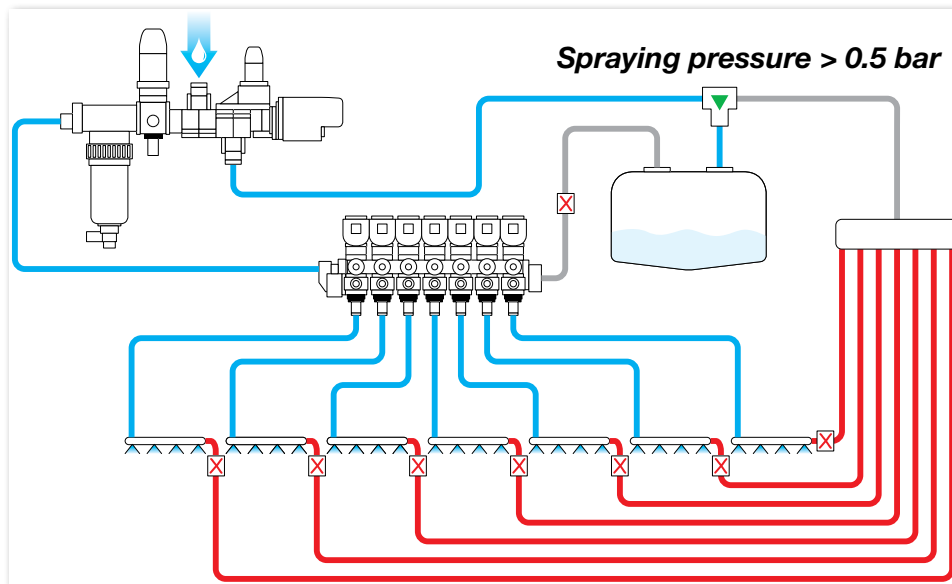
FULL DISTRIBUTION CONTROL

Re.D (RECIRCULATION DYNAMIC) is the semi-active product recirculation system used in MASCHIO GASPARDO sprayers to avoid activation delays and untreated areas during the opening of the bar sections and in the section on-off stages. The spraying lines are always ready for use over the entire working width. Furthermore, the ponding of the mixture in the circuit is prevented, avoiding obstructions and clogging.



RECIRCULATION STAGE

The product to be sprayed crosses the sections of the bar returning to the main tank, with a pressure (about 0.2 bar) lower than the opening pressure of the non-drip valves of the individual nozzles, thus avoiding spraying and ensuring the complete filling of the supply circuit of the sections themselves.



PROCESS STAGE

With the spraying cycle activated, the pressure inside the individual sections rises to values above 0.5 bar, allowing the activation of the individual nozzles.



MANAGEMENT COMPUTER

ISOBUS CONTROL

The management of the functional parameters of TEMPO ULTRA ISOTRONIC takes place via the computer on board the machine with ISOBUS logic. The machine can be connected directly to the tractor's ISOBUS terminal or alternatively to the ISOBUS monitor supplied as an accessory.



ISOBUS tractor monitor example

UNIVERSAL TERMINAL

It is possible to manage the sprayer directly from the tractor's ISOBUS monitor: the connection between the implement and the tractor allows the management of all the spraying and bar handling parameters. The equipment can therefore be used in compliance with Precision Farming functions if the tractor is ISOBUS.

ISOBUS TERMINALS (optional):

If the tractor does not have an ISOBUS monitor, MASCHIO GASPARDO makes one of the following monitors available as an optional accessory.

MONITORS FOR THE USE OF THE MACHINE IN PRECISION FARMING LOGIC



TOUCH 800

Solution for non-ISOBUS tractors that allows communication with the sprayer in a simple and functional way.

TOUCH 1200

Latest generation ISOBUS terminal that offers maximum flexibility and ease of use thanks to the 12" display. It can be used in both vertical and horizontal positions, it allows showing several control interfaces at the same time.



BASIC TERMINAL

Monitor suitable for use with TEMPO ULTRA ISOTRONIC for simple and intuitive functional management. All distribution parameters can be viewed and easily modified.

PRECISION FARMING

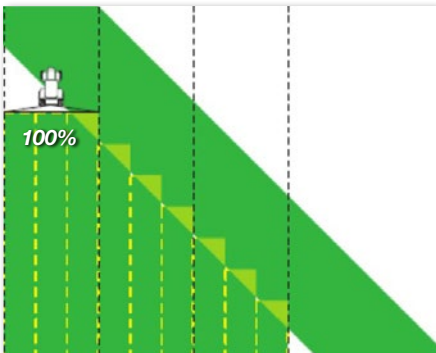
MANAGE YOUR COMPANY FOR MAXIMUM PROFIT

Thanks to the ISOBUS communication protocol, TEMPO ULTRA ISOTRONIC can operate according to Precision Farming rules for an improvement in the yield of your harvest, the reduction of working times and a sustainable management of your farm. Thanks to the control of the individual sections (section control) and the optimized consumption of the plant protection product (variable rate), the treatment is carried out in a homogeneous way, without any waste and damage to the crop, with consequent environmental and financial benefits. Each plant gets exactly the amount of treatment it needs.



ADJUSTMENT OF THE FLOW RATE ACCORDING TO GEOLOCATION:

The computer allows to automatically recalibrate the correct flow rate (l/min) in relation to the working position according to what is provided for in the prescription map. This controlled distribution allows to optimize the quantity of treatment product according to localized needs.



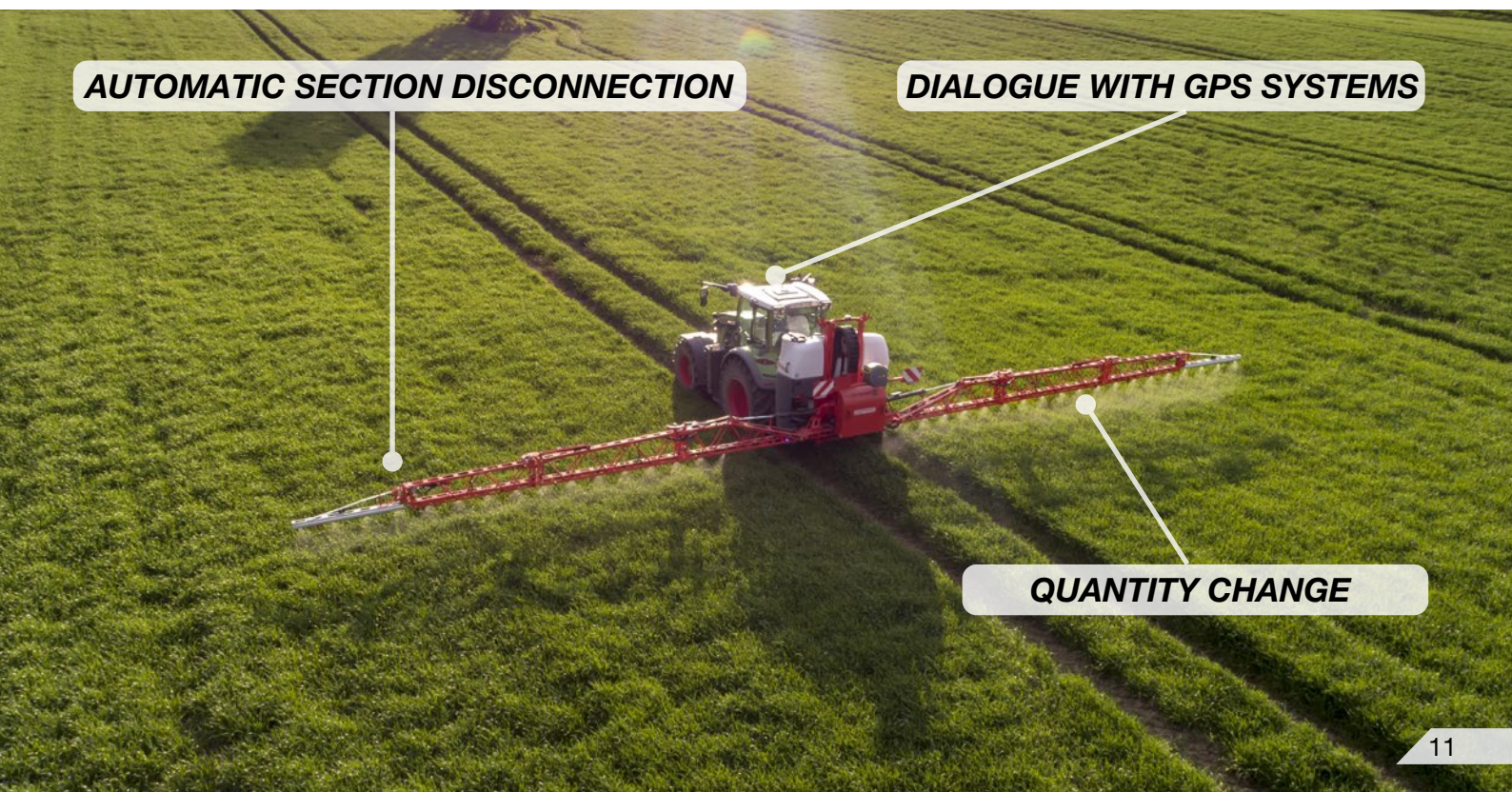
AUTOMATIC SECTION SHUT-OFF

It allows shutting off sections in case of overlap with an already treated area. Via GPS signal, the management computer, recognizes the area already treated or still to be treated and intervenes by shutting off or opening the necessary sections.

AUTOMATIC SECTION DISCONNECTION

DIALOGUE WITH GPS SYSTEMS

QUANTITY CHANGE



“ALA 400” BAR

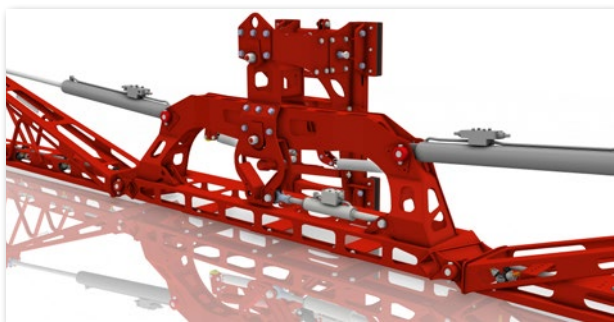


STABILITY AND LIGHTNESS

Low weight, high structural strength and consequent reliability over time of the “ALA 400” bar are guaranteed by the use of special high-strength steel.

Thanks to careful design that takes into account road regulations, when closed in the transport position, the bar is among the most compact on the market allowing a machine width of only 2.40 m.

TEMPO ULTRA ISOTRONIC is available with a working width of 21, 24, 27 and 28 meters.

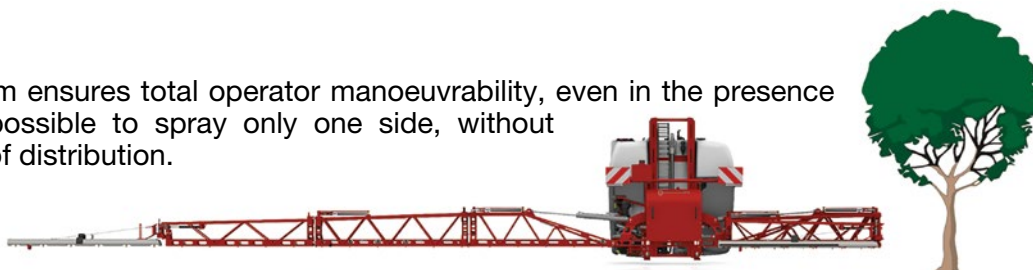


CONSTRUCTION CAREFUL TO THE SMALLEST DETAILS

A new hydropneumatic suspension and an anti-yaw system ensure the quality of the plant treatments. The system allows you to minimize vibrations, improving the performance and reliability of the machine. A bar that remains stable and aligned during work avoids spraying errors caused by uneven ground.

KNOWS NO OBSTACLES

The unique bar folding system ensures total operator manoeuvrability, even in the presence of various obstacles. It is possible to spray only one side, without compromising the precision of distribution.



Precision spraying

**DOUBLE PENDULUM
HYDROPNEUMATIC SHOCK
ABSORBER AND ANTI-YAW SYSTEM**

SECTION CONTROL

EVEN DISTRIBUTION

EVERY DROP IN THE RIGHT PLACE

The particular shape and design of the bars allows the nozzle bodies to be positioned inside the frame, protecting them from any impact. The nozzle holder elements have self-adjusting bayonet locks that ensure a quick change of nozzles when needed, without the use of tools.

For each application, the correct quantity per hectare is guaranteed by specific nozzles.



ELECTRONIC CONTROL OF THE BAR HEIGHT

To ensure perfect product distribution even on uneven ground, the bar can be set up with an electronic SONAR system to maintain an equal distance from the crop.

ALUMINIUM TIP WITH 3D MOVEMENT

The aluminium end has a safety system which, in the event of an impact with obstacles, makes it movable in any direction to protect the bar from damage.



FULL CONTROL

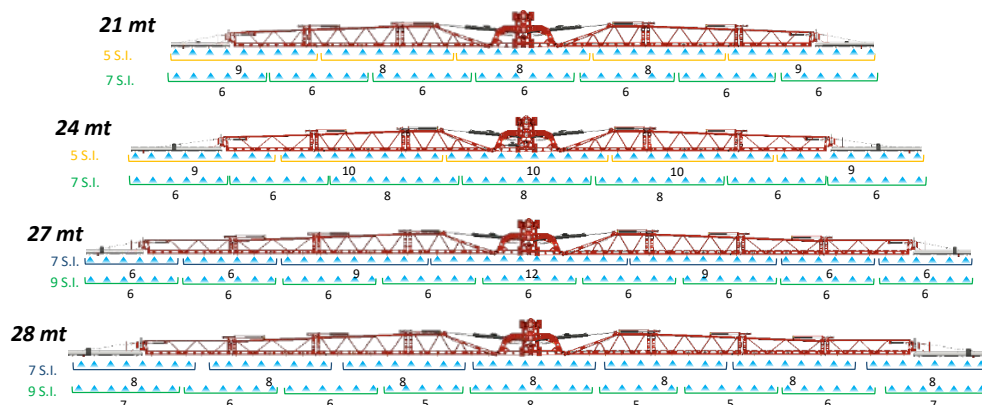
**DISTANCE CONTROL SET
ON THE CULTURE HEIGHT**



LIGHT, STABLE AND BALANCED

A good stability of the boom during working phase is essential to maintain the distance of the single nozzle from the crop. The mounted sprayer TEMPO ULTRA ISOTRONIC, thanks to its construction features such as variable geometry with a range of action of the single arm of + 8 °, (negative geometry -8 ° optional), the shock absorbed lifting and the central pendulum system, performs with the maximum functional regularity.

BAR DIAGRAMS, WORKING WIDTHS AND HYDRAULIC SECTIONS (50 cm distance between nozzles)



ELECTRONIC MANAGEMENT OF THE BAR HEIGHT (OPTIONAL)

The system allows you to automatically control the height of the bar, even in hilly or uneven terrain. Once the desired distance from the ground or crop has been set, the control unit independently manages the hydraulic movements of the bar (lift and working position corrector).

Innovation makes everything easier!



LED LIGHT

You can work with maximum precision even at night or in low light conditions. The two LED lights illuminate the spray blade produced by the individual nozzles from the centre of the bar towards the outside, ensuring full visual control of the distribution over the entire working width.



NOZZLES IN PROTECTED POSITION
WATER PANEL FOR TOTAL CONTROL
VARIABLE GEOMETRY OF THE BARS
EVEN DISTRIBUTION

MODEL		TEMPO ULTRA ISOTRONIC 1600	TEMPO ULTRA ISOTRONIC 2000
Polyethylene tank	l	1820	2180
Clean water tank	l	310	
Bar width	m	21 - 24 - 27 - 28	
Transport width	m	2.4	
Variable geometry		Positive (+ 8°) (negative option (-8°))	
Lifting	mm	1500	
Weight	Kg*	1770	1840
LED lights		Yes (option)	
Parking wheels		Yes (option)	
External washing kit-nozzle		Yes (option)	

*weight with 24 m bar

GASPARDO

MASCHIO GASPARDO S.p.A.

Headquarters and production plant

Via Marcello, 73

I-35011 Campodarsego (PADUA) - Italy

Tel. +39 049 9289810 - Fax +39 049 9289900

info@maschio.com - www.maschiogaspardo.com

Production plant

Via Mussons, 7

I-33075 Morsano al Tagliamento (PN) - Italy

Tel. +39 0434 695410 - Fax +39 0434 695425