### SPRAYMARC SPRAYER









The high-lift parallelogram frame and the boom's suspension system results in a level ride boom for accuracy and performance



## SPRAYMARC SPRAYER





#### 20 years of successful production of agricultural machines LOZOVA MACHINERY and 35 years of English experience in development of agricultural sprayers

Landquip Crop Sprayers (Fressingfield, Suffolk, United Kingdom) - producer of a wide range of agricultural sprayers. The company produces trailed and self-propelled sprayers suitable for chemical and fertilizer applications.

Landquip specializes in high quality, precision machines of their own design. The company offers the most modern design features, already included as standard, while each machine can be adapted to specific customer requirements.

The SPRAYMARC sprayer offers high quality and accurate chemical and liquid fertilizer application system that helps to reduce the number of weeds and increase the yield of crops.

- lightweight aluminum boom has the highest strength and resistance to aggressive substances
- special boom design facilitates nozzle protection reducing potential damage
- professional hydraulic cushioning system provides quick and responsive lateral boom performance
- boom control ensures a stable boom position with precisely maintained positioning to the ground
- the optimal shape of the tank with a low center of gravity ensures the stability of the unit in transport position and the ultra smooth tank surface ensures easy cleaning
- ergonomically positioned fittings and filters help with quick machine maintenance



#### Well thought-out design

to guarantee maximum efficiency and ease of use.

Efficient flushing

procedures are achieved due to the machine's design, using the minimum number of pipelines and hoses.

#### Easy to manoeuvre

SPRAYMARC sprayers originally designed Efficient flushing and easy cleaning Chassis design, combined with the a tank shape and the a lightweight boom allows the SPRAYMARC to offer ultimate weight distribution when spraying in the field from a full to empty tank.

Tank positioning, efficient chemical induction mixer, valve positioning and easy to use accessible valves - full optimization for making the spraying process simpler, easier and more enjoyable.



#### Transport stability

Safety for the operator

efficient due to the low centre of gravity of the machine

Transport stability with folded booms is SPRAYMARC sprayers are equipped with a storage box for protective and personal items for operator safety.

> A ladder and a wide platform provide safe access to the main tank. Within this zone, the risk of contact with the boom is completely avoided, as is the risk of contact with chemicals during tank filling.



# SIMPLICITY AND EASE OF DESIGN



#### Innovative tank design

Ultra-smooth tank of 3000 litres, easy to clean, has an anti-surge design and is equipped with a highly efficient in-tank agitation system via 2 in-tank rotary wash heads.

Equipped with efficient drain sump, high performance pump and large capacity filtration system.

The main tank of the SPRAYMARC sprayer is especially designed taking into account the low centre of gravity.

The main volume part of the tank is positioned close to the chassis, which ensures the stability of the machine in-field and on the road. Efficient sump with large outlet allows to quick emptying of the tank, regardless of orientation.





Fast and safe induction of chemicals at up to 3 litres/second

Liquid, granular or powder agro-chemicals can be added simply and safely to the 30 litre chemical induction mixer whilst standing on the ground. The swing-down design enables user-friendly, safe operation of the mixer and safe transportation when raised and locked in position.

The chemical induction mixer provides convenient, thorough and safe rinsing via can wash, rinse and agitation jets.

main parameters / volumes

- Main tank 3000 l
- Clean water tank 330 l
- Chemical induction mixer 30 l
- Hand wash tank 15 l

## EFFICIENTLY DESIGNED TANKS



#### Efficient boom suspension

A specially designed trapezium and Self levelling springs located in the lower pendulum combination for active boom suspension.

• Left and right hand active suspension stabilizing units

Automatic mechanical boom levelling

• Hydraulic tilt adjustment

part of the centre frame automatically control boom stability.

No input is required by the operator.

In-cab control of the hydraulic tilt cylinder enables the operator to over-ride boom inclination, which is especially important when working on hilly fields.

Full electro-hydraulic control of all boom folding functions is achieved by using one single acting tractor spool valve (requiring only 25 litres/minute oil flow).



### EFFICIENT AND SAFE TRANSPORTATION





#### Safe wheels

Adjustable axle easily adapts the sprayer Optimum wheel size 340/85 R38, complete to working on any row spacing in the range with full-width mudguards.

• provides less pressure on the soil.

Large footprint with optimal tyre pressure reduces soil compaction.



#### Compact transport width

The SPRAYMARC sprayer has a transport width of 2.5 metres which conforms to requirements of traffic regulations in any country of the world.

### to working on any row spacing in the range from 1.5m to 2.2m.

Universal axles

ADVANTAGES

- small turning radius due to compact chassis design
- ground clearance 700 mm

This is the optimal solution for reduced crop damage.

## ...INCLUDING FLASHING BEACON AND LED REAR LIGHTS / INDICATORS.

### ALUMINUM BOOMS AND CIRCULATION SYSTEM



Lightweight and durable solution

machine.

parallelogram.

The boom has a unique durable construction. It is resistant to rust, acid, chemicals and liquid fertilizers.

Aluminum does not require special protection; adjustments and maintenance are simple and easy

Specially designed aluminum boom, Aluminum booms make the machine 24 metres long, 2/3 lighter than steel, lighter, while boom construction maintains resulting in a much better balanced the strength and protects the nozzle bodies

The lightness of the booms results in a The boom is mounted on a high-lift lighter, better balanced machine providing less soil compaction, even when working in humid conditions.

> Lighter weight - easy to pull - lower fuel consumption.



Hinge lock during operation

All boom hinge/swivel mechanisms are hydraulically locked during spraying or transportation to provide stable, reliable and safe operation.





Boom circulation system

The SPRAYMARC design offers accurate flow distribution.

#### ADVANTAGES

- Optimum fluid flow to the booms.
- Easy incorporation of chemicals and efficient internal tank washing system.
- Even distribution of the solution along the whole boom
- Efficient boom line filtration prevents deposits or clogging inside the system
- Stainless steel hoseclips and fixing bolts throughout



#### Multifunctional nozzles

Multi-head nozzle bodies rotating 360° have (depending on the configuration) up to 5 high-pressure ceramic tips.



#### Piston diaphragm pump

Professional piston diaphragm pump designed specifically for boom sprayers.

There is no contact of metal parts with the working fluid since the pump housing (in which the shaft, bearings, connecting rods and pistons are installed) is separated by a membrane from the chamber which contains the working fluid.





#### Automatic control system for sprayers, with GPS navigation

Our electronic solutions with Bravo technology (Italian company ARAG, a leading manufacturer of automated control systems) provides high versatility, increases accuracy of operations, and makes the sprayer control process more convenient.

Bravo 400s features a 5.7-inch high resolution screen. The navigator displays vectors, distances, number of rows to resume working where last sprayed or interrupted.

- Graphical display of sprayed rows
- Sections automatically close to prevent overlapping on rows already processed
- Variable rate control application on the map
- Control of spraying for machines equipped with a distributed liquid recovery system
- Management of up to 5 spraying sections and 7 hydraulic functions.

The computer allows a reduction in chemical use due to the uniform rate of outflow over the entire area and constant concentration of the solution, which increases the productivity and working time of the sprayer.



#### GENERAL TECHNICAL CHARACTERISTICS

	SPRAYMARC
Tank material	polypropylene
Tank volume, l	3000
Rod material	Aluminum
Alu-light rod length, m	24
Wheel size	340/85 R38
Ground clearance, mm	700
Nozzles	Multi-head, up to 5 ceramic tips
Rotation of nozzles, <sup>0</sup>	360
Piston diaphragm pump	Productivity - 235 l / min. Maximum pressure - 20 Bar Working speed - 550 rpm Number of membranes - 3 pcs. Branch pipes: inlet / outlet - 50/25 mm
Tank volume for clean water, l	330
Chemical tank volume, l	30
Tank volume for hand washing, l	15
Automatic control	BRAVO series automatic spray regulators (180s, 400s LT, others)









Marshala Batitskogo 4, Kharkiv, 61038, Ukraine tel.: +38 057 738 10 14 fax.: +38 057 738 10 43

agro@lozovamachinery.com www.lozovamachinery.com





