gardinagroup

SURFACE FINISHING sanding and painting

TURNKEY LINES









PRIVILEGED RELATIONS WITH THE INDIAN MARKET

A long-standing tradition of cooperation, friendship and knowledge-sharing has linked Giardina Group to the large Indian market for many years. For some decades now, the latter has been showing strong signs of growth and interest in increasingly innovative technologies.

A shared path of growth and the creation of new opportunities, which has seen the Italian group specialising in surface finishing position itself alongside all the top furniture and furnishing companies - companies in search of smart and effective solutions, thanks to which they can pursue their ongoing quest for the highest quality for increasingly demanding consumers.

The Giardina Group has been operating in **India** directly and continuously for decades. This presence is now even more incisive, thanks to the group"s decision to enter the world of sanding to offer turnkey solutions, from the preparation of edges, profiles and surfaces to painting by veil, roller or the most modern painting robots.



A SUCCESSFUL PARTNERSHIP.

Today, Giardina Group is a well-established and leading furniture technology supplier in India.

A result achieved thanks to the valuable collaboration with **Vinpack** (www.giardina.in), which has been using the Italian group"s technologies for several years now, to the point of offering itself as an actual "Competence centre", with a team providing training and assistance, where companies and groups from all over India can go to see the entire range of solutions offered by the Giardina Group at work.

However, such a large market and an increasingly demanding national customer base prompted the Italian group to pursue a **new direction**, expanding and strengthening its sales network.

Therefore, companies interested in establishing relations with Giardina Group can now contact:

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Giardina Group is a world leader in technologies for painting wood, glass, composite materials, plastic and metal. Established in 1972. it provides the **most extensive** production programme in the industry: from beam impregnation to sanding, from the treatment of "Jumbo" glass sheets to profile finishing, up to the most sophisticated robot systems to paint windows and furniture.



Destefani is the most recent addition to the Giardina Group.

The experience and excellence acclaimed by customers all over the world is the best business card for the machinery and systems currently designed by Destefani: undeniably reliable solutions that provide superior finishes on edges, surfaces and profiles, either veneered or solid, unprocessed or treated with any kind of finish.



The brand new "Leviga" brand was created as a response to a demand that has become increasingly strong in recent years: to be able to count on the group's expertise and experience for a fully comprehensive response.

Hence the definition of specific partnerships with carefully selected manufacturers, thanks to which the Italian group's 50 years of experience can also be offered in the surface sanding domain.

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MVT 1000 (LVGT1SF)





Watch the video

The "MVT 1000 (LVGT ISF)" is the most compact machine in the "MVT" line equipped with a superfinisher unit. It is part of a line of automatic, single-sided solutions perfect for sanding the edges of MDF, chipboard and products painted with polyurethane or water-based primers. This machine is particularly suitable for processing glossy and matte **kitchen** doors, doors in general and many other products in the furniture industry.

UNITS

"MVT 1000 (LVGT 1SF)" is fitted with a single "SF 150" unit, a superfinishing unit with two belts - a flap belt and a sandpaper belt - for flat surfaces, with a pneumatically adjustable pad that provides the greatest possible **flexibility** and **precision**.

The machine has a "PLC" (Programmable Logic Controller) control for general automation and a "PLC" control on the superfinishing unit.

The base of the "MVT 1000 (LVGT 1SF)" is only 1,200 millimetres long.

STRUCTURE AND TRANSPORT

"MVT 1000 (LVGT 1SF)" has a thick steel structure, thanks to which it absorbs all vibrations and guarantees **perfect** stability even during the most intensive work.

Correct **workpiece feed** is ensured by a lateral guide that directs the workpiece into the machine and by a track that runs on two interchangeable steel guides with a steel chain on which the 80 millimeters wide, high-strength rubber-coated pads are fixed.

The motor power is 0.75kW and the workpiece feed speed, electronically adjustable by inverter, can vary from 5 to 25 metres per minute.



DATA SHEET

"SF" (height 150mm). Useful working surface: 100mm. Motor power: 3kW (4HP). Variable sanding belt speed: between 0.5 and 11m/s. Abrasive belt oscillation motor: 0.37kW. Angle adjustment: fixed 0 degrees. Pulley height: 150mm. Maximum dimensions of abrasive belts: 2,900x150(h)mm. **Themellar tape dimensions**: 2,370x140(h)mm.

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ACCESSORIES THAT CAN BE INSTALLED

Pneumatic blower for cleaning sheet metal parts with rotating blowers with timed intervention.

TECHNICAL DATA

- Working sides: 1.
- Minimum workpiece length: 200mm.
- Minimum workpiece width: 50mm.
- Maximum workpiece thickness: 100mm.
- Working speed: 5 to 25m/min.
- Driver motor power: 0.75kW.
- Working height: 900mm.

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• Total installed power: 5kW. • Voltage: 400V. • Machine length: 2,600mm. • Machine width: 1,700mm. • Machine height: 1,500mm. Workpiece loading/unloading: manual.







The "MVT 3000 (LVGT 2AT12B)" is an automatic single-sided machine of the "MVT" line, perfect for sanding the **edges of** MDF **panels**, chipboard and products painted with polyurethane or water-based primers.

This machine is suitable for machining matte **kitchen doors**, **doors** in general and many other products in the **furniture** industry.

UNITS

"MVT 3000 (LVGT 2AT2SB)" is equipped with two "AT" units and two "SB100" units. "AT" belt sanding units are suitable for sanding flat and shaped edges. At 110 millimetres high, with an adjustable tilt and an interchangeable sanding pad, they provide the greatest possible **flexibility** during machining and perfect sanding in a short time, helping streamline the production cycle.

The **Scotch Brite** unit ("SB100") is a brush sanding unit suitable for **superfinishing**. satin-finishing and brushing polished surfaces. The "SB100" unit has a useful working surface of 100 millimetres and a 1.5 kW motor.

The machine has a "**PLC**" (Programmable Logic Controller) control for general automation and a "PLC" control on the individual unit. The "MVT 3000 (LVGT 2AT2SB)" with its two "SB100" units provides even more efficient sanding from the very first time the product is passed.

STRUCTURE AND TRANSPORT

The "MVT 3000 (LVGT 2AT2SB)" has a thick steel frame, thanks to which it absorbs all vibrations and guarantees **perfect stability** even during the most intensive machining operations.

Correct workpiece feed is ensured by a lateral guide that directs the workpiece into the machine, by a track running on two interchangeable steel guides with a steel chain, onto which the 80 millimetre wide, high-strength rubber-coated runners are attached.

The motor power of the "MVT 3000" is 1.5 kW. The workpiece feed speed, electronically controlled by an inverter, can vary for both versions from 5 to 25 metres per minute.





DATA SHEET

"AT110".

Motor power: 2.2kW Variable belt rotation speed: between 0.5 and 11m/s. Abrasive belt oscillation motor: 35W. Angle adjustment: -10 degrees to +90 degrees. Pulley height: 110mm. Maximum dimensions of abrasive belts: 2,800x110(h)mm.

"SB100".

Motor power: 1.5kW. Brush size: 200x100mm. Suction inlet: 100mm. Grinding wheel speed: between 420 and 1,720rpm. Grinding wheel shaft: 30mm. Spindle-grinding wheel connecting flange: 76mm. Angle adjustment: 0 to 90 degrees.

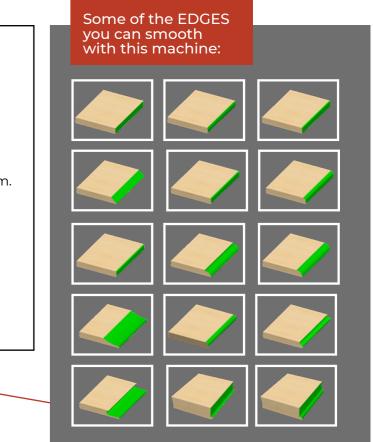
TECHNICAL DATA

- Working sides: 1
- Minimum workpiece length: 200mm.
- Minimum workpiece width: 50mm.
- Maximum workpiece thickness: 100mm.
- Working speed: 5 to 25m/min.
- Driver motor power: 1.1kW.
- Working height: 900mm.

- Voltage: 400V.

- Machine width: 1,700mm.
- Workpiece loading/unloading: manual.

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• Total installed power: 7kW.

- Machine length: 3,400mm.
- Machine height: 1,500mm.



The "Leviga 1350" is an automatic line sander with a double cross belt, with a fixed work surface 900mm above the ground. Designed with a thick electro-welded carbon steel 'cage' frame, it has independent belt motors inside the base.

The lifting screws are mounted at a large distance to ensure maximum stability of the steel work surface. The table lifting stage is motorised, with sliding on ground cylindrical columns and fine adjustment of the working thickness.

Contributing to the effectiveness of the "Leviga 1350" are the two transverse units with 5,500 millimetre belts and electronic pads controlled by a 50-sector electronic readout barrier.

The rectified **conveyor belt** is made of natural rubber; the conveyor advancement, equipped with an automatic centring device, is adjustable via an inverter from 3 to 18m/min. The electronic digital thickness reader offers resolution to the tenth of a millimetre.

The machine is controlled via a touch-screen PLC with a control keyboard.

TECHNICAL FEATURES

Alarm self-diagnosis system.

Electrically/controlled fine thickness adjustment.

Pneumatic display and regulation of working pressure values.

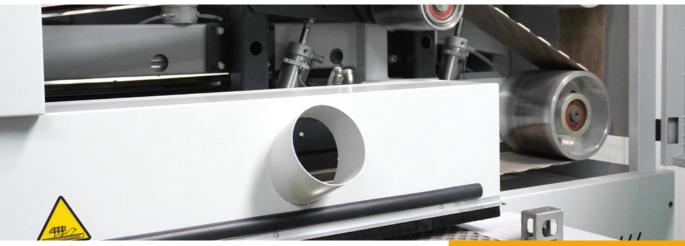
Workpiece backstop and infeed presser.

Large-diameter, rubber-coated, long-lever feeler wheels to optimise copying accuracy.

Blower rod to clean the conveyor belt and workpieces.







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- Net weight: 2,400kg.





• Usable working width: 1,350mm. • Working thickness: from 3 to 160mm. • Cross-belt length: 5,500mm. • Cross-belt width: 150mm. • Dimensions (width x depth x height): 2,723x175x1,655mm.

GLOSSY (brushing-polishing machine)



"Glossy" is a polishing-brushing machine for glossy painted panels, with polyurethane or direct polish finish lacquer, working with an oscillating brush unit.

The height of the work surface from the ground is 900 millimetres and the frame has an electro-welded carbon steel 'cage' structure.

The thickness of the working space is adjustable from 0 to 80 millimetres and can be controlled by means of dual numeric indicators.

The independent motors are located inside the base, while the table lifting is motorised by sliding on a ground cylindrical column.

The work table measures 825x650mm (length x width): the ground conveyor belt is made of natural rubber with a rhomboid profile.

The movement on the X-axis has an adjustable working stroke (motorvariator) and reversal from 0.8 to 8m/min. Sliding on the X-axis is ensured by 2,000mm roller tracks, with the option of unlimited extension thanks to additional support plates.

The **panels are locked into place** by a vacuum system acting through a perforated plane and mat. The depressor fan has a built-in 1.1kW motor. It can be controlled directly from the control panel and is located under the worktop.

BRUSHES

- The "brush unit" is tilted at 3 degrees in relation to the axis and comprises compact cotton disc brushes of medium softness.
- Maximum brush diameter: 250mm.
- Brush length: 670mm.
- Brush motor power: 2.2 kW (3HP).
- Rotation speed (fixed): 960RPM.
- Oscillation stroke: 25 mm (12.5+12.5 mm).
- Oscillation frequency: 32cycles/min.
- Power oscillation motor: 0.37kW (0.55HP).

Maximum dimensions (depth, width, height): 300x160x(h)165cm with rollers lowered.

Minimum dimensions (depth, width, height): cm: 116x160 (h) x165cm with raised rollers.





BRILLY (Polisher)



"Brilly" is a polishing machine for high-gloss painted panels with a polyurethane or direct gloss coating.

Finishing is achieved by means of **five rotating pads**, arranged on a rotating carousel.

The height of the work surface from the ground is 900 millimetres and the frame has an electro-welded carbon steel 'cage' structure.

The thickness is adjustable from 3 to 160 millimetres and can be controlled by means of dual numeric indicators.

The independent motors are located inside the base, while the table lifting is motorised by sliding on a ground cylindrical column.

The **conveyor belt** is made of solvent-resistant "oil-resistant" rubber and has a working width of 650 millimetres.

The movement on the X-axis, adjustable via an inverter, is provided by a 1.5kW motor

The **panels are locked into place** by means of a perforated plate and mat. The depressor fan has a built-in 2.2kW motor. It can be controlled directly from the control panel and is located under the worktop.

The rotation speed of the **carousel**, fitted with a 0.75kW motor, is adjustable from 30 to 120rpm via an inverter.





PADS OR DISCS

- Rotating pads (in rotation and revolution): 5.
- Pad diameter (min/max): 120 to 160mm.
- Orange sponge pads or discs.
- Type of coupling: quick, via a strips system.
- Brush height (working pressure): adjustable.
- Pad rotation speed; inverter-controlled.
- Pad rotation speed: adjustable from 250 to 1,200 rpm.

Overall dimensions (depthxwidthxheight): 138x110x170cm.



The latest addition to the large family of automatic oscillating sprayers designed and built by Giardina Group is the "Singletech 300", a sprayer with central reciprocating unit for spraying stain, primers and finishes onto all smooth and shaped surfaces (including the edges).

Designed to push the unique features of singlearm sprayers to their highest level, "Singletech 300" is the "entry level" solution for those that do not want to sacrifice the quality and performance of spray applications, with an even application onto all surfaces of the substrate to be painted and an efficient and effective overspray control.

It comes in three configurations: the "Single Belt" (SB, self-cleaning) version is fitted with a 2,000mm synthetic conveyor belt, which is in turn equipped with the classic reliable product recovery and belt cleaning system by Giardina Group. The "Single Belt Paper" (SBC paper) version involves the use of the disposable paper system. The third version – "Dual Belt" (self-cleaning and paper DB) – allows the operator to choose whether to adopt the **synthetic belt** or the **disposable** paper system, so that you can always use the sprayer in the ideal configuration.

The overspray reduction system inside the painting area can be a "**Dry**" (dry filtration) or "Wet" (water filtration) system.

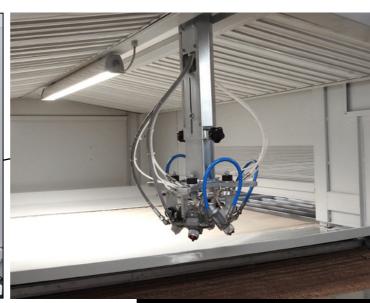
The **spraying room** is made of carbon steel profiles and pre-painted sheet metal panels. The air distribution **plenum** ensures an efficient flow, thus reducing the paint overspray.

SBC (Single Belt Paper),

DRY disposal system (suction with dry filter). SB (Single Belt, self-cleaning), DRY disposal system (suction with paper filter) or WET (water veil).

DB (Dual Belt, self-cleaning and paper), DRY (suction with dry filter) or WET (with water curtain) disposal system.





TECHNICAL DATA

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• Basic usable working width: 1,300mm. • Synthetic conveyor width: 2,000mm. • Disposable paper width: 1,700mm. • Brushless gun movement system. • 4-gun painting circuit (2 independent circuits on request).





SBC (Single Belt Paper), DRY disposal system (suction with paper filter). SB (Single Belt, self-cleaning with doctor blades), DRY (suction with paper filter) or WET (with water curtain) disposal system.

DB (Dual Belt), DRY (suction with paper filter) or WET (with water curtain) disposal system.

The "Dualtech 400" oscillating sprayer is undoubtedly the most successful version of the range of spraying solutions offered by Giardina Group, the perfect synthesis of 50 years of experience in spray painting focusing on quality, reliability, flexibility, technological innovation and ease of use.

Ideal for medium productivity, "Dualtech 400" is designed to spray stain, primers and finishes onto all flat and shaped surfaces (including the edges), and is available in three versions: "Single Belt" (SB) with a 2,000mm/wide synthetic belt equipped with the classic reliable product recovery and belt cleaning system by Giardina Group; "Dual Belt" (DB) with self-cleaning synthetic belt and disposable paper system, so that the operator can choose the most suitable system; "Single Belt Paper" (SBC) with disposable paper system.

All versions are available with a "Dry" (dry filtration) and "Wet" (water filtration) solid particulate disposal system.

"The "Dualtech 400" can be fitted with the "Dualtech" spraying system and the "Dualfast" guick gun change system.

The **spraying room** is made of carbon steel profiles and pre-painted sheet metal panels. The air distribution **plenum** ensures an efficient flow, thus reducing the paint overspray. In both the "Dry" and "Wet" versions, the solid particulate disposal system is provided by three separate filtration stages.











TECHNICAL DATA

- Basic usable working width: 1,300mm.
- Synthetic conveyor width: 2,000mm.
- Disposable paper width: 1,700mm.
- Gun movement system (max 4+4) driven by brushless motor.
- Reciprocating arm spacing: 1,880mm.
- Painting circuit with up to 4+4 guns (4 independent circuits on request).





SB (Single Belt, self-cleaning with doctor blades). DRY disposal system (suction with paper filter).

"Dualtech Forma" is the perfect combination of the highest design standards, which boasts **Pininfarina** as one of its most celebrated leaders, with the values that have always symbolised Giardina Group solutions.

A prestigious partnership, through which Giardina Group has entrusted Pininfarina with the task of designing the Italian group's new automatic sprayer.

Extremely ergonomic, the new **painting area** has been completely redesigned to allow convenient front and rear access.

The spraying room is made of carbon steel profiles and pre-painted sheet metal panels; the air taken from the environment by an electric fan is filtered and evenly distributed inside the spray booth.

The air distribution plenum ensures an efficient flow, thus reducing the paint overspray. "Dualtech Forma" is fitted with two additional air distribution plenums located at the inlet and outlet of the spray booth, so as to keep the spray booth under vacuum, thus preventing the overspray from escaping and ensuring that the extracted air is fully filtered.

An electric fan installed next to the filtration box, with dry filters, ensures the evacuation of all overspray from the spraying room, preventing the expulsion of particulate matter.





TECHNICAL DATA

- Basic usable working width: 1,300mm.
- Synthetic conveyor width: 2,000mm.
- Length of dry or longitudinal water curtain filters: 2,000mm.
- Reciprocating arm spacing: 1,880mm.
- 4-gun painting circuit (up to 4 independent circuits on request).



Watch the video

• Gun movement system (max 4+4) driven by brushless motor.



DRY disposal system (suction with paper filter).

"**Robotech gs15**" is an actual machine with two types of system for automatically spraying doors and panels.

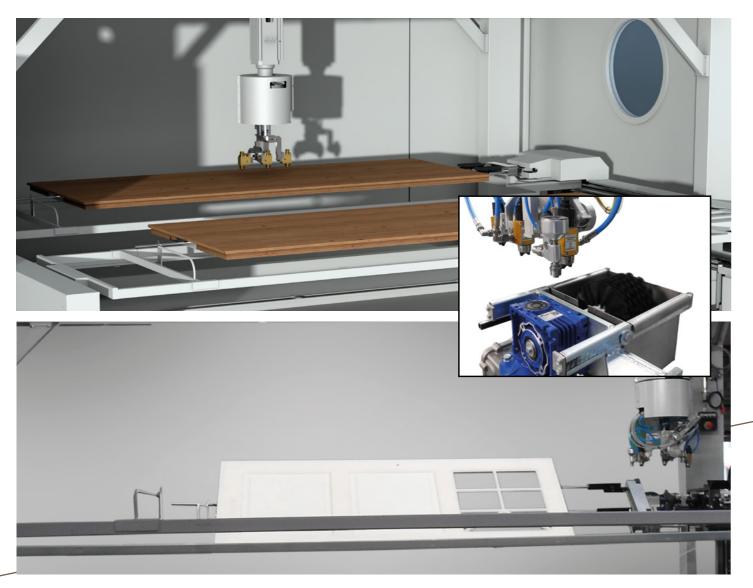
DOOR PAINTING

The "**Robotech gs15 Doors**" is designed to paint **any type of door**, and it can store and recall any painting program, route or parameter. A **scanner** scans the sizes and features of the incoming door to organise the next process steps accordingly.

The elements are transported to the painting area on **two motorised trays** that are positioned so that one element can be loaded or unloaded even while the other is being sprayed.

"Robotech gs15 Doors" can be fitted with several aggregates that increase its flexibility and productivity, including the **automatic door rotation system**, the automatic gun **cleaning brush**, the **automatic loading system** of doors from the racks.

The robot is normally installed in **pressurised booths** combined with drying booths.



PANEL PAINTING

The "**Robotech gs15 Panels**" 5-axis cartesian robot is designed to paint smooth or shaped panels with high quality standards. Thanks to the special **tray conveyor** system, it can be controlled by a **single operator** and requires very little space.

It can store and recall any painting program, route or parameter. A **scanner** reads the sizes of the incoming panels to organise the next process steps accordingly.

TECHNICAL DATA

AUTOMATIC DOOR PAINTING SYSTEM

- Maximum door size: 3,000x1,100mm.
- Maximum door thickness: 60mm.
- Maximum door weight: 60kg.
- 5 axes controlled by brushless motors.
- Painting circuits: up to 4.
- Standard gun configuration: 3 (two for surfaces and one for edges).
- Door rotation system.



The **elements are transported** to the painting area on two motorised trays that are positioned so that while painting is in progress on one tray, a second one is being loaded or unloaded from the system.

"Robotech gs15 Panels" can be fitted with several aggregates that increase its **flexibility** and **productivity**, including the automatic gun cleaning brush.

The robot is normally installed in pressurised booths combined with drying booths

AUTOMATIC PANEL SPRAYING SYSTEM

- Maximum panel size: 3,600x1,300mm.
- Maximum panel thickness: 80mm.
- 5 axes controlled by brushless motors.
- Painting circuits: up to 4.
- Standard gun configuration: 3 (two for surfaces and one for edges).





Watch the video

SBC (Single Belt Paper), DRY disposal system (suction with paper filter) Dry only (self-cleaning).

FLOOR SUCTION AND DISPOSAL

"Robotech gs 20" is available with the "Dry" (dry filtration) overspray reduction system inside the painting area and "Single Belt Paper" (SBC) conveyor with the **disposable paper system**.

The particulate suction and disposal system is in a loop around the paper conveyor made with four suction boxes, two longitudinal and two transverse, located on the floor.







- 5 axes (X-Y-A-Z-W) with brushless drive and HMI.
 Continuous 2D reading of the size and shape of parts (optional 3D scanner).
 3-gun "Robotech" robotic head ("Combi Head" and reciprocator on request).
- Liftable infeed-outfeed conveyor to optimise pressurisation while painting.
- Disposable paper conveyor width: 1,700mm.
- Booth pressurised by independent air supply unit with air heating system (air conditioning system on request).





Giardina Group for the Indian market

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