

# RANGER R 115 FD 85 BC CHEM







# **COMMITMENT TO THE ENVIRONMENT**

The focus on environmental protection and pollution reduction is an issue of global interest. The Planet's resources are not infinite and, for this reason, must be preserved carefully, without waste, respecting ecosystems and biodiversity. This awareness leads to the need to make even **economic growth more sustainable and environmentally friendly.** 

**Ghibli & Wirbel makes a daily and concrete commitment to becoming an increasingly sustainable company.** This important change is represented and told through the new GoinGreen symbol. In fact, the company has embarked on a path towards sustainability that will be increasingly enriched by projects related to this issue in the coming years. In this new symbol, the colours of the institutional logo, yellow and blue, icons of Ghibli & Wirbel's quality and reliability, blend to form the colour green, an emblem of the initiatives undertaken to protect the environment. Whereas the pinwheel represents the future and expresses a fundamental concept: the time has come to take action to ensure a better tomorrow for future generations.

# Ghibli & Wirbel Sustainable Vision

The company, certified ISO 9001 since 1995 (Quality Management System), strives to ensure safe and healthy working environments and to be an environmentally responsible organisation. Ghibli & Wirbel is also dedicated to constantly reducing energy and water consumption, using less paper and fuel, reducing noise in all its forms, and keeping waste production as low as possible. The entire production process applies **principles of environmental and social sustainability**: the company has started the process to obtain ISO 14001 (Environmental Management System Certification) and SA 8000 (Social Accountability) certification with the CSQ certification body.

The fruit of this work and investment has led to excellent results that contribute to increased corporate sustainability. There have been many green initiatives undertaken in recent years, but one in particular has required exceptional effort. The company, in fact, has achieved an important result: **introduce the use of recycled plastic in the production of its professional cleaning machines and produce sustainable products without sacrificing the quality that has always distinguished G&W products.** 





The EU Green Sheet is a technical document that accompanies the individual models of the Ghibli & Wirbel fleet. Inside you will find clear, upto-date and reliable information on environmental performance.



The EU Green Sheet is an operational tool capable of responding quickly and comprehensively to the EU's strategic directions, such as EU Green Deal COM (2019) 640, the 'new action plan for the circular economy. For a cleaner and more competitive Europe' - COM(2020) 98) and Regulation (EU) 2020/852 'establishment of a framework to facilitate sustainable investment'.

It is your daily support in developing technical offers in public tenders and a valuable ally in commercial offers for private customers.

# **INDEX**

- 4 GREEN PRO RANGER R 115 FD 85 BC CHEM: ENVIRONMENTAL HIGHLIGHTS
- 6 NORMATIVE REQUIREMENTS AND MACHINE CERTIFICATIONS LIFE CYCLE FOCUS
- 7 SUPPLIERS AND RAW MATERIALS
- 8 DESIGN
- **12 PRODUCTION**
- 13 USE PHASE
- **14 MAINTENANCE**
- 15 END OF LIFE AND TIPS FOR PROPER DISPOSAL
- 16 RECYCLING
- 17 ANNEX 1 CB TEST CERTIFICATE
- **18 RESOURCES**
- **19 MAINTENANCE LOG**

# **GREEN PRO RANGER R 115 FD 85 BC CHEM: ENVIRONMENTAL HIGHLIGHTS**

GREEN PRO RANGER R 115 FD 85 BC CHEM is the ideal ride-on scrubber-dryer for use in medium to large areas that combines high performance with ergonomics and maximum operator comfort. Eco-friendly model made of regenerated plastic material that guarantees the same quality and reliability as the standard model. The extra pressure on the ground and the action of the detergent (chemical mixing system) ensure excellent cleaning results; the robust aluminium header, which adapts perfectly to any obstacle, makes Ranger unrivalled in 'flush-to-wall' cleaning. The practical and intuitive control panel allows control and management of all machine functions. Ranger is easy to use, requiring no training, and even daily maintenance operations are quick and easy.

#### **PRODUCT IDENTIFICATION**

MODEL	CODE
GREEN PRO RANGER R 115 FD 85 BC CHEM	13.0815.70

- Green Pro Ranger is composed of 23% recycled plastic. Many hours of work, substantial investment in research and development, careful studies and specific field tests have enabled this important result to be achieved. The main objective was to make truly sustainable products while maintaining the quality and performance of standard machines. This feature makes Green Pro Ranger compliant with COM (2020) 98. A new plan of action for the circular economy. For a cleaner and more competitive Europe.
- The **SILENT MODE** function significantly reduces the noise emitted by the machine (57 dB(A)) while maintaining high performance. Ideal for day cleaning and for cleaning in environments where a low noise level is an essential and qualifying element (hospitals, schools, retirement homes). This feature makes Green Pro Ranger compliant with the Machinery Directive 2006/42/EC.
- The ECO SYSTEM programme, easily operated from the control panel, reduces consumption and eliminates waste, while still ensuring the best cleaning performance. ECO SYSTEM provides:
  - water flow to a minimum for the best optimisation of water consumption;
  - Reduced detergent concentration, if available: maintaining high cleaning standards while respecting the environment;
  - Optimisation of suction capacity: low noise and high energy savings.

With ECO SYSTEM, consumption is thus reduced and waste eliminated, with maximum respect for the environment and your wallet.

- It is possible to **adjust the amount of water** delivered during work according to need and the situation of use thanks to five levels selectable directly from the control panel.
- Splash guard to prevent water wastage during work sessions and, at the same time, prevent water and dirt from damaging the work areas.
- Green Pro Ranger is able to reduce water waste thanks to the BRUSH SOLUTION DIFFUSER, mounted directly on the brushes that
  ensures better water distribution over the work surface.
- The operator can manage the necessary chemical dosage according to the type of floor and dirt thanks to the CHEMICAL MIXING SYSTEM: the detergent percentage can be easily selected from five available levels.
- The cleaning process can be further optimised with the optional **G&W Fleet 4 You** management system. The data collected on the use of the scrubber-dryers is processed and transformed into useful information (the vehicle's activity status, its location, working hours, battery status and driving style) to be returned to the fleet management user, enabling him to plan the different activities and prepare the most effective and efficient cleaning process.

# **GREEN PRO RANGER R 115 FD 85 BC CHEM: ENVIRONMENTAL HIGHLIGHTS**



# **NORMATIVE REQUIREMENTS AND MACHINE CERTIFICATIONS**

GREEN PRO RANGER R 115 FD 85 BC CHEM, based on its design, type of construction and the version introduced to the market, complies with the basic health and safety requirements of the EC directives.



All products comply with the REACH Regulation (EC) No. 1907/2006, which concerns the registration, evaluation, authorisation and restriction of chemicals used in the production cycle, and the RoHS Directive 2011/65/EU and subsequent supplements, introduced to restrict the use of certain harmful and hazardous substances in electronic components.

In addition, the machine is in possession of the CB Test Certificate (see Annex 1 page 17). As part of the IECEE CB Certification System (worldwide system), CB certificates are issued to certify that an electrical/electronic product complies with IEC standards. The CB Test Certificate serves as a basis for obtaining national quality seals in participating countries. There are more than 50 national certification bodies in the CB System and they are located all over the world.





Developed by the European association of professional cleaning machine and system manufacturers, EUnited Cleaning, of which Ghibli & Wirbel is also a member, the EUnited Cleaning Scrubber Dryer Performance Label is based on the technical specification TS 35000 and the international standard IEC / EN 62885-9. Through the use of a reproducible test comparing the cleaning performance of different machines, scrubber dryers with high cleaning efficiency and the lowest possible use of water and electricity are identified and subsequently labelled. The label is to be seen as a concrete commitment of the European professional cleaning machinery and systems industry in creating a sustainable future through a cleaner environment. The prerogative of the companies involved is the pursuit of the most effective and at the same time resource-efficient cleaning that can adapt to future energy needs.

# **LIFE CYCLE FOCUS**

Ghibli & Wirbel continually invests to qualitatively and environmentally improve its fleet, consistent with EU environmental policies on eco-design (Ecodesign Directive 2009/125/EC, implementing regulations and Union action plan for the Circular Economy). A focus on all phases of a Ghibli & Wirbel machine's life cycle, from supplier selection to end-of-life.





Quality, Sustainability and Made in Italy are the core principles of Ghibli & Wirbel's procurement policy: a good percentage of suppliers (75%) have already adopted a quality (ISO 9001), environmental (ISO 14001) or occupational health and safety (ISO 45001) management system.

#### SUPPLY CHAIN GREEN PRO RANGER R 115 FD 85 BC CHEM

Average distance \*

109 km

\* The average distance of the main machine components is estimated from the weighted average of supply distances, taking weight % into account

#### **RAW MATERIALS**

The raw material use policy at Ghibli & Wirbel is geared towards favouring sustainable production models, consistent with the 'sustainable consumption and production' target defined by the United Nations within the 2030 Sustainable Development Agenda. A sustainable model that emphasises: high-quality and durable raw materials, recycled materials for parts with secondary functions (e.g. packaging or recycled plastic parts), end-of-life recyclability of materials in view of the circular economy, **as required by the 'new action plan for the circular economy. For a cleaner and more competitive Europe'- COM (2020) 98.** 

There have been many green initiatives undertaken in recent years, but one in particular has required exceptional effort. The company, in fact, has achieved the goal of: **introducing the use of recycled plastic in the production of its professional cleaning machines** and making sustainable products without renouncing the quality that has always distinguished G&W products.

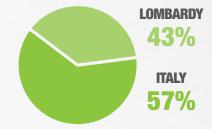
The recycled polymer is derived from plastic waste, postconsumer waste (bottles, films, automotive scrap, battery cases, flasks and other containers) and post-industrial waste (from plastic processing plants) that is controlled and certified.



Designed by Ghibli & Wirbel, Green Pro is a complete range of machines with recycled plastics to meet all the needs of professionals. The cross-sectional and comprehensive offer demonstrates the company's focus on the needs of its customers. The main objective was to maintain the quality of the products and, for this reason, parts made from regenerated plastics were subjected to the same stress tests as traditional plastics. The amount of recycled plastic that has been used in the manufacture of these machines **exceeds 25%** and, for some components, **even reaches 100%**.

These features make the product compliant with the EU Green Deal COM (2019) 640 and the new action plan for the circular economy 'For a cleaner and more competitive Europe' -COM (2020) 98.

#### **GEOGRAPHICAL DISTRIBUTION OF SUPPLIERS**



#### **GROSS WEIGHTS (KG) FOR COMPONENT TYPE**

Electrical and electronic components Motors, electrical cables, electrical components	70 kg
Plastic Shell, tubes, standard accessories, packaging, etc.	88.80 kg
Of which virgin plastic	67.67 kg
Of which recycled plastic	21.13 kg
Aluminium	15 kg
Ferrous materials Frame, screws, and various components	43 kg
Batteries	187.80 kg
Paper and Cardboard Box, instruction booklet, etc.	21.85 kg
Pallet	33 kg
More Other raw materials below the minimum detection threshold	25.40 kg
<b>GREEN PRO RANGER R 115 FD 85 BC CHEM</b> (with battery - without accessories and without packaging)	424.95 kg
<b>GREEN PRO RANGER R 115 FD 85 BC CHEM</b> (with battery - with accessories and without packaging)	430 kg
<b>GREEN PRO RANGER R 115 FD 85 BC CHEM</b> (with battery - with accessories and with packaging)	484.85 kg

#### **MAIN MACHINE MATERIALS**

(% BY WEIGHT) 39% BATTERIES —

**18% PLASTIC OF WHICH 24% RECYCLED** 

14% ELECTRICAL AND ELECTRONIC COMPONENTS

**9% FERROUS MATERIALS** 

**7% PALLET** 

**5% PAPER AND CARDBOARD** 

**3% ALUMINIUM** 

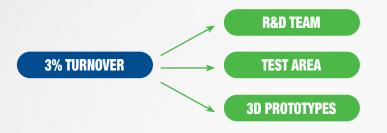
5% OTHER -



#### **RESEARCH AND DEVELOPMENT**

Quality and sustainability are the main objectives that Ghibli & Wirbel intends to pursue through its activities. Maintaining quality and sustainability is the reason why the company invests a substantial part of its resources in Research & Development every year. Our group of engineers, backed by cutting-edge technology, are constantly striving to perfect our current production and to plan tomorrow's. Innovative solutions are developed not only to continuously improve the functionality and ergonomics of Ghibli & Wirbel machines, but also to reduce noise, improve energy savings and make them more efficient, versatile and robust by using the most suitable materials and technologies. The entire production process is inspired by the best practices existing today to protect the environment. A 3D printer is also used to design and produce models of the machines produced by Ghibli & Wirbel.

#### **INVESTMENT IN RESEARCH AND DEVELOPMENT**



#### **SCRUBBER-DRYER**

A wide and complete range of state-of-the-art washer-dryers in ride-on and walk-behind versions. Seven models of machines dedicated to the cleaning of surfaces, from the smallest areas to large gathering spaces, designed with sustainability in mind and capable of meeting all the needs of professionals. The use of recycled plastic for the production of this type of machine represents an important investment that demonstrates Ghibli & Wirbel's concrete commitment to environmental protection issues. As highlighted by the acceptance tests and endurance tests during operation and transfer to which these eco-friendly machine versions are subjected, the entire range of scrubber-dryers guarantees the same performance as those produced without the use of recycled plastic.

#### **GUARANTEED DURABILITY**

The design principle of Ghibli & Wirbel machines is to extend product life and durability. Machines designed to work for longer guarantee efficient use of their materials and reduced environmental impact.

#### GREEN PRO RANGER R 115 FD 85 BC CHEM

AVERAGE BRUSH MOTOR LIFE HOURS

Internal test - machine in use > 2000\*

#### **AVERAGE SUCTION MOTOR LIFE HOURS**

Internal test - machine in use > 1000\*



#### **ERGONOMICS**

Ghibli & Wirbel's sustainable design is consistent with the basic principles of ergonomics, i.e. the efficient relationship between: machine, operator and cleaning environment.

The most important requirement for determining the level of ergonomics is safety, followed by adaptability, usability, comfort, pleasantness, comprehensibility. Sustainability that is not only environmental, but also social through Ghibli & Wirbel's special focus on the operators and users of clean facilities.

#### **ACCESSIBILITY AND SAFETY**



Squeegee blades can be adjusted for maximum drying results. Presence of splash guards to prevent splashing water and preserve the working environment.



Front and rear polyurethane wheels: non-slip and non-marking, ensuring perfect stability and road holding.



Emergency stop: the emergency button for the interruption of all activities in the event of any hazardous situations.



Automatic speed reduction on overly high-speed bends.



Possibility of selecting the 'Low Noise' mode **(57 dB(A**)) via the specific control, making the machine perfect for day cleaning and for working in 'sensitive' areas (hospitals, retirement homes, schools). The low noise level is achieved by reducing the motor's suction power, thanks to which consumption is minimised, while still ensuring the best cleaning performance (optimising consumption while maintaining the cleaning standard appropriate for a professional machine). Also from an economic point of view, the use of the machine during standard working hours reduces the costs of the cleaning operation.



Designed to ensure maximum operator comfort. The machine's easy accessibility, complete visibility during both transport and work, and ergonomic seat have been designed to ensure maximum comfort and practicality, even for particularly long and tiring work sessions. All the machine's main functions can be operated via the practical and intuitive control panel. The display allows precise and constant monitoring of the activities of the GREEN PRO RANGER 115 FD 85 BC CHEM

#### **EASE OF USE AND EFFICIENCY**



Routine and extraordinary maintenance of the GREEN PRO RANGER 115 FD 85 BC CHEM is made as easy as possible. Practical filling of the solution tank thanks to the extendable filling hose supplied as standard. The solution tank of the Green Pro Ranger can also be easily filled via the Water Stop Kit, the automatic shut-off filling system (optional).



Immediate installation and removal of brushes. The squeegee is easy to both install and remove. The rubber blades, which can be used on all four sides, can be cleaned very easily and without the use of any tools.



In order to facilitate transport and storage operations, the Green Pro Ranger is equipped with a practical support, located on the recovery tank, to which the squeegee can be hooked: minimum space requirements and easy manoeuvring.



#### WIDE RANGE OF ACCESSORIES TO FACILITATE USE OF THE MACHINE IN ALL ENVIRONMENTS

The standard equipment designed by Ghibli & Wirbel for its machines is as complete as possible in terms of efficiency and economy to cope with the most common applications.

9 ACCESSORIES (in the standard configuration) to cover the main cleaning requirements.

# **STANDARD ACCESSORIES**



FILLING HOSE Extensible and equipped with universal coupling for all types of taps.

#### POLYPROPYLENE BRUSHES 0.7 MM

Resistant and suitable for every surface type, 430 mm 17'' diameter and 0.7 mm diameter bristles.



#### **BRUSH SOLUTION DIFFUSER**

Diffuser mounted directly on the brush for better distribution of the cleaning solution on the work surface.



#### **SPLASH GUARDS**

They avoid splashes of water and better protect the brush head and working environment.







#### SQUEEGEE BLADES IN NATURAL RUBBER

For the best drying performance and highly resistant due to increased adaptability to the ground. **6V GEL BATTERIES** Set of four Gel 6V 240Ah batteries capable of guaranteeing 5 h of autonomy.



It allows batteries to be conveniently recharged in different or distant locations, without having to return to the same place.



CHEMICAL MIXING SYSTEM Automated chemical dispensing system.



FLASHING KIT Maximum safety during work sessions and during transport.



# **OPTIONAL ACCESSORIES**

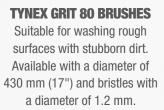
Ghibli & Wirbel's optional accessories allow even the most specific requirements to be met in a timely manner. In particular, the following optional accessories are available for the GREEN PRO RANGER 115 FD 85 BC CHEM :





#### POLYPROPYLENE BRUSHES 0.9 MM

Suitable for all types of surfaces, available in diameters of 430 mm (17") and 0.9 mm diameter bristles.





PAD HOLDER 420 MM

Required to use the wide range of 17" pads available. Equipped with a practical quick coupling and release system.



SQUEEGEE BLADES IN POLYURETHANE Suitable for all types of floors, highly resistant to wear and oil.



WATER STOP KIT Water tank filling system with automatic stop.



**CORNER DRYING KIT** For perfect suction of corners and hard-to-reach areas.



FRONT LIGHT KIT LED beacon to ensure visibility while working with poor lighting.



FLEET 4 YOU It includes the complete fleet management system and the use of the G&W Fleet 4 You Connect portal for 12 months.



FLEET & KEY 4 YOU Adding to the services offered by the standard version is the Key 4 You electronic badge, which allows you to control access to the machine on which it is installed.





The company, which has been ISO 9001 certified since 1995 (Quality Management System), strives to ensure a safe and healthy working environment and to be an environmentally responsible organisation. To this end, it has started the process of obtaining ISO 14001 (Environmental Management System Certification) and SA 8000 (Social Accountability) certification with the CSQ certification body. Ghibli & Wirbel is also committed to constantly reducing energy and water consumption, using less paper and fuel, reducing noise in all its forms, and keeping waste production as low as possible. The entire production process is inspired by the best practices existing today to protect the environment. In the year 2022, 91,580 Ghibli & Wirbel machines were produced. In 2023, a 750 kW photovoltaic system was installed at the production site to cover 50% of the company's electricity consumption needs, thus the company makes a contribution to climate mitigation as stipulated in Art. 12 of Regulation (EU) 2020/852.

100% of the machines are tested with an end-of-line test that verifies the functionality of the product. In addition to this testing, there is a quality audit based on a statistical check in which the various characteristics are rechecked. The machines are designed and manufactured in such a way as to favour the longest possible service life and the recycling at end-of-life\* of the various materials of which they are composed.

# **GHIBLI & WIRBEL**

Ghibli & Wirbel, the brand that was born from the merging of two Italian excellences in professional cleaning, promotes the values of Italian entrepreneurship, passion for work and the quality of Made in Italy unaltered.

The products are designed and manufactured entirely in the production plant in Dorno (Pavia).

To gain complete control over its production cycle, Ghibli & Wirbel manufactures most of the components of the machines it assembles in-house. Each mould is the result of meticulous prototyping. Production is carried out on injection moulding machines. Processing is carried out on automatic moulding lines: a complete cycle that leaves only the last stage of inspection to specialised personnel Ghibli & Wirbel operates production lines divided by product:

- 2 lines for the assembly of vacuum cleaners, dry-wet vacuum cleaners and spray-extraction cleaners
- 1 assembly line for industrial vacuum cleaners
- 1 single disc machine assembly line
- 4 assembly lines for scrubber-dryers
- 1 assembly line for other product families



\* This is in line with the 'new action plan for the circular economy. For a cleaner and more competitive Europe' - COM (2020) 98.

Ghibli & Wirbel SpA



GENERAL SPECIFICATIONS				
Manufacturer	Chibli & Wirbel Spa - Via Enrico Formi 42 Voror	12 (VB)		
Place of manufacture	Dorno (PV) - Italy	Ghibli & Wirbel Spa - Via Enrico Fermi, 43 – Verona (VR)		
Function	Ride-on scrubber-dryer			
Rated power (W)	2300			
Suction motor power (W)	550			
Brush motor power (W)	500x2			
Washing track (cm)	85			
Suction width (cm)	105			
Hourly output (theoretical - practical) (m <sup>2</sup> /h)	5000 - 3000			
Weight (kg)	424,95	•		
ENERGY EFFICIENCY	0.00 *			
Energy consumption per m <sup>2</sup> (Wh/m <sup>2</sup> )	0,28 *	•		
CO <sub>2</sub> EMISSIONS	0.001111			
$CO_2$ emissions per m <sup>2</sup> (gCO <sub>2</sub> /m <sup>2</sup> )	0,09***			
NOISE				
Sound power (dB)	78			
Sound pressure [dB(A)]	63 [57 (silent mode)] **			
WATER EFFICIENCY				
Tank (I)	110			
Water consumption - range (I/min)	0 to 4.1	•		
BATTERIES				
Type (gel/lithium)	Gel			
Capacity (Ah)	240	•		
Charging times (h)	10****			
Life cycles (No. of recharges)	> 700*****			
Autonomy (h)	5			

\* This figure is the result of tests conducted in-house by Ghibli & Wirbel. If you have any questions, please contact G&W directly. \*\* Complies with the Machinery Directive 2006/42/EC

\*\*\* Considering only the use phase and thus the energy consumed per square metre (Emission Factor).

\*\*\*\* With 30-amp charger (with fully discharged batteries)

\*\*\*\*\* According to IEC 254-1

Each dot corresponds to the accreditation level of the data:

Self-declared

External laboratory test Occlared by supplier



The maintenance plan\* of the machines guarantees high operating efficiencies and high performance qualities over time, which means reduced consumption and, consequently, reduced environmental impacts generated by machine use.

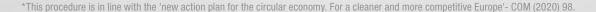
Ghibli & Wirbel recommends that regular maintenance work be carried out in strict accordance with the 'Operation and Maintenance' booklet and the 'Technician's Handbook' (see resources section of the EU Green Sheet). Where possible, pick specialised and authorised companies and record work in the periodic maintenance booklet. In the maintenance booklet, the coupons and interventions carried out on the machines must be recorded and initialled. It is a tool for keeping your fleet under control and for demonstrating to your customers that regular interventions have been carried out. Attention to the customer and to the quality of the cleaning service provided can also be demonstrated by keeping cleaning machines and equipment in full working order.

For the validation and justification of interventions Ghibli & Wirbel suggests you use the logbook provided on the last page of this EU Green Sheet. You can detach it and file it in your site documentation.

Scheduled maintenance diagrams are shown below. The indicated frequencies may vary depending on particular working conditions, to be defined by the maintenance manager.

#### **SCHEDULED MAINTENANCE DIAGRAM**

ROCEDURE	<b>DAILY</b> after the machine is used	WEEKLY	HALF-YEARLY	YEARLY
Battery charging				
Cleaning the squeegee	•			
Cleaning the brushes	•			
Cleaning the recovery water tank	•			
Cleaning the recovery water tank bowl filter	•			
Checking the lid seal		•		
Cleaning and purging the chemical system		•		
Checking the squeegee blades		•		
Cleaning the clean water tank		•		
Cleaning the clean water tank filter		•		
Checking and cleaning the steering chain				
Replacing the squeegee blades			•	
Checking the efficiency of the electric brake			•	
Replacing the brushes				
Checking wheel wear				•
Checking or replacing section motor carbon prushes				•
Checking or replacing brush gearmotor carbon prushes				•
Checking or replacing traction wheel carbon orushes				•





# STEP 6 END OF LIFE AND TIPS FOR PROPER DISPOSAL

Environmentally friendly design also pays attention to end-of-life management, although Ghibli & Wirbel machines are designed for an extended life cycle\*. In line with the 'new action plan for the circular economy. For a cleaner and more competitive Europe'- COM (2020) 98 the principles of disassembly and recyclability are applied and guaranteed.

The machines are designed and manufactured in such a way as to favour the longest possible service life and the recycling at end-of-life\* of the various materials of which they are composed.

#### **END-OF-LIFE MACHINE DISPOSAL MODE**

The materials are all recyclable\*, although some parts of the machinery will have to be disposed of as special waste due to their specific function of use. Different materials must be easily separable. Parts subject to wear, damage or malfunctioning must be removable and replaceable. Plastic parts must be marked with the coding of the type of polymer they are made of according to DIN 7728 and 16780 and UNI EN ISO 1043/1.

#### **PACKAGING DISPOSAL METHODS**

Corrugated cardboard packaging complies with European Directive 94/62 EC on packaging and packaging waste. Corrugated cardboard is 100% recyclable and must be disposed of according to the separate collection procedures established by the local authority. As far as plastic film is concerned, it too complies with the requirements of the European Packaging and Packaging Waste Directive 94/62/EC. Plastic packaging should be delivered in accordance with the separate collection procedures established by the local authority.

On the other hand, the tertiary packaging (pallets) used for transporting the machines are taken back by a specialised company and reused, thus avoiding the generation of waste.

#### WASTEWATER DISPOSAL METHODS

Waste water produced by machine operations must be disposed of according to the type of solution produced in a manner consistent with industry standards.

#### **DISPOSAL OF CONSUMABLES**

Wear parts such as brushes, squeegees, wheels, etc. are removable and replaceable\*. They must also be disposed of at the end of their life in accordance with environmental regulations. Those authorised for periodic maintenance will be properly informed and trained on how best to handle them.



The policy on the use of raw materials is geared towards favouring production models consistent with Goal 12 - **Ensure sustainable production and consumption patterns** - defined by the United Nations 2030 Agenda.

A sustainable pattern that promotes: high quality and durable raw materials, recycled materials (e.g. packaging and recycled plastic parts of machines), end-of-life recyclability of materials in a circular economy perspective.



Attention is paid to all stages of the life cycle of a Ghibli & Wirbel machine, from the selection of raw material suppliers and components to the end of the product's life.

Following the introduction of recycled plastic in this process, the focus on the production cycle has increased further. Ghibli & Wirbel's main objective, to manufacture more sustainable machines, was only achieved when it was possible to **guarantee the same quality as the products in the standard range**. Numerous tests were carried out to verify and certify that the recycled plastic components of the various machines meet the technical requirements and guarantee excellent performance.

All plastics used are recyclable and are marked to make the type of plastic present immediately recognisable and facilitate recycling.

Most production waste is reprocessed and used to make new components and accessories.



RESPECT FOR THE ENVIRONMENT

by reducing the use of virgin plastic in favour of recycled.

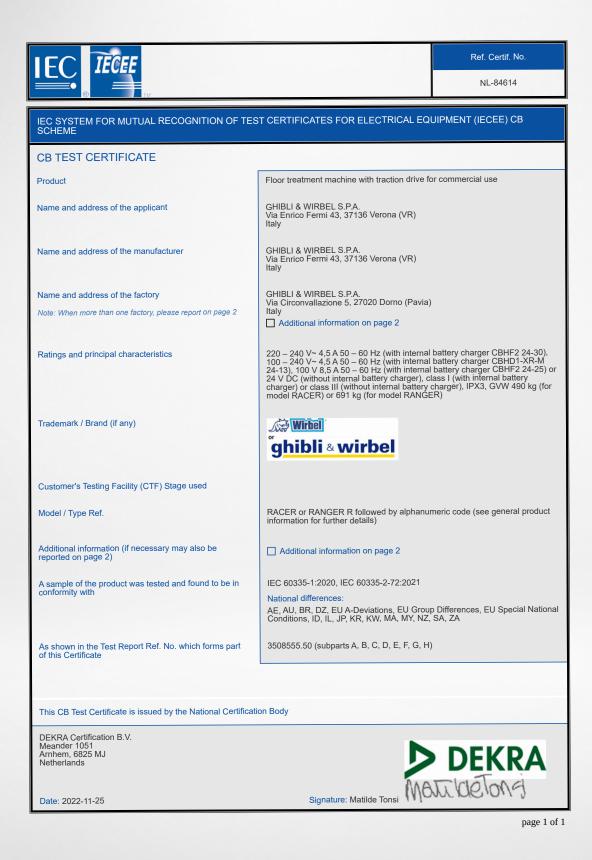


**REDUCTION OF WASTE** 

thanks to the greater care that is taken in production and, more generally, in the entire product life cycle.



# **ANNEX 1 - CB TEST CERTIFICATE**



# RESOURCES

Ghibli & Wirbel makes available on its website (www.ghibliwirbel.com) and on its My G&W reserved area all machine-specific documentation, including this EU Green Sheet.

- Data sheet
- Use and maintenance
- Use and maintenance Illustrations
- EC Declaration of Conformity
- Warnings and safety
- Technician's Handbook
- Wiring diagram
- Troubleshooting
- Machine brochure
- Quick Guide
- Machine video
- Quick Guide video

# CONTACT

For more information write to: green@ghibliwirbel.com

#### **GHIBLI & WIRBEL SpA**

Registered office Via Enrico Fermi, 43 37136 Verona (VR) - Italy

Operations and production site Via Circonvallazione, 5 27020 Dorno (PV) - Italy

#### www.ghibliwirbel.com

Tel +39.0382.848811 Fax +39.0382.84668 Email info@ghibliwirbel.com

VAT 03976160287

# **GHIBLI & WIRBEL FLEET MAINTENANCE LOG\***

YARD/SITE	MODEL	SERIAL NUMBER	INTERVENTION TYPE	HOUR METER READING**	DATE	SIGNATURE AND STAMP

\* This procedure not only contributes to the proper functioning of the machines used but is also consistent with the principles of the 'new action plan for the circular economy. For a cleaner and more competitive Europe'- COM (2020) 98. \*\*If on board

Ghibli & Wirbel SpA

x



Professional Cleaning Machines Since 1968



#### 100% MADE IN ITALY

Registered office Via Enrico Fermi, 43 - 37136 VERONA (VR) - Italy

Operational Headquarters Via Circonvallazione, 5 - 27020 Dorno (PV) - Italy

P. +39 0382 848811 - F.+39 0382 84668 - M. info@ghibliwirbel.com

#### www.ghibliwirbel.com



