

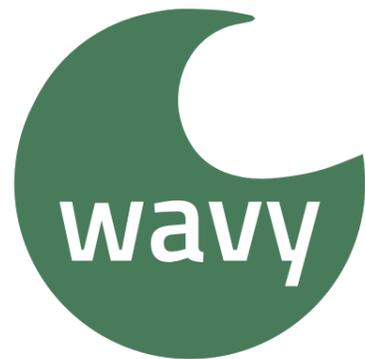
# WASHING MACHINES

A new era in the laundry

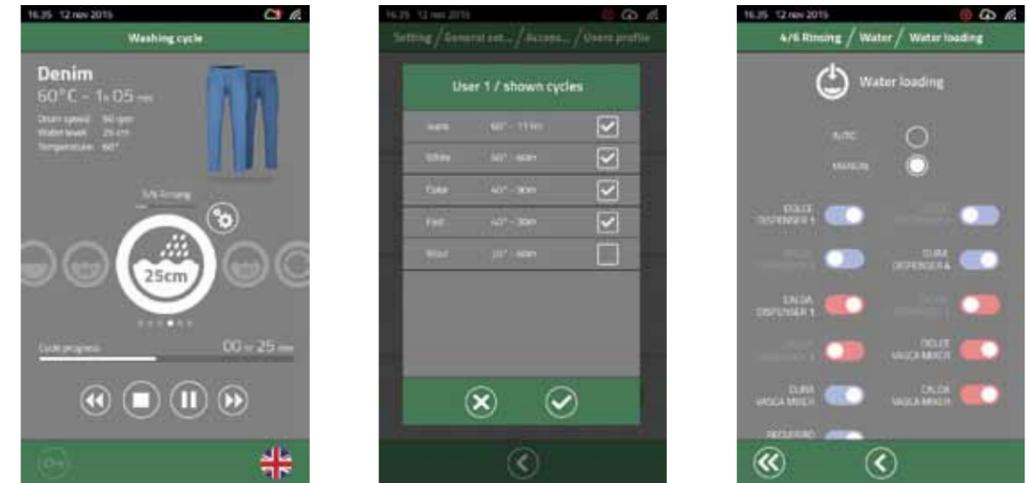
# WASHING MACHINES

- 02 - **Wavy interface**
- 05 - **Cloud**
- 06 - **Facelift**
- 08 - **GWH**
- 10 - **GWM - GWN**
- 12 - **Market**
- 14 - **Application areas**
- 16 - **Sustainability**
- 18 - **Technical files**

# The intelligence at your fingertips has a name: Wavy!



**Intuitive, touchscreen and multi-level interface that offers simple, quick and Step-by-Step procedures. Everything is measured according to the user needs and skills.**



## A simple, modern and interactive interface

Wavy is a new, user-friendly, interactive and touchscreen graphic user interface, that provides information for programming and monitoring our machines in a visual way. Inspired by the high-tech world, Wavy exploits the potential of the app language, to make faster and easier your daily work in a laundry. It's a control system that speaks your language, not only in the literal sense, but because adapts itself to the level of users experience! The access, indeed, is hierarchical so everything is dosed on the type of user (basic, intermediate, professional or technical) and the procedures are simple and Step-by-Step.

## WAVY is fast, dynamic and catchy

We've chosen Wavy because it's an international name, short, easy to pronounce and remember. A catchy name, then, that reflects the essence of our new control system that's fast, dynamic and easy to use. Also the logo is the result of a particular choice: is the stylisation of a finger pressing an app. Name and visual together, then, briefly explain the modernity of our path. In the last few years our society has changed: words like app, mobile, social and cloud are now part of our daily language. So, in this new scenario, we felt the necessity to change image and language, offering a proper answer to the new requirements of our clients. And the answer is Wavy!

## We welcome the 2.0 revolution in the laundry world!

Easy as a tablet, which follows the appearance, this new interface will revolutionise your job in the laundry, simplifying it further. Just two clicks and you've started the washing machine! But there's more, also the update is easy. Update the software is as simple as downloading an app on your smartphone!



## Self-service user

This kind of user can choose only the pre-set program according to the type of laundry to be treated. The procedure is simple and completely visual: through graphical icons, the interface allows to select just the kind of clothes (jeans, dark clothes, delicate, colorful, whites, etc.) and, before starting, the payment method, of course. The progress of the cycle is visible on the display and the user will only have to worry about going back to take his clothes at the end.

## Basic user

Just like the previous one, except for the selection of the payment method, the basic user can choose, in two clicks, only the type of laundry to be washed. Our machine does the rest.

## Intermediate user

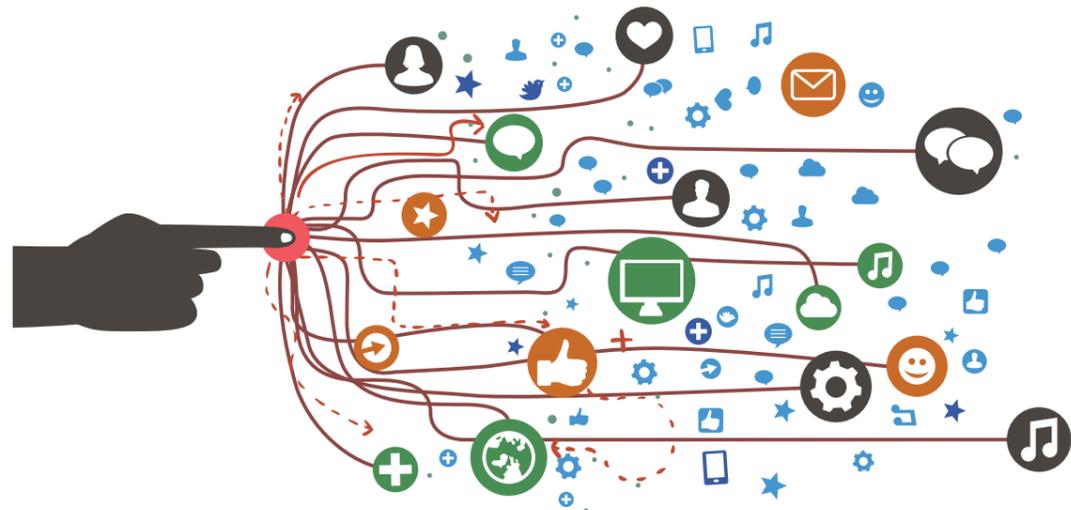
Equipped with a greater knowledge of cleaning process, the intermediate user is able to make some changes to the pre-set programs, such as increases the temperature, removes the pre-wash, sets the fast forward, etc. But he hasn't the license for creating new washing programs.

## Professional user

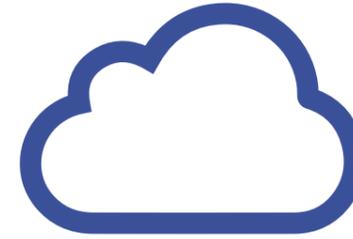
The professional user, with a deep knowledge of the laundry industry, has a free access to every parameters and, therefore, a complete control of the machine. He can modify or create new programs for specific needs (type of fabric, water, detergents, etc.), but also view the archive of machine operation (cycles performed, consumption, receipts, etc.).

## Technical user

Since this kind of user is usually a maintainer or a dealer, with a deep experience and knowledge of our washing machines, he has a 360° access to the equipment. He can modify the operating parameters, access the archive, the data on consumption and, especially the data log.



# Everything is connected on WavyCloud!



**It's a neural network of know-how, processes and diagrams with a hierarchical access (user, operator, administrator). Contents and resources are always available and it's easy managing and monitoring the equipment from everywhere in the world, anytime!**

## Drum's balancing system

We applied a device to the drum to follow the movements of the laundry inside the machine at any time and, during the spin cycle, correcting whatever imbalance of the drum. This means also less mechanical stress and noise.

## It's handy like a smartphone

The 7-inch display is vertical, just like your smartphone: we know that the users usually interact with this type of tools. Why should we ask them to change habits? But there's more. The display has a tempered glass (not a plastic film) and also a catchy design: we are Italian and style, quality and aesthetics are intrinsic elements of our DNA. We don't just create useful tools, we also make them beautiful.

## It's time to touch!

Say goodbye to the instruction manual and lengthy procedures to set the parameters of the machine. With Wavy each step is simple and clear. Choosing the type of detergent or temperature is possible just clicking on an app, like on your tablet or phone. Same thing for the adjustment of the engine and any other parameters.

## Close connection between hardware and software

Unlike the majority of companies, we've developed hardware and software together to avoid any compromise in performance or usability problems. In this way the two souls of our new equipment are closely bond.

## There are no limits to the number of programs

As you certainly know, often in a tender for a contract, one of the parameters used to win the competition is the number of programs that the device is able to offer. Thanks to the Cloud service, it no longer makes sense to specify that number, because there are no limits. WavyCloud will host a growing number of programs.

## Data archive always available inside the machine

Wavy machine is connected via Wi-Fi, the data are stored in the Cloud in order to be available everywhere, anytime. But, what would happen to the data in case of disconnection? You don't have to worry, each device has its own internal archive: the machine collects the data and send them to the Cloud. So you will never lose the information!

## It manages up to 17 detergents

The control system is able to manage up to 17 types of detergents, through 13 pumps and 4 dispenser. The detergents and fabrics industries are constantly changing and we don't know which products will be available in the future, but our machines are ready for every new developments.

## Wi-Fi connected: your passport to the world

The idea of creating a control system connected via Wi-Fi to the Cloud is not a fleeting trend or a whim, it's the only solution to really be in step with the new expectations of customers and, above all, to cut costs and make faster and easier the laundry activity. We have created a social device for "social animals"; because we believe that also the future of the professional industry is connectivity.

## Control is just a click away!

Without moving from everywhere, WavyCloud allows you to monitor operation and performance of one or more machines and structures (laundry, self-service, condominium, hospital, etc.). It's perfect to control your business anytime you need and, above all, to planned the workflows. Thanks to the Cloud service, indeed, you can check the operating parameters of the machine (type and number of cycles performed, consumption, hours of operation, cycle traceability, costs and receipts). But there's more, the system allows to make queries by serial number, model, customer and structure, or to see a synoptic of the laundry, showing the situation in real time (busy/free machines, remaining cycle time, standby, etc.). You can also set a message alert to warn you when a washing cycle is finished! Everything is really under control with a fingertip!

## A virtual technician always available

You don't have to worry about any anomalies because even the diagnostics is managed by WavyCloud! The system deals with the detection of the equipment operation, reporting (to one or more users) any problems and failures. If the anomaly is simple (not mechanical failures) is possible resolve it directly through WavyCloud. The administrator, eventually, can stop the washing machine, simply by a click. And what about the upgrade? Our system warns you about each new release, you just need to click for install it. Easy-peasy like downloading an app on your smartphone! Furthermore, it provides maintenance warnings through graphic notifications, that indicate clearly and in time the need for intervention in specific parts of the machine.

## More time for the real business

WavyCloud allows also an easier management of the administrative part of the laundry activity, with a significant reduction of times and full-time staff required for the control. The system allows, indeed, the remote monitoring of the operation data of single equipment or structure (cycles performed, consumption, operating hours, standby, receipts, etc.) and the setting of the accounting values (cycle cost, water, detergents and power costs, etc.) in order to have always under control the costs and the benefits. Thus, this system allows a quick and easy management of non-tax accounting.

## The best solution for every need

Every industry has its own needs and WavyCloud has the right answer for each one. For example, the monitoring and management features are perfect for the self-service industry. While, for the professional laundries it's downloading special programs for specific or delicate fabrics (e.g. mops, Gentlewash®). Health centers, food and pharmaceutical industries can use, instead, the HACCP traceability system to ensure maximum hygiene and the compliance with the regulations. The fire brigade sector meets its particular needs by downloading specific washing programs for technical fabrics. Finally, every sector due to the data archive, is able to program a more efficient and effective workflows.

## Online manuals, certificates and guides

Have you lost the instruction manual or do you need the installation scheme? Don't worry it's all available on WavyCloud. You can consult all the documents, without problems, directly on Cloud. The access to the content archive is hierarchical (user and service) so everyone can quickly see just what he needs. Moreover, you can also find an useful quick html guide.

## The winning performances now are rented!

Today customer seeks to get high quality results, not the mere possession of goods. That's why our equipment allow a pay-per-use service: hotels, health centers, marinas, campgrounds and condominiums can benefit of our equipment simply renting them, without worrying about the maintenance or replacement of the models, and paying only when they're used. This opens new business opportunities, in which the center of the sale is the service. Anyone who rents, through a specific menu, has the entire control over the equipment: from the diagnostics to the performances, from the maintenance to the number of cycle performed until the state of payments. WavyCloud, in the pay-per-use configuration, allows the remote management of licenses, utilities and deadlines and, if necessary, even stops the machine. The user, however, has the benefit of using the latest technology without large investments or specific skills.

# The spin cycle that drives you to success

A new and innovative design borrowed from the high-tech sector, but the same mechanical, functional and performance qualities of our traditional equipment.



## Precision weighing. Standard!

Our patented precision weighing system (DWS) is available as a standard on the Wavy washing machines. The DWS system weighs the laundry and the data are processed by the control system which calculates the exact amount of resources needed. In this way, the machine adapts itself, with extreme precision, to every minimal variation of loading. The management of consumption is no longer limited to a few preset options, only the resources strictly necessary are used according to the laundry loaded.

## Steel core, velvet touch

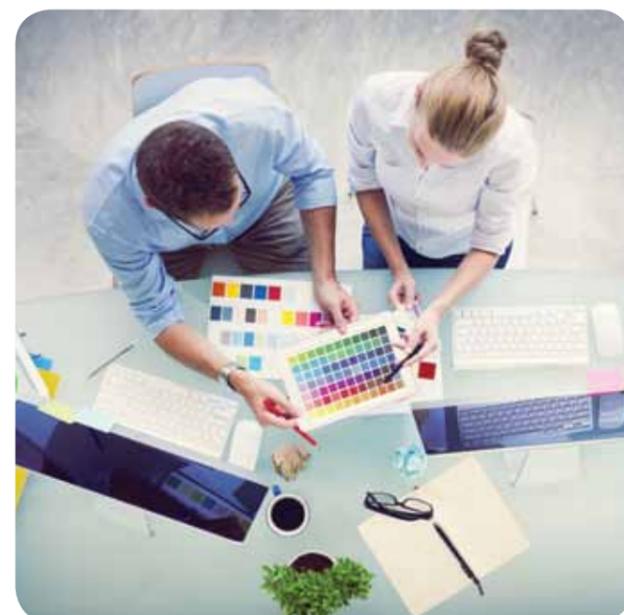
The high-spin washing machine requires power and delicacy at the same time. Our new GWH Wavy washing machines, indeed, have stainless steel drums and powerful engines capable of generating up to 400G (400 times the acceleration of gravity) to ensure a successive fast and effective drying phase. The drum has special hemispheres that ensure a better water discharge during the spin cycle and prevents the damaged of clothes caused by an excessive friction. So Grandimpianti machines allow to wash working overalls as well as wedding dresses.

## To each his own

Wavy washing machines are available in six different capacities, to meet the various load needs. From 75 to 280 litres (load ratio 1:10), you can choose the washing machine that best suits you. Every version has the same functional and design characteristics to always guarantee the best quality result to each client. So you can choose the loading capacity that best suits your needs without sacrificing the high performance or the ease of use, the high savings or the low environmental impact.

## New, Italian, contemporary design

Completely renovated in design and user interface, the new and revolutionary Wavy washing machines, combine aesthetics and efficiency with new trends and technology: the LCD display is vertical and touchscreen, the shiny front are inspired by hi-tech and automotive and gives preciousness to the equipment. We are aware that materials, finishes and colour codes are becoming increasingly important to win the competition in the market and, above all, to give coherence and strength to the visions and the product strategies. That's why we've always paid great attention to beauty and functionality, design and ergonomics. So also the new Wavy machines are made with meticulous attention to the details.



## Costs optimization

It saves up to 50% of detergent: the quantity of detergents being automatically adjusted by the patented DWS system. It saves, also, energy by optimising the amount of water to be heated. The presence of a second optional discharge valve, then, allows a greater time savings. These solutions mean less costs and environmental impact.



## Time saving

Save your time also due to the large drain system. Thanks to the motorised 3-inch discharge valve, the machine discharges water quickly and allows to perform almost an additional full cycle for each shift.



## Recycling rates

96% recyclability rate of machine. It's an ecological washing machine even at the end of its life-cycle. It's made of recyclable materials and therefore has low environmental impact even when you decide to change it. Materials such as the skinplate: a plastic film made of PVC. Many as 56% of PVC, indeed, is made of common salt, a completely renewable resource.



## Less maintenance

Less maintenance costs due to the anti-lime heaters and the long-lasting seals. The heaters are made of INCOLOY® steel able to reduce the lime deposits. The EPDM seals, then, ensure long life. This means less maintenance for the washing machine.



## Usability

Ergonomic and ease to use thanks to the wide opening door. The washing machine has a large portholes that guarantee an ease and fast loading and unloading of laundry. No wasted time and more attention to the user comfort.

# High-spin washing machines with a soul

## Details count

Let's get down to the details of the new high-spin washing machine to appreciate the newness that make this product great. New design and ergonomics are combined with the traditional features of Grandimpianti appliances. This short tour through the most representative details gives us a quick overview of its aesthetic and functional characteristics.



**A.** Innovative Italian design with shiny front and vertical 7-inch and touchscreen display, visible even in harsh environments and inspired to the mobile technology. It was designed to be comfortably used even with gloves.



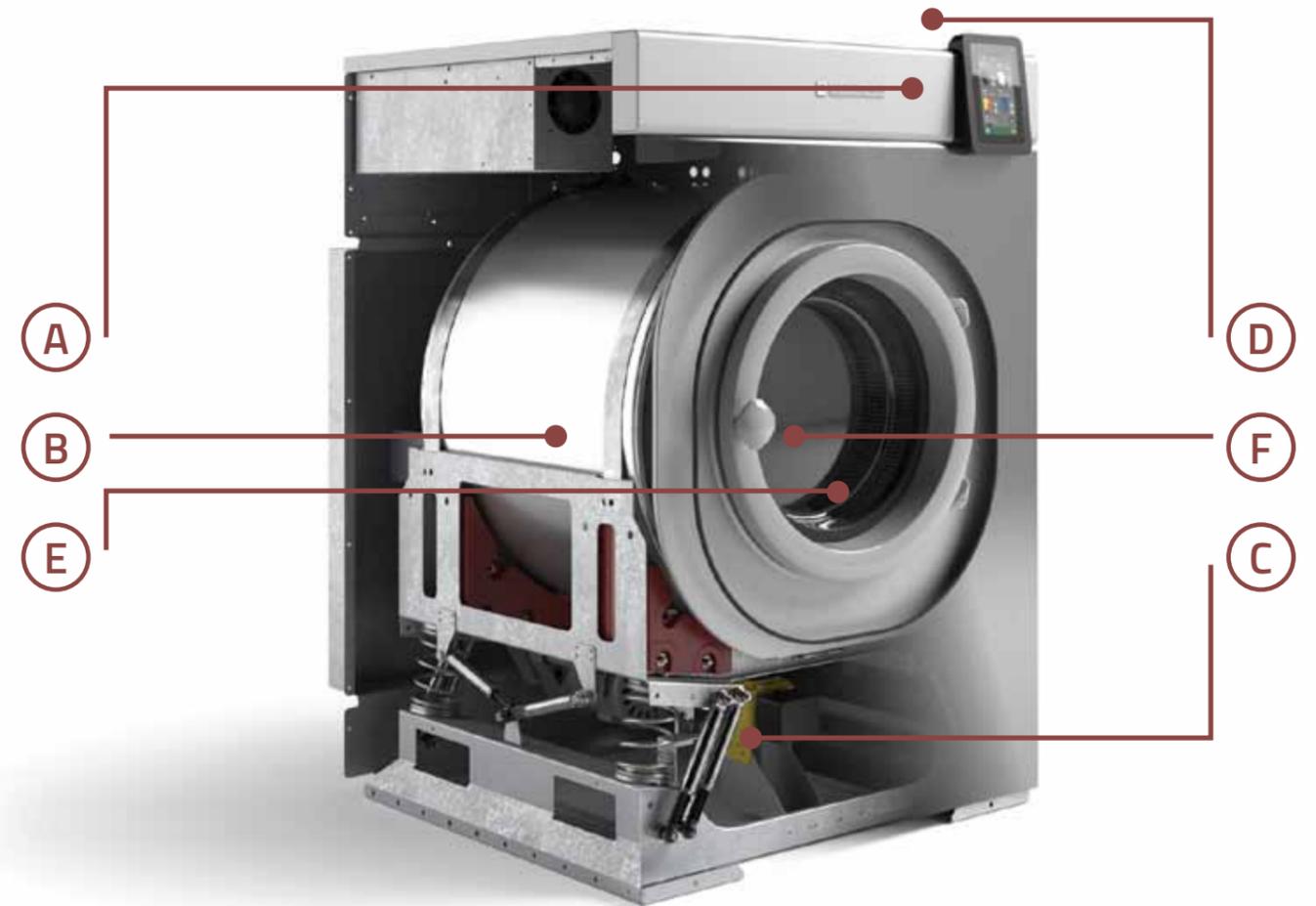
**B.** The stainless steel hemispheres of the drum ensure a gentle touch on the fabrics, even during the high spin cycle and avoid the water bounce. The large number of micro-holes of the drum guarantees a rapid flow of water.



**C.** Springs and shock-absorbers reduce the ground vibration. This means lower noise and an increased general comfort of the laundry room.



**D.** 4 compartments soap dispenser ergonomically placed.



**E.** The large door which opens up to 180° facilitates the loading and unloading of the laundry. The EPDM seals ensure a tight seal.



**F.** Ergonomic knob: a slight rotation is enough to open the door. The exclusive Grandimpianti lock system keeps the door closed and locked until the rotation of the drum ends completely.

# Medium-low spin speed washing machines with a soul

## Details make the difference

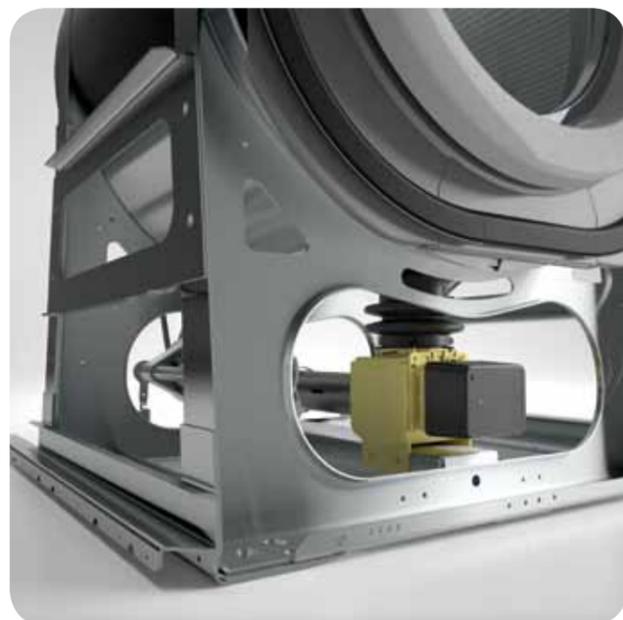
Let's get take a look to the details of GWM & GWN Wavy machines to appreciate the newness that make them great. Our new heavy-duty washing machines have a new design that combined ergonomics with the traditional features of Grandimpianti appliances. This short tour through the most representative details gives us a quick overview of its aesthetic and functional characteristics.



**A.** Also the medium-low spin speed washing machines have an innovative Italian design with shiny fronts and a vertical 7-inch display. The display inspired to the mobile technology, is touchscreen and visible even in harsh environments. It was designed to be comfortably used even with gloves.



**B.** The stainless steel hemispheres ensure a gentle touch on the fabrics, even during the high spin cycle, and avoid the water bounce. The large number of micro-holes of the drum guarantees a rapid flow of water.



**C.** It has a rigid, solid and robust frame. There aren't any springs or shock absorbers because only the drum turns. This means less wear, minimum maintenance and low noise, without affecting to the cleaning benefits which remain consistently high.



**D.** 4 compartments soap dispenser ergonomically placed.



**E.** The large door which opens up to 180° facilitates the loading and unloading of the laundry. The EPDM seals ensure a tight seal.



**F.** Ergonomic knob: a slight rotation is enough to open the door. The exclusive Grandimpianti lock system keeps the door closed and locked until the rotation of the drum ends completely.

# Grandimpianti listens to the market



We've always listened to our customers: today they're asking speed, connectivity and convenience. Our answer is an innovative solution that makes their job smarter, faster and easier.



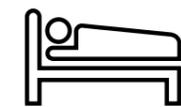
## Machines ready to go everywhere!

Listening, observing and analysing the market is crucial for us! We've always been opened to the world! This inclination has helped us to develop versatile and innovative machines, ready for different environments, industries and geographic areas: from small restaurant to large offshore platform, from food industry to cruise ships, from hospitals to self-service laundries and much more. But, above all, they are prepared to be always connected and easily managed from everywhere, anytime you need!

## National and international regulations

Collecting, analysing and developing the customer requirements is the vision that permit us to create solutions ready for sharing with a wider network of intelligences: the market. This also leads our solutions to conform to the international standard regulations (extra-UE included): we respect the safety and the environmental protection rules, therefore, our machines are ready for all markets and countries.

## A very complex target market that includes:



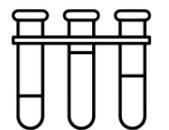
Hospitality industry



Professional laundry with Gentlewash® system



Nursing homes



Pharmaceutical industry



Mining camps



Oil facilities



Health service



Industrial laundry



Dairy sector



Multi-Housing & self-service laundry (My Clean Clean)



Ships & marine transports



Catering service & restaurant

# Application areas of our products

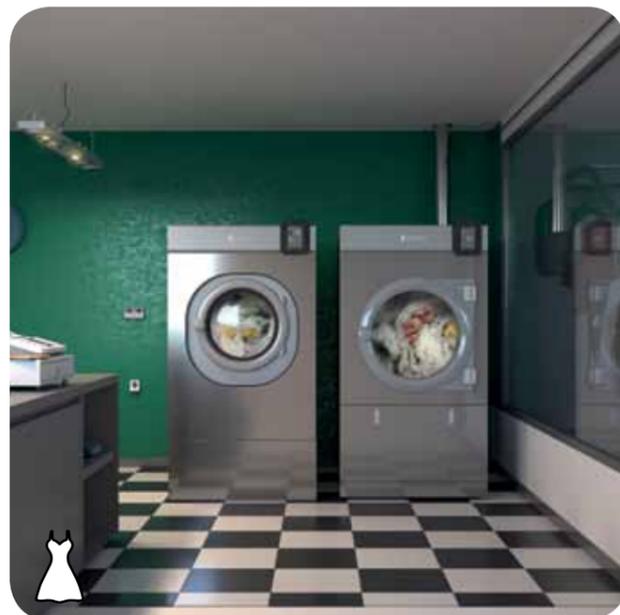


## Restaurant and hospitality

In hotels, canteens or restaurants the textile products (napkins, tablecloths, sheets and towels), usually get in touch with everyone and everything, before they end up into the laundry drum. It's clear that assuring their perfect cleanliness and hygiene is crucial; moreover because, the consumers pay more attention now to this aspect. 85% of people who eats out, for example, wouldn't return into a restaurant if they considered it dirty. So, we offer a simple and effective solution: automatized and smart machines that allow the management of textile even by unskilled users and assure always great results, without waste or additional costs.

## Industrial and professional laundry

An industrial or professional laundry must handle a huge amount of different linen for both level of dirt and type of fabrics. It's therefore important to rely on efficient and versatile equipment, which are able to guarantee optimum results in term of cleanliness and hygiene, but also a soft touch on the delicate garments like one offered by Gentlewash®. Programmable and versatile machines, then, with special programs so as to adapt themselves to specific needs, but also simple, to be used even by less experienced employees.



## Self-service

A self-service laundry require simple to use, durable, safe and completely autonomous equipment. Washing machines and dryers equipped with an extremely intuitive control panel, a resistant and reliable mechanics and a maintenance program automatically managed by an efficient electronic control. Our company offer more than that: My Clean Clean is a reliable consulting service, with 40 years of experience, that follows the investor from the idea to the opening day.

## Cruise ship

Having reliable, safe and eco-saving equipment is important, especially aboard. Textile cleaning requires freshwater, definitely expensive and limited on a ship. Thanks to our patented DWS system (dynamic weighing system) our washing machines consume only the freshwater and the detergents strictly necessary, without waste. Moreover, since it sails on blue water, it's crucial to have reliable and safe equipment, which shall not break. Here we don't accept compromise: safety approved devices and redundant systems ensure the highest standard of efficiency and effectiveness, even in the ocean.

## Oil field

We provide the best solutions for the specific needs of the oil field, offering safe, sustainable, and simple solutions able to maximize the results, optimising water and energy consumption. To one of most complex and toughest sectors, that required strong and reliable equipment, we offer an unmatched durability.

## Mobile laundry

It's the perfect solution for medium/long-term construction sites, militarised areas, car washes, service areas, field hospitals and various types of emergencies. Mobile laundries are equipped with efficient, reliable and easy to use washing machines and professional dryers. Equipment that guarantee great results with low energy consumption (water, energy and detergents). All you need are the connections for electricity and water.

## Offshore platform

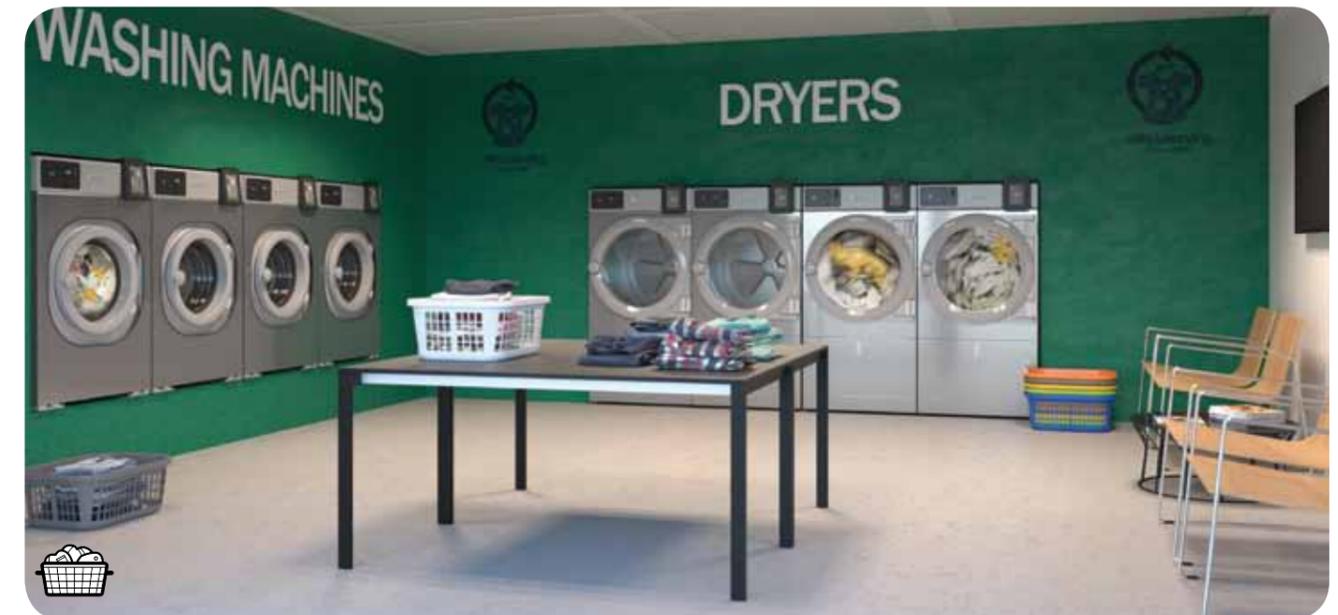
In a specific and difficult environment like an offshore platform are required heavy machines with long lifespan which can be able to wash and dry dirty working overalls, day after day. In a reduced amount of space available, we are able to create an efficient and complete laundry using strong, reliable and simple equipment. Professional machines that offer great performances with low noise and a minimum energy and water consumption.

## Food industry

Food processing facilities deal with some of the most heavily soiled linens of any industry: the clothes for dairy products, workers' uniforms, aprons, etc. require specific and effective processes which is why we offer highly programmable controls and reliable machines. Do you need to comply with specific legislation? We have the solution: our equipment are able to cover the most demanding hygienic standards, with specific programs for solving every washing and drying needs.

## Health services

There are bacteria and viruses that cannot be removed through traditional washing, a potentially infected fabric requires greater attention and a different, specific, process. It's necessary to rely on solutions that are efficient and simple to manage and able to drastically limit the human error. Hospitals, clinics or hospices, then, require a certified and easily traced hygiene process (RABC - UNI EN 14065). Our aseptic laundry solution ensures all this: changing completely the way in which the area and staff are managed, it allows to provide a certified service, in terms of safety and hygiene.



# Sustainability + Safety



## Eco-friendly soul

The patented DWS system (dynamic weighing system) optimises the consumption of energy, water and detergents according to the real amount of laundry loaded, reducing the waste and the environmental impact. The amount of unused water, normally present between the drum and the tub, is reduced thanks to a slight shift of the two components, while the position of the discharge valve, placed immediately under the tub, prevents the deposit of detergents and water. Due to the second optional water discharge valve, instead of being immediately deleted in the sewer, the water is recovered and used later. Moreover, three water inlets allows to reduce the consumption of hard and soft water, improves the dosage of detergents and balances the amount of cold and hot water, minimizing the necessity of heating. The mixer with 13 inlets, combines water and detergents before they come into contact with the fabrics. Wavy also optimises the speed rotation of the drum and the distribution of the load inside the machine, guaranteeing great results with minimum mechanical stress. Finally, the particular design of the drum ensure an effective washing and spin cycle (up to 400G for GWH, up to 200G for GWM and up to 100G and for GWN) without stressing the fibres.



## Easy installation

These washing machines are designed to be installed by a single person. The detergent mixer can to manage up to 13 pumps of liquid soap from the rear, thus simplify the connecting phase. Due to the size of the slim, the lightweight frame and the maintenance only from the front and back of the equipment, is possible to install multiple washing machines side by side or combining with dryers. Finally, the machine produces little ground vibration, thus avoiding the costs for additional soundproofing and cushioning in the installation phase.

## Ergonomic mind

Thanks to Wavy, our revolutionary graphical interface, the interaction with the machine is easy. The machines have a large porthole opening up to 180° for simplify the loading/unloading of laundry, while the strong hinges provide precise and fluid opening. The position of the dispenser is designed to facilitate the manual dosage of the detergents. Also the coin acceptor is aesthetically and functionally integrated in the front to facilitate the self-service payment. Moreover, the low noise gives the user additional comfort of use. Finally, the shape and size of the machine allow a better use of the laundry space.

## Easy maintenance

The discharge valve and the resistors are accessible from the front. The bearings of the drum are separate from the crosspiece and removable as a single component from the rear. All of this helps to make the maintenance faster and easier. The electric and electronic components are protected inside anti-fouling containers as required by the international standards. The INCOLOY® steel resistors and the EPDM® rubber gaskets are long-lasting and prevent the limes deposit. The flat transmission belt reduces the maintenance and tensioning procedures. The components are certified according to international standards. In addition, the control system allows to schedule the maintenance, according to the real use of the machines: analyses number and type of cycles, mechanical stress level, etc. allowing to plan the maintenance ahead of time.

## Safety on your fingertip

The entire process is handled by the control system that stops the machine as quickly as possible. This happens due to the interaction with an electronic board designed and certified for the management of the machine's safety. The appliance has also double safety systems and redundant alarm circuits, like an airplane, including the porthole lock. All it's certified according to the strictest international standards by an accredited laboratory.



## Our experience at your disposal

The patented DWS weighing system ensures high efficiency even with partial loads. Recent studies has shown that the washing machines are almost never loaded according to their real capacity. So the DWS system adjusts the dosage and consumption on lower loads. For example, with a 70% of loading, the machine uses 30% less of detergent and the cycle is 5 minutes shorter than usual with a lower water consumption. This means also less power required without any change of the quality of washing.

## Ready for future business

The control system of our machines can be easily upgraded through the useful and smart WavyCloud. Diagrams, programs and updates are just a click away! Our system warns about each new release, it just need to click for install it. It's easy like downloading an app on your smartphone! Our software is designed to be easy programmed and updated, in order to keep up with new technologies. So our machines, therefore, do not only adapt themselves to the current demands but are also ready for the future developments. A purchase that lasts over time!  
What if my laundry doesn't have Wi-Fi? Never mind, it's possible update the machine or download its operating data using a USB port.

\* The patented DWS system independently determines the reduction of resource consumption in relation to the real laundry loaded in the machine (in kg). Consumption corresponding to 100% of the nominal load was calculated according to the international regulatory standard ISO 9398. The standard provides for the examination of the performance of the machine as a function of a washing cycle composed of a washing phase at 60°C, 3

rinse phases and a final full power spin, corresponding to a load equal to a nominal capacity with a 1:10 ratio, of towels cotton fabric weighing 420g/m<sup>2</sup> with dimensions of 60cm x 90cm.

\*\* The dosage of detergents is automatically reduced in case it's chosen the direct management of the dosing pumps by the control system.

CHARACTERISTICS	GWM/GWH80	GWM/GWH105	GWM/GWH135	GWN/GWH180	GWN/GWH240	GWN/GWH280
Drum volume	dm <sup>3</sup> 75	dm <sup>3</sup> 105	dm <sup>3</sup> 135	dm <sup>3</sup> 180	dm <sup>3</sup> 240	dm <sup>3</sup> 280
Drum perforation	Around 8%	Around 8%	Around 8%	Around 8%	Around 8%	Around 8%
Programs number	No limits	No limits	No limits	No limits	No limits	No limits
UR percentage (GWM/GWN)	53÷70%	53÷70%	53÷70%	80÷100%	80÷100%	80÷100%
UR percentage (GWH)	43÷47%	43÷47%	43÷47%	43÷47%	43÷47%	47÷50%

### 100% NOMINAL CAPACITY\*

Water per cycle	lt 71.1	lt 85.9	lt 116.2	lt 154	lt 205.5	lt 245
Power consumption	KWh1.563	KWh2.332	KWh3.125	KWh5.168	KWh6.450	KWh7.847
Cycle length	55min	55min	56min	56min	58min	60min
Detergents**	100%	100%	100%	100%	100%	100%

### 70% NOMINAL CAPACITY\*

Water per cycle	lt 49.5	lt 60.2	lt 81.4	lt 110.7	lt 154	lt 172
Power consumption	KWh1.158	KWh1.578	KWh1.998	KWh3.166	KWh3.713	KWh4.459
Cycle length	50min	51min	50min	50min	51min	52min
Detergents**	70%	70%	70%	70%	70%	70%

### 50% NOMINAL CAPACITY\*

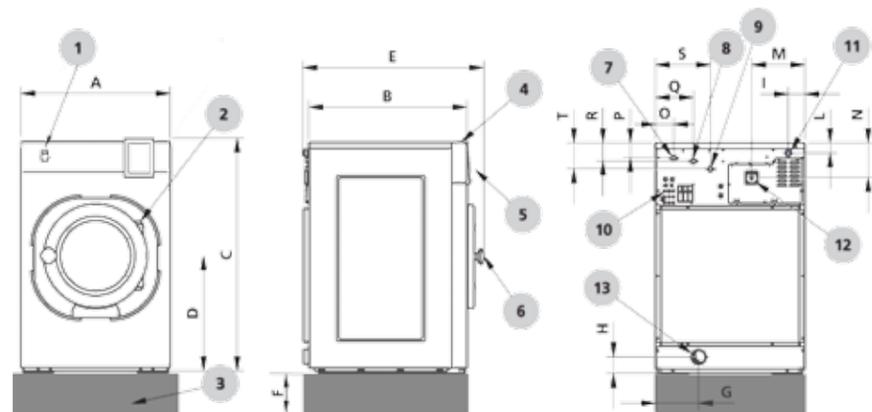
Water per cycle	lt 35.5	lt 43	lt 58.1	lt 90	lt 115	lt 142.5
Power consumption	KWh0.888	KWh1.188	KWh1.488	KWh2.232	KWh2.713	KWh3.246
Cycle length	45min	46min	47min	46min	49min	50min
Detergents**	50%	50%	50%	50%	50%	50%

# Let's take the measurements

CHARACTERISTICS	GWM80	GWM105	GWM135	GWN180	GWN240	GWN280
Capacity ratio 1:10 kg*	4 ÷ 8	5.3 ÷ 10.5	6.75 ÷ 13.5	9 ÷ 18	12 ÷ 24	14 ÷ 28
Capacity ratio 1:9 kg*	4.5 ÷ 9	6 ÷ 12	7.5 ÷ 15	10 ÷ 20	13.5 ÷ 27	16 ÷ 32
Dynamic weighing DWS	Yes	Yes	Yes	Yes	Yes	Yes
Electronic imbalance control	Yes	Yes	Yes	Yes	Yes	Yes
Spin (rpm) / G Factor	820 / 200	760 / 200	760 / 200	490 / 100	490 / 100	490 / 100
Noise level (dB)	<65	<65	<65	<65	<65	<65
Control	Wavy	Wavy	Wavy	Wavy	Wavy	Wavy
Payment systems	Mechanical coin meter / Electronic coin meter / Central payment unit / Other systems on request					
Heating power (kW)	6/9	6/9/12	9/12	12/18	18	22
Motor power (kW)	0.5	0.8	1.0	1.10	1.6	2.30
Electric power supply	220-240V 1~ 50/60Hz 230-240V 3~50/60Hz 380-415V 3N 50/60Hz 440V-480V 3~ 60Hz					
Net/Gross weight (kg)	135 / 145	170 / 185	190 / 200	255 / 270	275 / 290	290 / 305
Dynamic floor loading (kN)	1.6 ± 2.4	1.9 ± 4.0	2.2 ± 5.10	2.7 ± 3.60	3.0 ± 4.8	3.22 ± 5.60
Porthole diameter (mm)	330	410	410	460	460	460

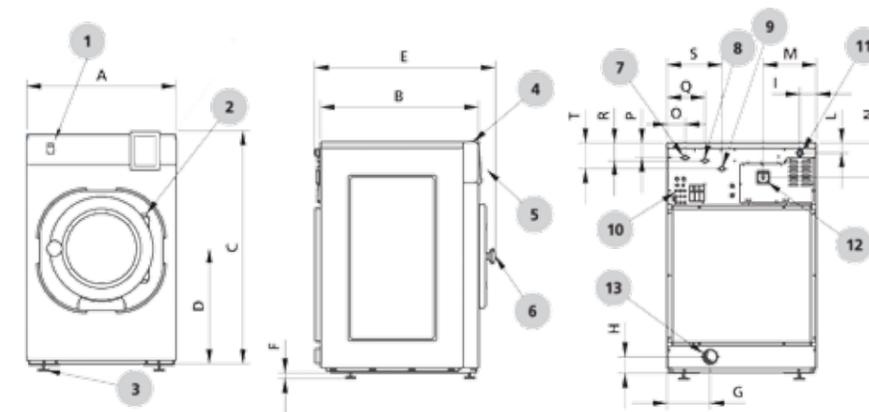
CHARACTERISTICS	GWH80	GWH105	GWH135	GWH180	GWH240	GWH280
Capacity ratio 1:10 kg*	4 ÷ 8	5.3 ÷ 10.5	6.75 ÷ 13.5	9 ÷ 18	12 ÷ 24	14 ÷ 28
Capacity ratio 1:9 kg*	4.5 ÷ 9	6 ÷ 12	7.5 ÷ 15	10 ÷ 20	13.5 ÷ 27	16 ÷ 32
Dynamic weighing DWS	Yes	Yes	Yes	Yes	Yes	Yes
Mechanical and electronic imbalance control	Yes	Yes	Yes	Yes	Yes	Yes
Spin (rpm) / G Factor	1165 / 400	1075 / 400	1075 / 400	980 / 400	980 / 400	915 / 350
Noise level (dB)	<65	<65	<65	<65	<65	<65
Control	Wavy	Wavy	Wavy	Wavy	Wavy	Wavy
Payment systems	Mechanical coin meter / Electronic coin meter / Central payment unit / Other systems on request					
Heating power (kW)	6/9	6/9/12	9/12	12/18	18	22
Motor power (kW)	1.14	1.66	2.37	3.36	4.6	4.6
Electric power supply	220-240V 1~ 50/60Hz 230-240V 3~50/60Hz 380-415V 3N 50/60Hz 440V-480V 3~ 60Hz			220-240V 3~50/60Hz 380-415V 3N 50/60Hz 440V-480V 3~ 60Hz		
Net/Gross weight (kg)	190 / 205	215 / 240	260 / 280	385 / 400	435 / 455	475 / 520
Dynamic floor loading (kN/Hz)	1.9 ± 0.5 / 19.4	2.2 ± 0.5 / 17.9	2.7 ± 0.5 / 17.9	4.0 ± 0.7 / 16.3	4.6 ± 1.1 / 16.3	5.0 ± 1.1 / 15.25
Porthole diameter (mm)	330	410	410	460	460	460

Provide GFCI (differential switch) Class "B" once the appliance is installed



- 1 Emergency button
- 2 Porthole hinge
- 3 Concrete floor
- 4 Aesthetic angle closure
- 5 Dashboard
- 6 Handle
- 7 Soft water connection
- 8 Hard water connection
- 9 Hot water connection
- 10 Soap connection
- 11 Electrical connection
- 12 Disconnecter
- 13 Drain (3")

Provide GFCI (differential switch) Class "B" once the appliance is installed



- 1 Emergency button
- 2 Porthole hinge
- 3 Feet
- 4 Aesthetic angle closure
- 5 Dashboard
- 6 Handle
- 7 Soft water connection
- 8 Hard water connection
- 9 Hot water connection
- 10 Soap connection
- 11 Electrical connection
- 12 Disconnecter
- 13 Drain (3")

	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T
GWM80 (mm)	710	660	1130	582	780	25	230	88	88	55	284	185	98	80	203	96	213	165
GWM105 (mm)	795	660	1245	620	780	25	230	88	88	55	284	185	98	80	203	96	293	138
GWM135 (mm)	795	830	1245	620	935	25	230	88	88	55	284	185	98	80	203	96	293	138
GWN180 (mm)	970	940	1460	765	1000	25	270	109	88	55	329	185	98	100	203	143	308	185
GWN240 (mm)	970	1045	1460	765	1105	25	270	109	88	55	329	185	98	100	203	143	308	185
GWN280 (mm)	970	1187	1460	765	1247	25	270	109	88	55	329	185	98	100	203	143	308	185
	Width		Depth		Height													

	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T
GWH80 (mm)	710	660	1130	582	780	25	230	88	88	55	284	185	98	80	203	96	213	165
GWH105 (mm)	795	660	1245	620	780	25	230	88	88	55	284	185	98	80	203	96	293	138
GWH135 (mm)	795	830	1245	620	935	25	230	88	88	55	284	185	98	80	203	96	293	138
GWH180 (mm)	970	940	1460	765	1000	25	270	109	88	55	329	185	98	100	203	143	308	185
GWH240 (mm)	970	1045	1460	765	1105	25	270	109	88	55	329	185	98	100	203	143	308	185
GWH280 (mm)	970	1187	1460	765	1247	25	270	109	88	55	329	185	98	100	203	143	308	185
	Width		Depth		Height													

## Credits

agency:  
consilia.it

graphics art direction:  
Carlo Busiol  
Alex Nalesso

copy:  
Giovanna Cesarato

## Grandimpianti i.l.e - Ali s.p.a.

Via Masiere 211/c  
32037 Sospirolo (BL) Italy

### information

info@grandimpianti.com  
ph. +39 0437 848711  
fax +39 0437 879108

### sales

com@grandimpianti.com  
ph. +39 0437 848711

### customer service

tec@grandimpianti.com  
ph. +39 0437 848800

Ref. GR00000000B048 - 10/2016

**grandimpianti i.l.e - Ali spa**  
via masiere, 211/c - 32037 sospiolo (BL) Italy  
ph. +39 0437 848 711 - fax +39 0437 879 108  
www.grandimpianti.com - info@grandimpianti.com



COMPANY WITH  
MANAGEMENT SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =  
= ISO 14001 =

an Ali Group Company



The Spirit of Excellence