

HASS

SMART Car Wash

Powered by:



The better way to clean

CarWash





EHRLE factories and warehouses



*Illertissen, Germany
metal construction*



*Illertissen, Germany
CarWash factory*



*Dietenheim, Germany
final assembly*



*Leeds, England
main warehouse and sales*



*Szczecin, Poland
main warehouse and sales distribution*

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Rim cleaner

with EHRLE RimCleaner



Wheel cleaning with Ehrle RimCleaner, made easy.

More and more car wash customers pay their attention to a perfect and through rim cleaning. In the past car wash customers used to be bringing their own rim cleaners in spray bottles and been using them at the self-service washing area. It was detrimental practice. Firstly – an illegal , secondly – acidic products were causing significant long-term damage on the washing plates, rims and brake systems.

But now it is over. EHRLE has developed new technology with excellent cleaning results with minimal chemical consumption (approx. 20ml/ rim) guaranteed. The RimCleaner is acid-free and organic degradable. With the additional rim cleaning program the washing turnover is being increased by up to 30%.

Technology

An additional pre-spray device is installed at the washing area. It has separate low pressure system with the RimCleaner concentrate. At the customer control panel there is an additional button launching rim cleaning program to be used at customer's own pace.

The rim cleaner concentrate is simply mixed in the spraying device and sprayed onto the rim. Within short time of exposure the rims are clean and shine again thanks to the washing program „Clean“. Following the further program sequence the rims get the lacquer protection and preservation as well. The alkaline recipe of the rim cleaner does not harm the rims nor the washing area.



1. Dirty vehicle rim

Vehicle rims, particularly aluminum ones, are especially prone to get smudged with brake abrasion dust and common road and tires impurities. This insoluble film of dirt, preserved by high temperature, is very difficult to remove. Mechanical cleaning appears to be not efficient. If rim cleaning is not an often routine layers of dirt are almost indelible while common cleaning.

2. Apply the RimCleaner

First- apply the EHRLE RimCleaner onto the rims with spray mist using a pre-spray device. The RimCleaner will develop a neon-yellow-green foam of an intensive cleaning potency. It takes one to two minutes while the foam works the dirt down. Then it dissolves signaling the end of dirt removal.

3. Wash off the RimCleaner

After the exposure time the product is being washed off along with the rims' dirt during the regular cleaning program.

4. Clean result!

As a result the customer gets sparkling clean vehicle rims without any, even the most stubborn, dirt remaining.





Precleaning with Active-Foam

with SoftFoam-Lance



Precleaning with Soft-Active-Foam

In order to achieve an optimal cleaning result, the vehicle surface is pre-sprayed with a highly effective Active-Foam concentrate. EHRLE offers various high-performance products, which differ in cleaning power and fragrances. The right Soft-Active-Foam for every application.

Technology

When selecting an Active-Foam program, the water output at the washing lance is reduced by 70% and a precisely preset foam concentrate in a mixing ratio of 1.0 - 2.5%, continuously adjustable, is added to the high-pressure jet.

This application is extremely economical and prevents excessive amounts of foam on the vehicles. The wash customer can spray the vehicle with soft foam all around without stress, without overstraining and in a targeted manner at the areas that show stubborn impurities.

The EHRLE Soft-Active-Foam gives dirt no chance and creates an unprecedented cleaning result and a perfect foam appearance with the smallest dosage and low water consumption.

By using the Soft-Active-Foam, the customer extends the washing time by an average of 30%, gets flawless cleanliness and the self-service car wash operator analogously a higher washing turnover.



SoftFoam lance with Active-Foam

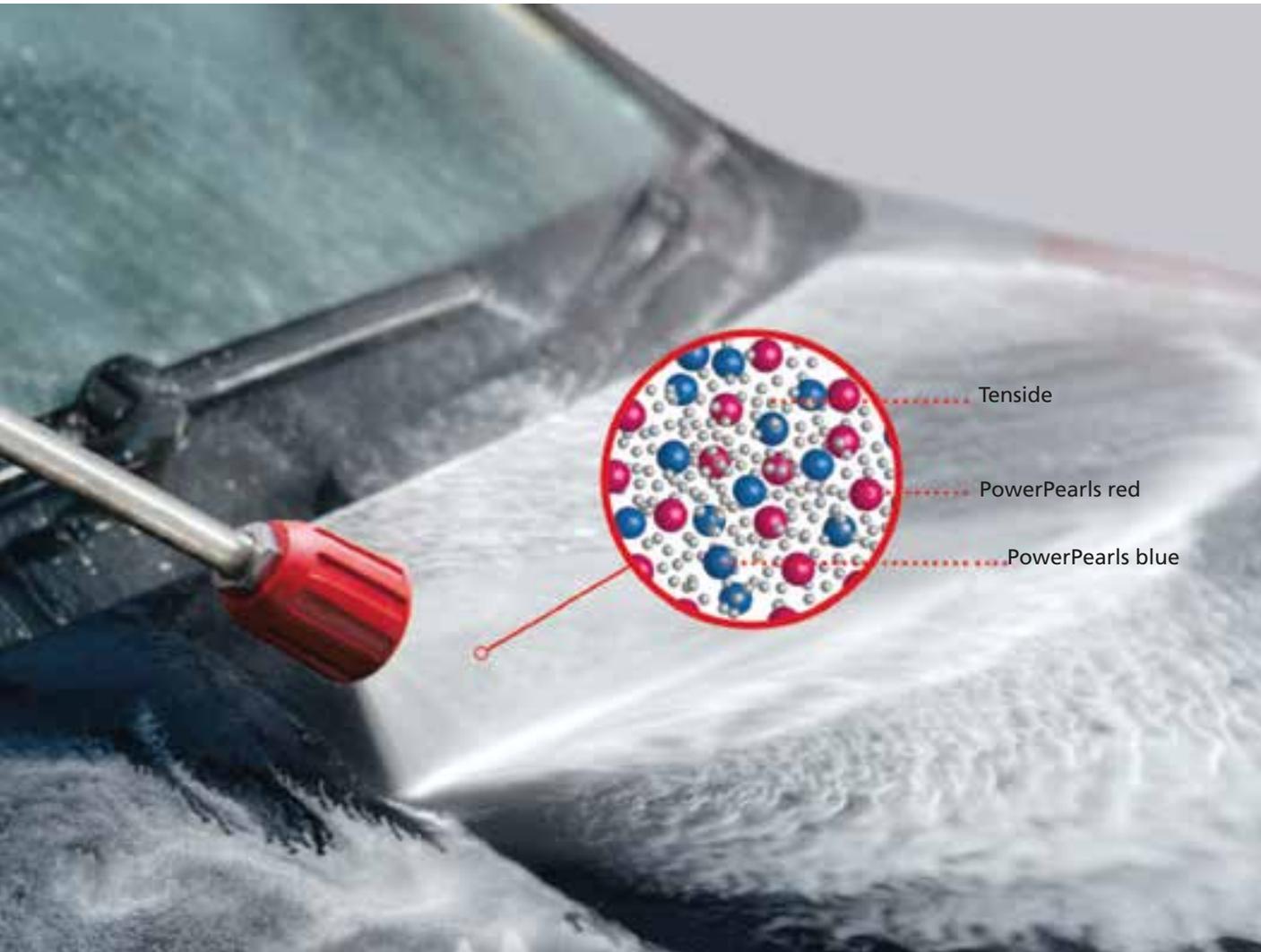
The Active-Foam medium is fed to the SoftFoam lance via a separate high-pressure pipe system with a precisely pre-dosed SoftFoam portion. According to Bernoulli's law, the high-pressure switching pistol and an air injector create a dynamic pressure drop below atmospheric pressure, which sucks in air completely free of charge and mixes it with the active foam medium. The larger the amount of air, the better the foam formation and the EHRLE active foam system is at the top of the list in terms of efficiency and wear resistance. In addition, a perfect foam pattern is achieved via a downstream whirling chamber. This system is very simple and has no moving parts, making it particularly robust, low-maintenance and versatile.





Brushless cleaning

with ActivePower Pearl MicroPowder



The challenge

The big challenge in car washing is that only the visible and coarse dirt on the paint surface can be removed with high-pressure washing alone. After the dirt has been removed, a film of dirt or grey film always remains on the paint, which can only be removed by contact with brushes, textile or foam strips, cloths or similar. It is pre-programmed that fine dirt particles remaining in the brushes, sponges or cloths scratch the paint and thus damage it.

ActivePower Pearl MicroPowder

The EHRLE ActivePower Pearl MicroPowder removes the dirt film by direct mechanical contact of specially developed fine micro powder beads, which are applied to the surface to be cleaned by means of a high-pressure gun with a special ceramic nozzle. The product is extremely gentle on the material, leaves no residues and also has an additional corrosion protection component. The EHRLE ActivePower Pearl MicroPowder® has been specially developed by the experts in the EHRLE chemistry department for use in self-service washing systems and has been consistently improved, further developed and constantly adapted to changing environmental protection conditions over the years.

1. Purification



This is the basis for further care steps: The self-service high-pressure wash with ActivePower Pearl MicroPowder® guarantees the best washing result.

3. Paint protection



UltraProtection® is sprayed onto the vehicle surface with decalcified, hot water. The vehicle surface is optimally protected and the water rolls off the sealed lacquer surface.

2. Clear rinsing



The clear rinsing process rinses off the detergent residues of ActivePower Pearl MicroPowder® and dissolved dirt with cold, clear water. The rinse program can optionally be operated with decalcified or demineralized osmosis water.

4. High polish



This wash cycle removes all remaining mineral deposits chemically. A perfectly shiny vehicle is the result of this care process after drying. A leathering of the vehicle is not necessary.



SmartWash / SmartWash Plus

Self-service washing systems 1-bay, cabinet version outdoor, electrically heated



Especially suitable for petrol stations

The 1-place self-service washing systems SmartWash and SmartWash Plus are ideal for areas with limited space.

It is a perfect complement to normal everyday business, e.g. at petrol stations or workshops.

The SmartWash is an economical and easy-to-use compact EHRLE 1-place self-service washing system. The system guarantees a safe and modern car wash. Thanks to the brushless technology of ActivePower Pearl MicroPowder®, mixed in a high-pressure jet, dirt can be removed quickly and effectively.

The system is available as standard version with water softening and as SmartWash Plus version with additional reverse osmosis system.

The washing water is heated by means of an oil burner or electric boiler.

SW *SmartWash*



SW+ *SmartWash PLUS*



<i>Technical data</i>	<i>SmartWash electro heated</i>	<i>SmartWash Plus electro heated</i>
Voltage	3/PE/AC/50Hz/400V	3/PE/AC/50Hz/400V
Operating pressure	130bar/13Mpa	130bar/13Mpa
Max.pressure	150bar/15Mpa	150bar/15Mpa
Water output	660l/h	660l/h
Nozzle size	60056	60056
Hot water output	60°C	60°C
Heating capacity	12kW - Electric boiler	12kW - Electric boiler
Pump rpm	900U/min	900U/min
Capacity water softening	32m ³	32m ³
Permeate capacity reverse osmosis	-	2.400l/d
Capacity osmosis tank	-	100l
Capacity MicroPowder dispenser tank	15l	15l
Capacity UltraProtection tank	10l	10l
Capacity SuperFinish tank	10l	10l
Connected load	16,5kW / 26A	17,2kW / 28A
Electrical fuse	3x32A	3x32A
Weight	650kg	770kg
Dimensions	1260x775x1755mm	1380x1080x1755mm



SmartWash / SmartWash Plus

1-place self-service washing systems oil-heated or electrically heated



SmartWash / SmartWash PLUS in standard version

SmartWash / SmartWash PLUS in standard version of delivery. The scope of delivery does not include washing area equipment. The washing area equipment can be adjusted variably.



SmartWash / SmartWash PLUS with system bracket

SmartWash / SmartWash PLUS with attached stainless steel Washing boom with 4x1.5W lighting LED. This range of accessories includes the HP hose, as well as integrated HP washing area equipment. This is only possible for system variants 1 and 2.



Floor boom for SmartWash or other systems

SmartWash / SmartWash PLUS with separate mast and washing boom for floor installation. Integrated Washing area lighting LED 2x30W. Attachment option for ceiling or double ceiling gyroscope and 2 different washing facilities.





JetWash / JetWash Plus

Stationary JetWash self-service washing systems for 1-3 wash places, gas, oil, electrically heated or remote heat

Standard equipment JetWash / JetWash Plus

The JetWash systems are available with 4 standard washing and care programs. Optionally there is the possibility to upgrade with additional programs.

The systems are available with all EHRLE payment systems, as well as with the latest CentralPay technology.

The entire washing technology is housed in a powder-coated stainless steel housing and both JetWash and JetWash Plus can be heated with oil, gas, remote heat or electrically.

Like every car wash, JetWash car washes are equipped with a water softener. In addition, the JetWash Plus version has an 800-litre deionised water tank and a reverse osmosis system. Reverse osmosis offers not only fewer water stains after washing and drying, but also a consistently high quality of washing, even with an above-average number of customers.

The car wash is controlled by a modern Siemens computer and the TFT touch screen installed in the control system gives the owner access to information on all important parameters of the car wash and detailed financial information on the revenue and turnover of the car wash.





Self-service washing systems for 1-3 washing places,
 outdoor cabinet version electrically heated.
 Version for oil, gas, district heating are available on request.

JW *JetWash*



JW+ *JetWash PLUS*



Technical data	JetWash electro 1-3 wash bays			JetWash Plus electro heated		
	1 WP	2 WP	3 WP	1 WP	2 WP	3 WP
Number of bays	1 WP	2 WP	3 WP	1 WP	2 WP	3 WP
Voltage	3/PE/AC/50Hz/400V			3/PE/AC/50Hz/400V		
Operating pressure	130bar/13Mpa			130bar/13Mpa		
Max.pressure	150bar/15Mpa			150bar/15Mpa		
Water output	660l/h			660l/h		
Nozzle size	60056			60056		
Hot water output	60°C			60°C		
Heating capacity /12kW Electric boiler	18kW	24kW	36kW	18kW	24kW	36kW
Pump rpm	900U/min			900U/min		
Capacity water softening	120m ³			120m ³		
Permeate capacity reverse osmosis	-			7.200l/da bei 12°C Wassertemp.		
Capacity osmosis tank	-			800l		
Capacity MicroPowder dispenser tank	35l			35l		
Capacity UltraProtection tank	10l			10l		
Capacity SuperFinish tank	10l			10l		
Connected load	23kW	32kW	41kW	24kW	33kW	42kW
Electrical fuse	3x50A	3x63A	3x63A	3x50A	3x63A	3x80A
Weight	910kg	950kg	990kg	1200kg	1300kg	1360kg
Dimensions	1 WP: 2245x970x2100mm 2+3 WP: 2270x970x2100mm			1WP: 3250x970x2100mm 2+3WP: 3275x970x2100mm		

JetWash / JetWash Plus

Stationary JetWash self-service washing systems for 1-3 wash places, gas, oil, electrically heated or remote heat







CarWash Plus

Stationary self-service washing systems for 2-4 washing places, gas, oil, electrically heated or with remote heat



Standard equipment CarWash Plus

The CarWash systems are available with 4 standard washing and care programs. There is the option of upgrading with additional programs too.

The systems are also available with all EHRLE payment systems, as well as with the latest CentralPay technology.

An internal touch screen display serves to display and control all important operating parameters as well as to evaluate all previous washing activities and washing sales.

Due to a special frost protection system and underfloor heating of the wash places, minus temperatures have no chance.

The CarWash, exactly like the Jet Wash, contains water softener which is of double size here however. To defy the quantity of the wash places, as well as an 800l VE water tank and a reverse osmosis plant against annoying water stains.

The car wash is controlled by a modern Siemens computer and the TFT touch screen installed in the control system which gives the owner access to information about all important parameters of the car wash and detailed financial information of the revenue and turnover of the car wash.



CarWash Plus

Self-service washing systems for 2-4 washing places, outdoor cabinet version, oil, gas, with district heating or electrically heated.



Technical data	2-4 washing places, Oil			2-4 washing places, Gas			2-4 washing places, Remote heating			2-4 washing places, Electric		
	2 WP	3 WP	4WP	2 WP	3 WP	4WP	2 WP	3 WP	4WP	2 WP	3 WP	4WP
Washing places	2 WP	3 WP	4WP	2 WP	3 WP	4WP	2 WP	3 WP	4WP	2 WP	3 WP	4WP
Voltage	3/PE/AC/50Hz/400V			3/PE/AC/50Hz/400V			3/PE/AC/50Hz/400V			3/PE/AC/50Hz/400V		
Operating pressure	130bar/13Mpa			130bar/13Mpa			130bar/13Mpa			130bar/13Mpa		
Max.pressure	150bar/15Mpa			150bar/15Mpa			150bar/15Mpa			150bar/15Mpa		
Water output	660l/h			660l/h			660l/h			660l/h		
Nozzle size	60056			60056			60056			60056		
Hot water output	60°C			60°C			60°C			60°C		
Heating capacity	50kW	55kW	55kW	55kW	74kW	85kW	55kW	74kW	85kW	24kW	36kW	42kW
Pump rpm	900U/min			900U/min			900U/min			900U/min		
Capacity water softening	2x120m ³			2x120m ³			2x120m ³			2x120m ³		
Permeate capacity reverse osmosis	7.200l/at 12°C Water temp.			7.200l/at 12°C Water temp.			7.200l/at 12°C Water temp.			7.200l/at 12°C Water temp.		
Capacity osmosis tank	800l			800l			800l			800l		
Capacity MicroPowder dispenser tank	35l			35l			35l			35l		
Capacity UltraProtection tank	10l			10l			10l			10l		
Capacity SuperFinish tank	10l			10l			10l			10l		
Connected load	9kW	11kW	14kW	8kW	10,4kW	13kW	9kW	11kW	14kW	32kW	46,4kW	54,6kW
Electrical fuse	3x16A	3x20A	3x32A	3x16A	3x20A	3x32A	3x16A	3x20A	3x32A	3x63A	3x80A	3x100A
Weight	1610kg	1640kg	1670kg	1610kg	1640kg	1670kg	1610kg	1640kg	1670kg	1610kg	1640kg	1670kg
Dimensions	4770x970x2100mm			4770x970x2100mm			4770x970x2100mm			4770x970x2100mm		

CarWash Plus

Stationary self-service washing systems for 2-4 washing places, gas, oil, electrically heated or with remote heat





CompactLine

The series for beginners in the CarWash business and tough cost accountants



The CompactLine modular system

The CompactLine series is based on a modular system.

Here you can assemble an individual washing system from a large number of different modules and place it in your own premises or in an EHRLE Technik Container of your choice.

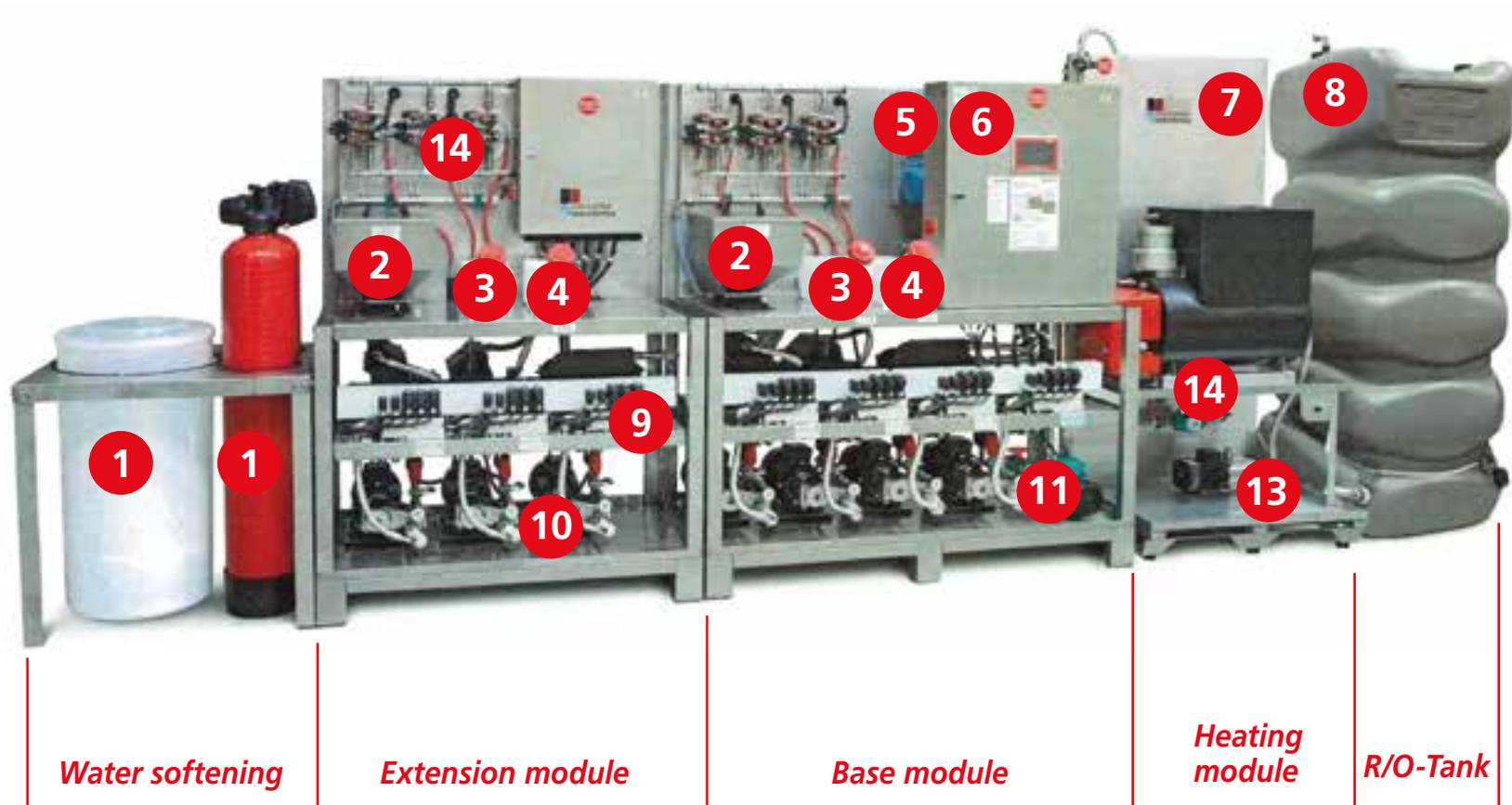
The basic module, which supplies 2, 3 or 4 washing places, can be supplemented at any time with an extension module, which also supplies 2, 3 or 4 washing places.

This makes it possible to assemble a self-service washing system with up to 8 washing places.

Each module is designed from the ground up for 4 washing places. If not all locations are used, it is still possible to retrofit the module with one or more kits.



- 1 Water softening with brine tank
- 2 MicroPowder dispenser tank
- 3 UltraProtection tank
- 4 SuperFinish tank
- 5 Reverse osmosis system
- 6 Main electrical cabinet
- 7 Heating module gas-heated
- 8 Osmosis tank 1000l
- 9 Magnetic valve collector
- 10 Engine with high pressure pump
- 11 Osmosis feed pump
- 12 FBH pump
- 13 Hot water booster pump
- 14 Foam system



CompactLine

Basic and extension module



Technical data	CompactLine 2 Wash bays	CompactLine 3 Wash bays	CompactLine 4 Wash bays	CompactLine 5 Wash bays
Voltage	3/PE/AC/50Hz/400V	3/PE/AC/50Hz/400V	3/PE/AC/50Hz/400V	3/PE/AC/50Hz/400V
Operating pressure	2x130bar/13Mpa	3x130bar/13Mpa	4x130bar/13Mpa	5x130bar/13Mpa
Max. pressure	2x150bar/15Mpa	3x150bar/15Mpa	4x150bar/15Mpa	5x150bar/15Mpa
Water output	2x720l/h	3x720l/h	4x720l/h	5x720l/h
Nozzle size	60056	60056	60056	60056
Max. inlet temperature	60°C	60°C	60°C	60°C
Supplied heating power	55kW	74kW	85kW	105kW
Pump rpm	1400U/min	1400U/min	1400U/min	1400U/min
Capacity water softening	2x120m ³	2x120m ³	2x120m ³	2x180m ³
Permeate capacity reverse osmosis	7.200l/at 12°C Water temp.	7.200l/at 12°C Water temp.	7.200l/at 12°C Water temp.	7.200l/at 12°C Water temp.
Capacity MicroPowder dispenser tank	1x35l	1x35l	2x35l	2x35l
Capacity UltraProtection tank	1x10l	1x10l	2x10l	2x10l
Capacity SuperFinish tank	1x10l	1x10l	2x10l	2x10l
Connected load	11,6kW	15,6kW	19,6kW	23,6kW
Electrical fuse	3x25A	3x32A	3x50A	3x50A
Weight	390kg	420kg	450kg/ 390kg + 350 kg (2+2)	420kg + 350kg
Dimensions	1775x740x1900mm	1775x740x1900mm	450kg/ 390kg + 350 kg (2+2) Erweiterung: 1275x740x1900mm	Grundmodul: 1775x740x1900mm Erweiterung: 1275x740x1900mm

CarWash Indoor ModulLine

Advanced technology compact in one room

ModulLine pump unit

The individual ModulLine high-pressure pump units are installed in series as required in the dedicated technical room (Technology Container) and connected to the power and water supply.

In addition, hot water heating modules, storage modules charging modules and foam generators can be arranged in the same modular system structure.

The EHRLE ModulLine system can be easily extended at any time.

All modules are networked via an Ethernet/LAN connection. The washing stations communicate with the individual technology modules via a serial connection.





Technical data	System variant 1-2	System variant 3SE-7	System variant 8SE-10
Voltage	3/PE/AC/50Hz/400V	3/PE/AC/50Hz/400V	3/PE/AC/50Hz/400V
Operating pressure	130bar/13Mpa	130bar/13Mpa	130bar/13Mpa
Max. pressure	150bar/15Mpa	150bar/15Mpa	150bar/15Mpa
Water output	660l/h	660l/h	660l/h
Nozzle size	60056	60056	60056
Max. inlet temperature	60°C	60°C	60°C
Supplied heating power	50kW	50kW	50kW
Pump rpm	900U/min	900U/min	900U/min
Capacity MicroPowder dispenser tank	1x25l	1x25l	1x25l
Capacity UltraProtection tank	1x10l	1x10l	1x10l
Capacity SuperFinish tank	1x10l	1x10l	1x10l
Connected load	3,2kW	3,4kW	3,6kW
Electrical fuse	3x16A	3x16A	3x16A
Weight	190kg	200kg	200kg
Dimensions	600x740x2160mm	600x740x2160mm	600x740x2160mm



Operator terminals

Robust control terminals made of stainless steel - 4-digit display with program selection button



LCE Operating Terminal



LCE operating terminal made of stainless steel

- Suitable for wall mounting
- Large illuminated program buttons, IP 65 safe housing
- 2 internal stainless steel hinges
- Number of program buttons: 4 to 8
- Emergency stop or STOP button
- 4-digit display
- Display of the selected washing amount
- Display of the remaining washing time
- Reference to the washing area to be used equipment
- CC-Talk coin validator for coins (option)
- MDB key system for RFID CarWash key (option)
- CC-Talk note reader for 4 banknotes (option)
- Stainless steel plexi weather protection
- 3 point locking with PZ half cylinder
- Piezo housing heating 250W (option)
- Modern carbon design

SafePillar control terminal – a reference product - stainless steel

- suitable for wall and floor mounting with concrete stainless steel installation frame;
- LED-illuminated control panel;
- internal switch box, waterproof, for protection of all control and operating devices IP65;
- Integrated coin extraction system (option)
- large illuminated program buttons, IP 65 safe housing;
- 4 internal stainless steel hinges;
- number of program buttons: 4 to 8;
- emergency stop or STOP button;
- 4-digits display;
- selected washing amount display;
- remaining washing time display;
- reference to the particular washing machine being currently in service
- CC-Talk coin validator for coins (option);
- MDB key system for RFID CarWash key (option)
- CC-Talk note reader for 4 banknotes (option)
- Stainless steel plexi weather protection
- 5-point locking with PZ half cylinder
- Housing heater 1000W (option)
- Modern carbon design

Operating terminals

There are two decision-worth reasons to visit the self-service cleaning facility : flawless cleaning results and customer-friendly operating terminal.

Simple and clear control elements give the real washing experience to the self-controlled car washing process.

Both payment and control elements are housed in a sturdy stainless steel case.

The washing and care programs are carried out using waterproof, impact-resistant and illuminated program buttons. This button area provides the customer detailed information about respective washing and care programs as well. The case of SafePillar is equipped in LED lighting for the better legibility of washing information in dark.

The large 4-digits display shows the initial amount of funds as well as the remaining amount after the program has started on.

A waterproof switch box inside the SafePillar provides optimal protection of the payment and the operating devices as well.

A built-in heater prevents the control technology in operating terminals from vandalism thanks to five points locking system and hidden hinges.

In addition to a PZ half-cylinder lock a large padlock can be attached on site.

The operating terminals are through a serial bus connection RS458 connected to the main control cabinet and communicate the entire operational process.

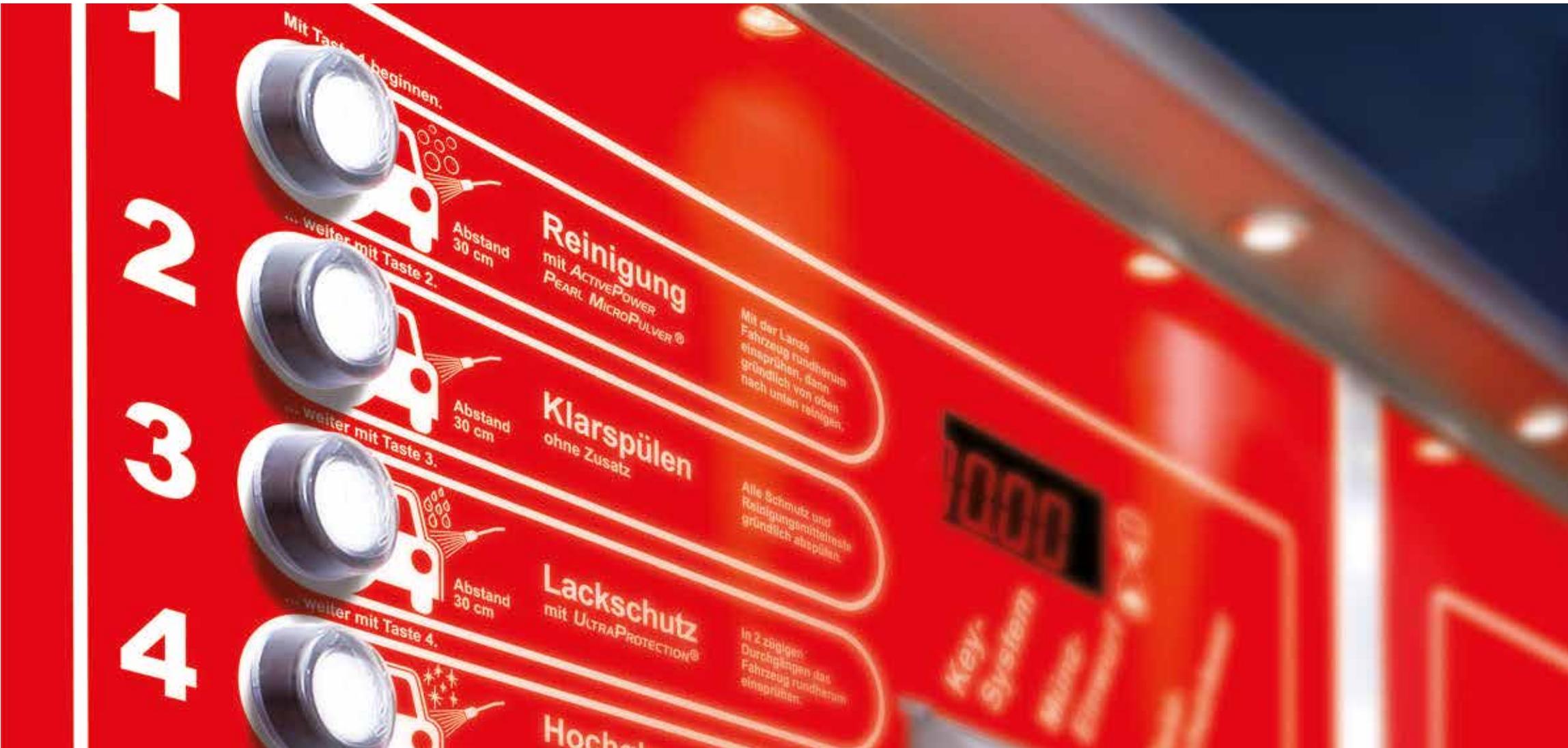
SafePillar, programming terminal





EHRLE Washing and care programs

Perfectly tailored to customer needs





Cleaning with ActivePower Pearl MicroPowder

The main course of vehicle cleaning is high-pressure cleaning with ActivePower Pearl MicroPowder®. This is the basis for further care steps and guarantees satisfied washing customers. The self-service high-pressure wash with ActivePower Pearl MicroPowder® ensures the best washing result.



Rinsing

The rinse process rinses off the detergent residues of ActivePower Pearl MicroPowder® and dissolved dirt with cold, clear water. This serves as the basis for the further maintenance steps. The rinse program can optionally be operated with decalcified or demineralized osmosis water.



Paint protection with UltraProtection®

UltraProtection® is sprayed onto the surface of the vehicle with a washing jet using decalcified and hot water. The vehicle surface is optimally protected and the water rolls off the sealed varnish surface. The synthetic structure of UltraProtection® also prevents the windscreen wipers from smearing in the rain.



Stain-free high gloss with SuperFinish®

As a final care programme, EHRLE recommends rinsing with decalcified, demineralized osmosis water with the addition of SuperFinish®. This wash cycle removes all remaining mineral deposits chemically. A perfectly shiny vehicle is the result of this care process after drying. A leathering of the vehicle is not necessary.



EHRLE add-on programs

The EHRLE additional programs for washing professionals and increased sales for customers



Additional programs



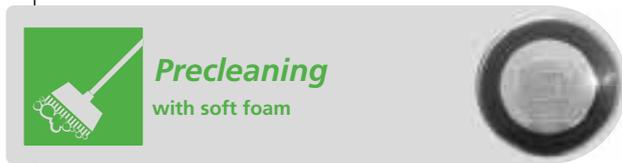
Cleaning with RimCleaner

In the first step, the EHRLE RimCleaner is pre-sprayed with a uniform spray applied to the rim. The RimCleaner develops a neon-yellow-green foam on the rim and develops the intensive cleaning power there. This should act for 1-2 minutes until the foam has broken down giving signals of the end of dirt detachment. After the exposure time, the product with the detached rim dirt is cleaned with the cleaning washing program. The car wash customer can combine this process directly with washing the vehicle. The RimCleaner is acid-free and biodegradable. The consumption is a minimum of approx. 20-25ml / rim concentrate.



Pre-cleaning with SoftFoam lance and SoftFoam

In order to achieve a perfect cleaning result, EHRLE recommends pre-cleaning with SoftFoam a powerful dissolution of dirt, traffic film and insect residues. This washing process will transport the SoftFoam to the washing area via a separate pipe system. In addition, the amount of needed water is reduced by 70% in order to achieve economical consumption compared to other commercially available foam systems. The foam is applied to the cleaned car body surface using the separate SoftFoam lance.



Pre-cleaning with SoftFoam brush (optional) and SoftFoam

In order to achieve a perfect cleaning result, EHRLE recommends pre-cleaning with SoftFoam a powerful dissolution of dirt, traffic film and insect residues. This washing process will transport the SoftFoam to the washing area via a separate pipe system. In addition, the amount of needed water is reduced by 70% in order to achieve economical consumption compared to other commercially available foam systems. The foam is applied to the cleaned car body surface using the separate SoftFoam lance or optionally by brush (delivered upon order).



EHRLE additional programs

For professional washing and sales increase for the customers.



Additional programs



Pre-cleaning with ActivePower Pearl MicroPowder® low pressure

Pre-cleaning with ActivePower Pearl MicroPowder® in the low-pressure process offers an intensive pre-wash at an economical price-performance ratio. The amount of water is reduced by half and the micro- Powder applied in a fine spray jet of 25bar in a higher concentration. It will be the same High pressure washing lance used as when cleaning with ActivePower Pearl MicroPowder® under high pressure



Cleaning with a foam brush and ActivePower Pearl MicroPowder®

Optionally, in system variants 6, 7 and 9, the foam brush can be used in conjunction with the ActivePower Pearl MicroPulver®. This leaves nothing to be desired more for the car wash customer and ensures additional sales at the washing bays. This system is offered itself as an autonomous and not expensive alternative to the System variant 5.



Cleaning with a foam brush and ActivePower Pearl MicroPowder®

Optionally, in the 3SE and 8SE system variants, the foam brush can be used in conjunction with the ActivePower Pearl MicroPowder® can be used. This leaves nothing to be desired for the car wash customer and ensures Increased sales at the wash bays. This system offers itself as an autonomous and inexpensive alternative for system variant 5. The 3SE and 8SE system variants are suitable for outside temperatures of up to -3°C especially for areas with little frost.



Combinations of Washing and care programs

EHRLE offers 10 combinations of washing and care programmes:

System variation 1

- Cleaning with APPMP and jet pipe
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe

System variation 2

- Pre-cleaning with APPMP low pressure and jet pipe
- Cleaning with APPMP and jet pipe
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe

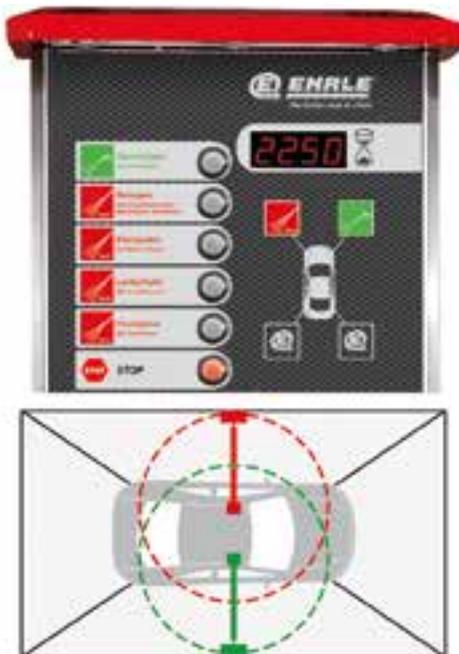
System variation 3 SE (Southern Europe)

- Cleaning with APPMP and jet pipe and foam brush
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe



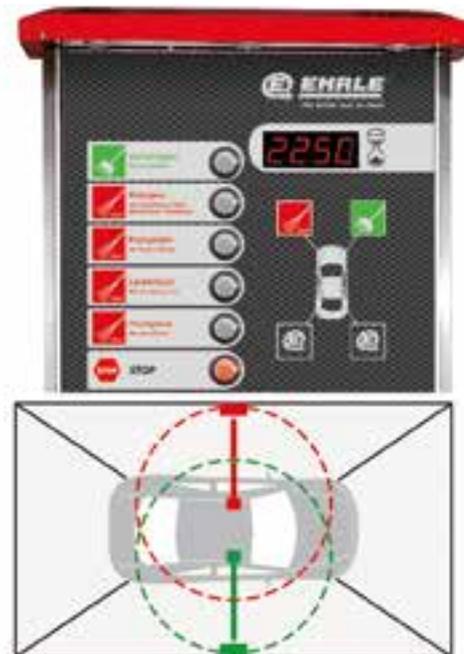
System variation 4

- Pre-cleaning with SoftFoam jet pipe
- Cleaning with APPMP and jet pipe
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe



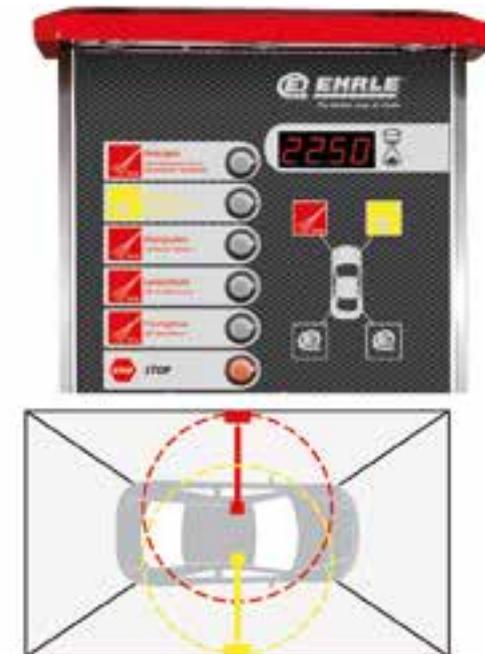
System variation 5

- Pre-cleaning with SoftFoam Brush
- Cleaning with APPMP and jet pipe
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe



System variation 6

- Cleaning with APPMP and jet pipe
- Cleaning with APPMP and SoftFoam brush
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe





EHRLE Washing and care programs

EHRLE offers 10 combinations of washing and care programmes:

System variation 7

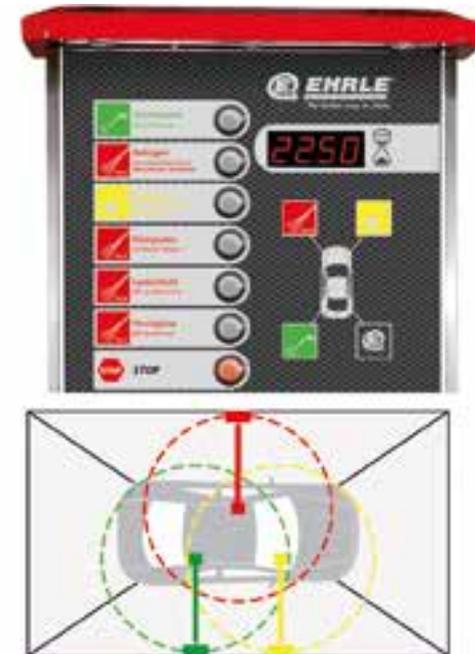
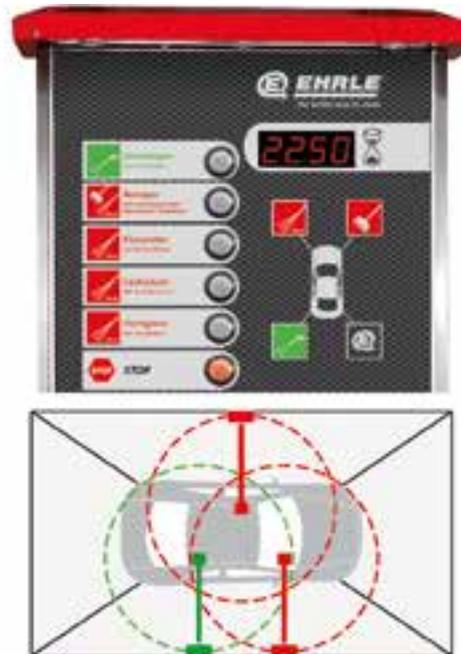
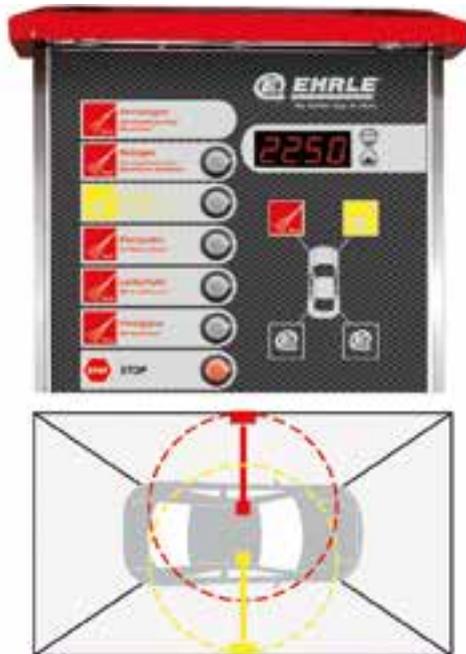
- Pre-cleaning with APPMP low pressure and jet pipe
- Cleaning with APPMP and jet pipe
- Cleaning with APPMP and foam brush
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe

System variation 8 SE (Southern Europe)

- Pre-cleaning with SoftFoam-Gun
- Cleaning with APPMP and jet pipe and foam brush
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe

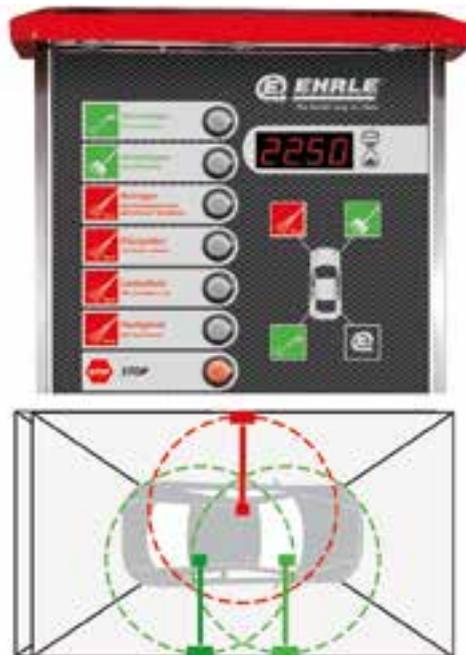
System variation 9

- Pre-cleaning with SoftFoam-Gun
- Cleaning with APPMP and jet pipe
- Cleaning with APPMP and foam brush
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe



System variation 10

- Pre-cleaning with SoftFoam-Gun
- Pre-cleaning with SoftFoam Brush
- Cleaning with APPMP and jet pipe
- Rinsing with jet pipe
- Paint protection with UltraProtection and jet pipe
- High gloss with SuperFinish and jet pipe



System variate	Smart-Wash	Smart-Wash Plus	JetWash	JetWash Plus	CarWash Plus	CarWash Compact-Line	CarWash ModulLine	
1	√	√	√	√	√	√	√	4+ 1 button
2	x	x	√	√*	√	√	√	5+ 1 button
3SE	√	√	√	√	√	√	√	4+ 1 button
4	√	√	x	√	√	√	√	5+ 1 button
5	√	√	x	√	√	√	√	5+ 1 button
6	√	√	x	√	√	√	√	5+ 1 button
7	x	x	x	√*	√	√	√	6+ 1 button
8SE	x	x	x	√	√	√	√	5+ 1 button
9	x	x	x	√	√	√	√	6+ 1 button
10	x	x	x	√	√	√	√	6+ 1 button
Rim Cleaner	x	x	x	x	x	√	√	7+ 1 button

* for 1-2 washing bays only

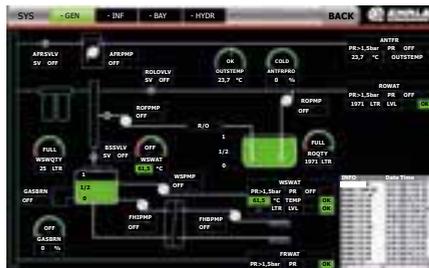
CM ConditionMonitoring

Monitoring and control of the plant as well as business evaluations.

ConditionMonitoring 1 Basic

In the basic version of ConditionMonitoring 1 (CM 1), all system-relevant data such as opening time, happy hour, current system status, operating status and washing turnover can be read out. All important system parameters can be read out locally and adjusted at the same time. All wash volumes are displayed for each individual wash area and can also be separated into cash, tokens and CarWashKeys. EHRLE ConditionMonitoring offers the possibility to determine the washing turnover per washing station in the last 24 hours, the last weeks, months, years and the total turnover since commissioning. An evaluation program graphically displays the development of washing sales for each wash area as well as the overall development.

General monitoring



The representation of systems in general enables an overview of all relevant main systems of the EHRLE self-service car wash systems.

ConditionMonitoring 2 (Option)

In the configuration level ConditionMonitoring 2 (CM 2), all functional sequences of your SB-Car-Wash system are also displayed on the display (12 "TFT) in clear graphic functional representations. The media pressure monitoring constantly controls the pressures of fresh water intake, osmosis, antifreeze and wash water. Sensors immediately report a defect or malfunction in the system with the date and time.

Monitoring of washing places



The overview of systems washing stations shows the entire self-service washing system in the respective operating states separately according to washing places.

Condition Monitoring 3 (Option)

With the configuration level ConditionMonitoring 3 (CM 3), all high-pressure pumps are additionally monitored independently and displayed in an analogue display. All storage containers of the additives and the MicroPowder are monitored and clearly displayed. The plant operator can always get an impression of the amount of washing and care products.

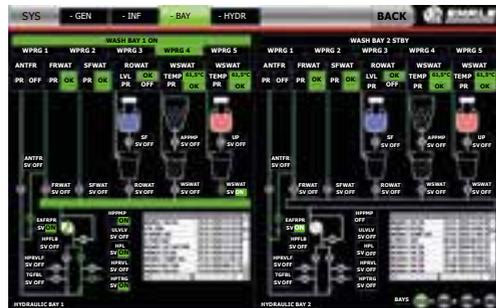




Condition monitoring with EHRLE app

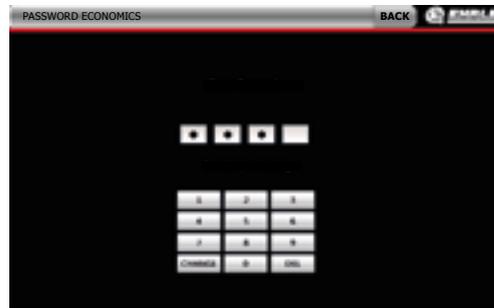
Monitoring and control of the self-service system as well as business evaluations with the EHRLE app

Monitoring of hydraulic system



The hydraulic systems page for each washing area is the information about the technical sequences and operational functions at the selected washing area. At the top area there is currently selected washing program displayed and in the hydraulic diagram below the system components are shown. In this the media the flow and the switch positions can be viewed of all solenoid valves and pumps tracked.

Password protected sales



The sales of the self-service car wash can be read out. Similar to a SmartPhone, a 4-digit access code needs to be entered for the activation of ECONOMICS pages. Every incorrect entry is saved and at the 3rd The ECONOMICS system will automatically make an incorrect entry locked for any further access.

Total sales of the car wash



The overview of total sales of the washing system shows the total wash sales of the self-service car wash. The washing sales are recorded fiscally added and shown separately. It will be between the respective cash transactions in different mod of currencies, according to cash (CASH), CarWash key (KEY), tokens (JETONS) and credit Card payment (CARD).

Sales per wash bay



The page Sales per wash station is an information page for the system operator and gives information about the Wash sales at the individual wash bays. Consequently trends of car wash customers are quickly recognized and the operator can react to this in a targeted manner. Likewise can view and evaluate the generated sales at the self-service vacuum cleaner stations.



Condition monitoring and EHRLE app

Monitoring and control of the self-service system as well as business evaluations with the EHRLE app

The Opening Hours

	FROM	TO	FROM	TO
	hh:mm:ss	hh:mm:ss	hh:mm:ss	hh:mm:ss
MONDAY	06:55:00	22:15:00	00:00:00	00:00:00
TUESDAY	06:55:00	22:15:00	00:00:00	00:00:00
WEDNESDAY	06:55:00	22:15:00	00:00:00	00:00:00
THURSDAY	06:55:00	22:15:00	00:00:00	00:00:00
FRIDAY	06:55:00	22:15:00	00:00:00	00:00:00
SATURDAY	06:55:00	22:15:00	00:00:00	00:00:00
SUNDAY	06:55:00	22:15:00	00:00:00	00:00:00

The OPENING HOURS page provides information about the working times of the self-service car wash. It can provide for different opening times entered on weekdays stored in the permanent memory of the controller. In the event of an unforeseen circumstance all data are retained in the event of e.g. a power failure.

Settings

ACTIVPOWER PEARL MICROPOWDER QTY:	0,35 SEC
ULTRAPROTECTION POLYWAX QTY:	0,35 SEC
SUPERFINISH DRYINGLIQUID QTY:	0,07 SEC
START ANTI FROST PROTECTION:	3,0 °C
WASH WATER TEMPERATURE:	58,0 °C
WATER BASIN OPEN TIM	5,00 SEC
MULTIPLICATOR HAPPY HOUR:	1,00 *
ACTUAL DATE / TIME:	2020.07.23 15:16:52

The overview Settings - Chemistry - Temperature

- Time shows the set values for
- Chemical and micro powder dosage
- Paint protection UltraProtection liquid dosage
- Shiny dry SuperFinish liquid dosage

as well as the start temperature for the frost protection circuit and the underfloor heating on (if such systems were installed for the colder areas).

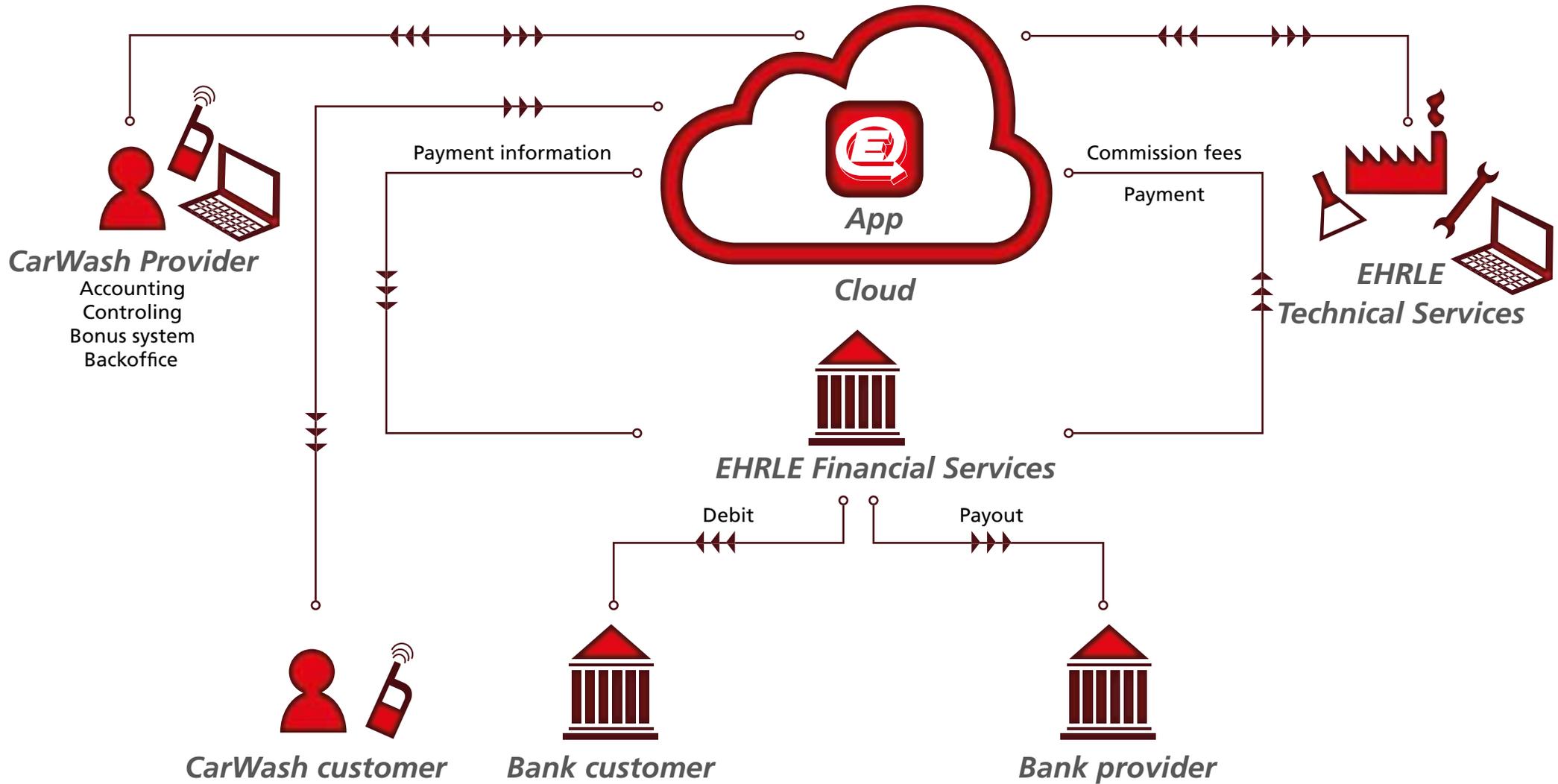
Washing times and currency

	WASH BAY	VACUUM
0,50 EURO:	60 SEC	120 SEC
1 CHF:	30 SEC	120 SEC
0,50 GBP:	60 SEC	120 SEC
WM1:	30 SEC	120 SEC
WM2:	60 SEC	240 SEC
WMS:	150 SEC	0 SEC
KEY:	0,50 EURO	60 SEC

The washing times and currency page shows all relevant settings for calculating the washing and vacuum cleaner places. Here is the time value for the lowest sales value per currency or token entered. The self-service washing areas and self-service vacuum cleaner areas can each with different Value-for-money amounts be set. To The values are set online to all washing and Transfer nursing stations. Even for the users of the CarWash Keys (loyalty Systems) can have different time values for the smallest sales values can be set. EHRLE has thought of everything for the operator's turnover and increase the car wash customers for bonus systems to inspire.

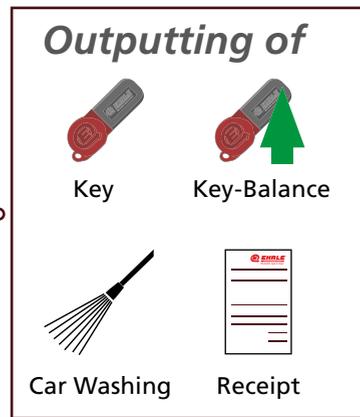
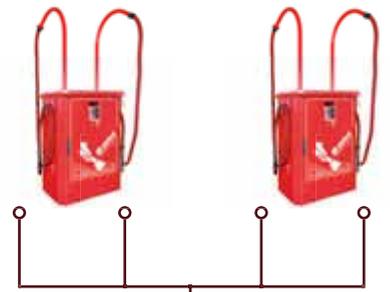
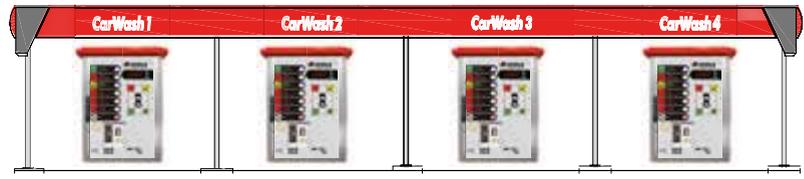
The EHRLE Cloud

with EHRLE App and Smart Phone Pay without credit card terminal



CentralPay

with credit card terminal (POS), everything in one place!



CentralPay
Central payment



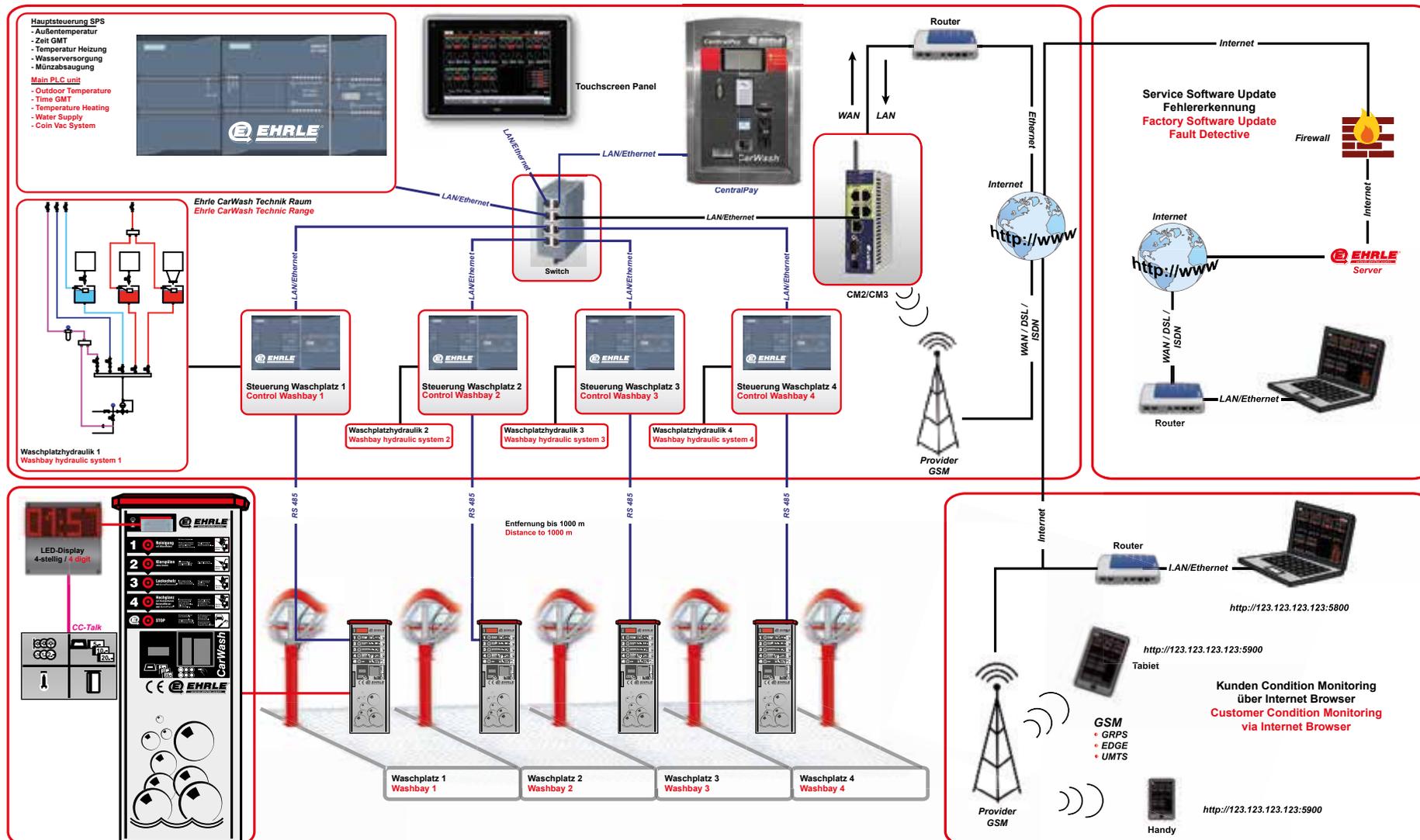
Selecting and paying for the wash place activates the washing process

Selection and payment of the self-service vacuum cleaner enables the vacuum cleaning operation



CarWash customer

Networking and remote data transmission



Self-service vacuum cleaner

The overall concept of a self-service washing system always includes high-performance vacuum cleaners



Multi-cyclone vacuum cleaner

As with the single cyclone vacuum cleaner, the incoming air flow is first rotated to remove the larger dirt particles. The air is then accelerated again to a second „purification stage“ with another cyclones. Due to the smaller diameter of the second cyclone, the air is set into a considerably higher rotation speed, which also allows finer dirt particles to be separated. With the EHRLE Multi-cyclone vacuum cleaner reduces the size of the separated dust particles, so that the central filter can also be omitted in many cyclones. This also eliminates the need to clean the central filter and prevents loss of vacuum power, even during heavy use. Simply ingenious – ingeniously simple.

Overhead hose system

The vacuum hose and nozzle are easy handled and have no ground contact therefore guarantee less wear and soiling of the vacuum device. A large lateral vacuum hose holder is used for storage.

Option: INOX

- Complete stainless steel housing, ground surface
- Stainless steel vacuum hoses 180° rotatable
- Stainless steel dirt container

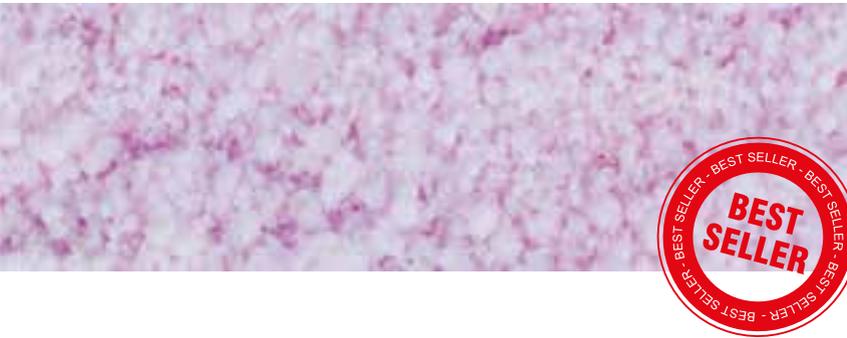


Technische Daten	Mono-Standard	Mono-INOX	Duo-Standard	Duo-INOX
Vacuum capacity	3700l/min	3700l/min	2x3700l/min	2x3700l/min
Vacuum	160 mbar	160mbar	2x160mbar	2x160mbar
Dirt container capacity	70l	70l	2x70l	2x70l
Vacuum hose length	5000 mm	5000mm	5000mm	5000mm
Noise level	66dB(A)/57,5dB(A)*	66dB(A)/57,5dB(A)*	69dB(A)/60,5dB(A)*	69dB(A)/60,5dB(A)*
Electrical fuse	3/400V/50Hz - 3x10A	3/400V/50Hz - 3x10A	3/400V/50Hz - 3x16A	3/400V/50Hz - 3x16A
Connected load	2,8kW/5,1A	2,8kW/5,1A	5,6kW/10,2A	5,6kW/10,2A
Connected load	1204x999x3395mm (mit Galgen)	1200x800x3000mm (mit Galgen)	1200x800x3000mm (mit Galgen)	1200x800x3000mm (mit Galgen)
Weight	400kg	400kg	450kg	450kg

* with sound insulation

Wash-and care additives

Optimally matched to EHRLE technology



ActivePower Pearl MicroPowder Plus

ActivePower Pearl MicroPowder offers maximum dirt dissolving with ActivePower Pearls and a high surfactant content.

Constant flowability and rapid solubility form a perfect foam pattern and leave a fresh, pleasant scent in the washing box.

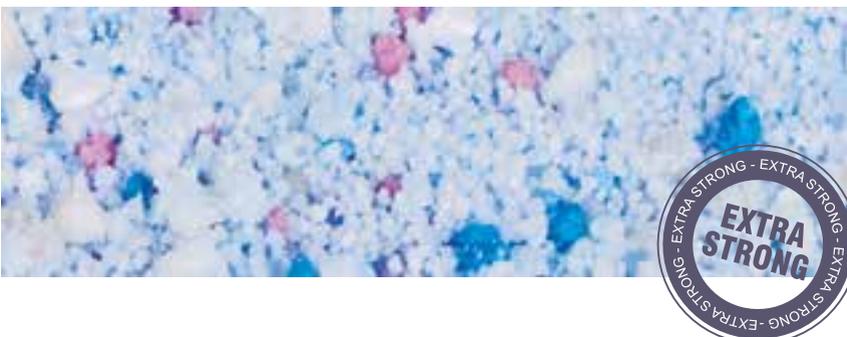
The powder is very gentle on the material and leaves no residues on vehicle lacquer, glass and plastics.



ActivePower Pearl MicroPowder INEX

With its refined scent of exotic fruits, the powder is a recognition value for every EHRLE CarWash customer.

Airy, white with an active microgranulate it can be used for all contactless car washes.



ActivePower Pearl MicroPowder XP

HighTec MicroPowder concentrate with cleaning intensive MicroPearls. Best cleaning result, noble perfumed and bluish color.

The high proportion of blue and red MicroPearls provide a perfect washing result even with extremely stubborn dirt and remove even dried insects on the paint surface, particularly thoroughly and gently. Even for the removal of stubborn traffic film and streaks from rubber are no problem for the cleaner.



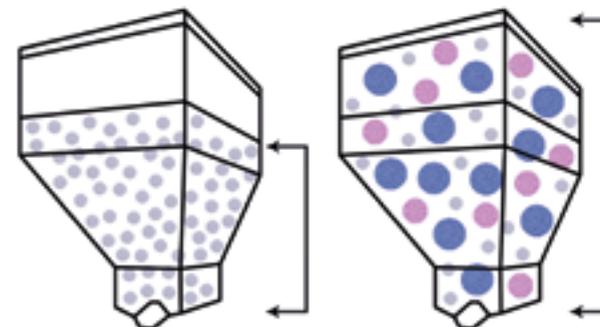
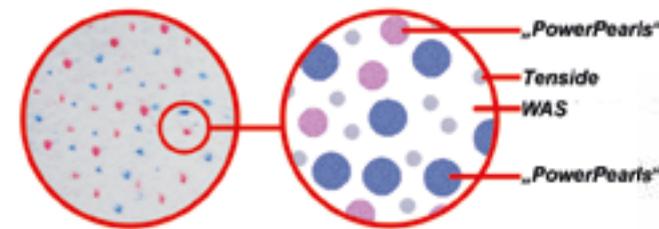
ActivePower Pearl MicroPowder

The high proportion of surfactants and detergents in combination with the red and blue **ActivePower Pearls** offer a perfect cleaning result and at the same time protect the environment. The **ActivePower Pearls** do not only remove coarse dirt, but can also effortlessly remove the so-called TrafficFilm (grey film) from the vehicle surface.

In combination of the warm and decalcified wash water, the surfactants and chelating agents of EHRLE **ActivePower Pearl MicroPowder**® act like a thousand small sponges and ensure a thorough cleaning of the vehicle surface, without damaging or scratching it.

The perfect foam pattern and high dispersibility in combination with an intensive fresh scent makes cleaning child's play and gives your washing customer an optimum cleaning result. The low density of EHRLE **ActivePower Pearl MicroPowder**® and the constant flowability ensure precise dosing in a high-pressure spray jet.

The product is extremely gentle for the material and also has an additional corrosion protection component as well. In addition, **ActivePower Pearl MicroPowder**® is silicate-free and leaves no residue on vehicle lacquer glass and plastic.



20 kg normales Pulver

20 kg **ActivePower Pearl MicroPulver**®



Washing and care additives

For a shiny washing result

RimCleaner

Dissolves stubborn grease, oil, rubber and brake dust residues. Acid and alkali-free, for a gentle cleaning. Creates a dense, area-wide neon green yellow gel layer on the dirty car rim. Apply RimCleaner on a dry rim before the actual car wash. Action time of 3-5 min for a perfect dirt cleaning process.

Paint protection UltraProtection[®]

Best conservation and care effect on paint, rubber and plastic surfaces for self-service washing systems. For high value retention and long-lasting protection against weather influences such as insects, traffic film and UV radiation. Impregnating effect to repel water and dirt. Can be used as foam wax in the self-service sector. High scent intensity. Particularly good beading effect and fragrance when used with warm softened water.

Preserves and cares intensively lacquer, rubber and plastic surfaces

- Perfect gloss on paint and plastic surfaces
- Mineral oil and hydrocarbon free

High gloss dryer SuperFinish[®]

High gloss dryer for self-service polymer-based washing systems. Improves the drying result when osmosis water is used in the last care program. Drains the water from the car surface like a film and leaves a stain-free drying result. High scent intensity and leaves no streaks even with windscreen wiper operation.

Very explosive bursting of the water film

- Causes water and dirt resistant high gloss effect
- Can be used with all water types up to water pH <approx. 8 (hard, soft, demineralized, rainwater etc.)
- Petroleum and hydrocarbon free
- Can be used for rinsing after a wax care



SoftFoam INEX

Extremely efficient and economical soft foam cleaner with maximum foam effect. Suitable for foam prewashing in self-service washing systems. Powerful and odorless. Available in 10l, 25l, 60l canisters.



SoftFoam PLUS

HighTec Soft-Foam pre-cleaner with particularly intensive fragrance. The car wash becomes a fragrance experience that accompanies the customer for days after the wash. Perfect foam formation and the best cleaning and care results for components that are gentle on the paintwork. Ideally suited for foam prewashing in self-service washing. Available in 10l, 25l, 60l canisters.



SoftFoam XP

Intensive soft foam pre-cleaner for extreme soiling. Dissolves even heavily soiled deposits of dried insects and traffic film effortlessly. Gentle on rubber and paint surfaces. Very good foam result and particularly economical. Slight scent intensity. Available in 10l, 25l, 60l canisters.



IntensiveShampo IS

Powerful brush shampoo with high care effect on the paint surface. Extremely economical and paint neutral. Pleasant fresh scent and slight foam formation. Highly dispersing and cleaning intensive. Available in 10l canisters.



HighPerformance PaintSealer HS

Best conservation and care effect on paint, rubber and plastic surfaces for portal wash systems. For high value retention and long-lasting protection against weather influences such as insects, traffic film and UV radiation. Impregnating effect to repel water and dirt. Can be used as foam wax in portal washing systems. High scent intensity. Particularly good roll-off effect and fragrance when used with warm water. Available in 10 l canisters.



HighPerformance Dryer HD

High gloss dryer for polymer-based portal washing systems. Improves the drying result when using fresh water in the last maintenance program. Also suitable for convertible tops. Drains the water from the car surface like a film and leaves a stain-free drying result. High scent intensity and leaves no streaks even with wind-screen wiper operation. Available in 10 l canisters.



Example of EHRLE CarWash systems arrangements

Customer satisfaction lies in elegance and perfection, every EHRLE self-service car wash system speaks for itself!



EHRLE Present World Wide





HASS
SMART
Car Wash
Powered by:  **EHRLE**
The better way to clean

In India for orders please contact:
Hass Ventures India Private Limited
Smart Car Wash powered by Ehrle
D-32 3rd Floor, Defence Colony,
New Delhi, 110023, INDIA

+91 114 100 08 13, 114 100 08 14
contact@smartcarwash.in
sales@smartcarwash.in
www.smartcarwash.in

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