

Commercial vehicle wash units Overall programme

www.christ-ag.com



The Real XXL Wash Factory

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Commercial vehicle wash units for trucks

Christ offers highly specialised wash systems for all types of commercial vehicles. Technical solutions, such as the automatic mirror bypass for trucks or JETSTREAM wraparound high-pressure wash with oscillating nozzles, are only offered by Christ wash systems. Special solutions for forwarding agents, contract washing companies and public transportation companies ensure the best washing result at low operating costs.

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Commercial vehicle wash units for buses

Clean vehicles have become an effective advertising medium for industrial companies, transport companies and omnibus companies. Time-saving, automatic cleaning keeps the value of the vehicles. In order to meet the special requirements of your fleet, with our MAGNUM, MAGNUM-5 and ECOBUS commercial vehicle wash units, we have designed three systems that can be configured to suit any fleet. We recommend our MAGNUM for a fleet of buses and trucks.

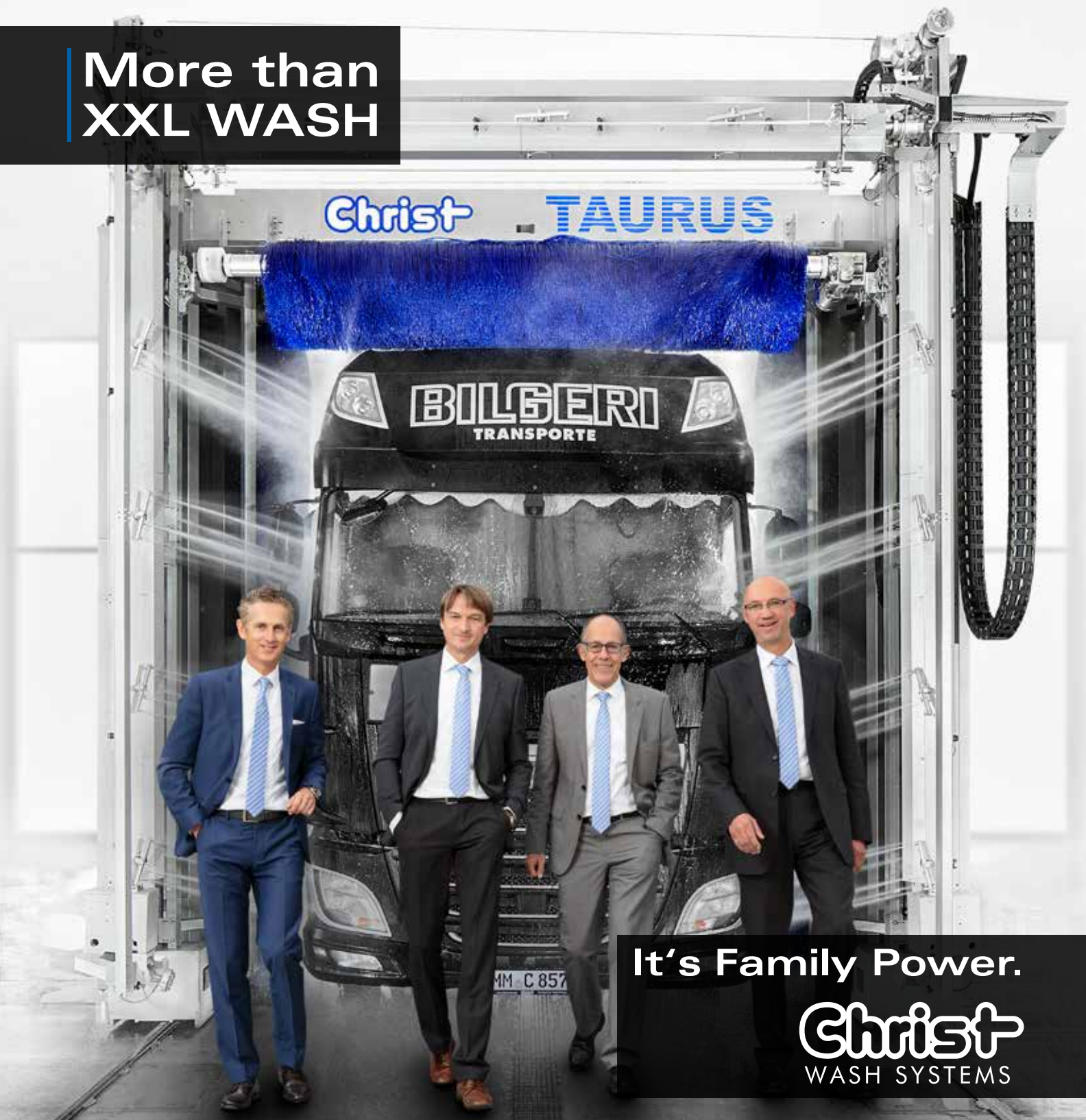
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More than XXL WASH



It's Family Power.

Christ
WASH SYSTEMS

Otto Christ AG is a leading, internationally competent provider of vehicle washing technology. We keep up the tradition of a family business. Thanks to 130 years of successful business policy and constant quality growth, we always have the right solution and therefore also the most suitable product for you.

We focus on innovation and see changes as chances. Our products set themselves apart thanks to innovative technology, high functional value and the highest quality. The plant engineering

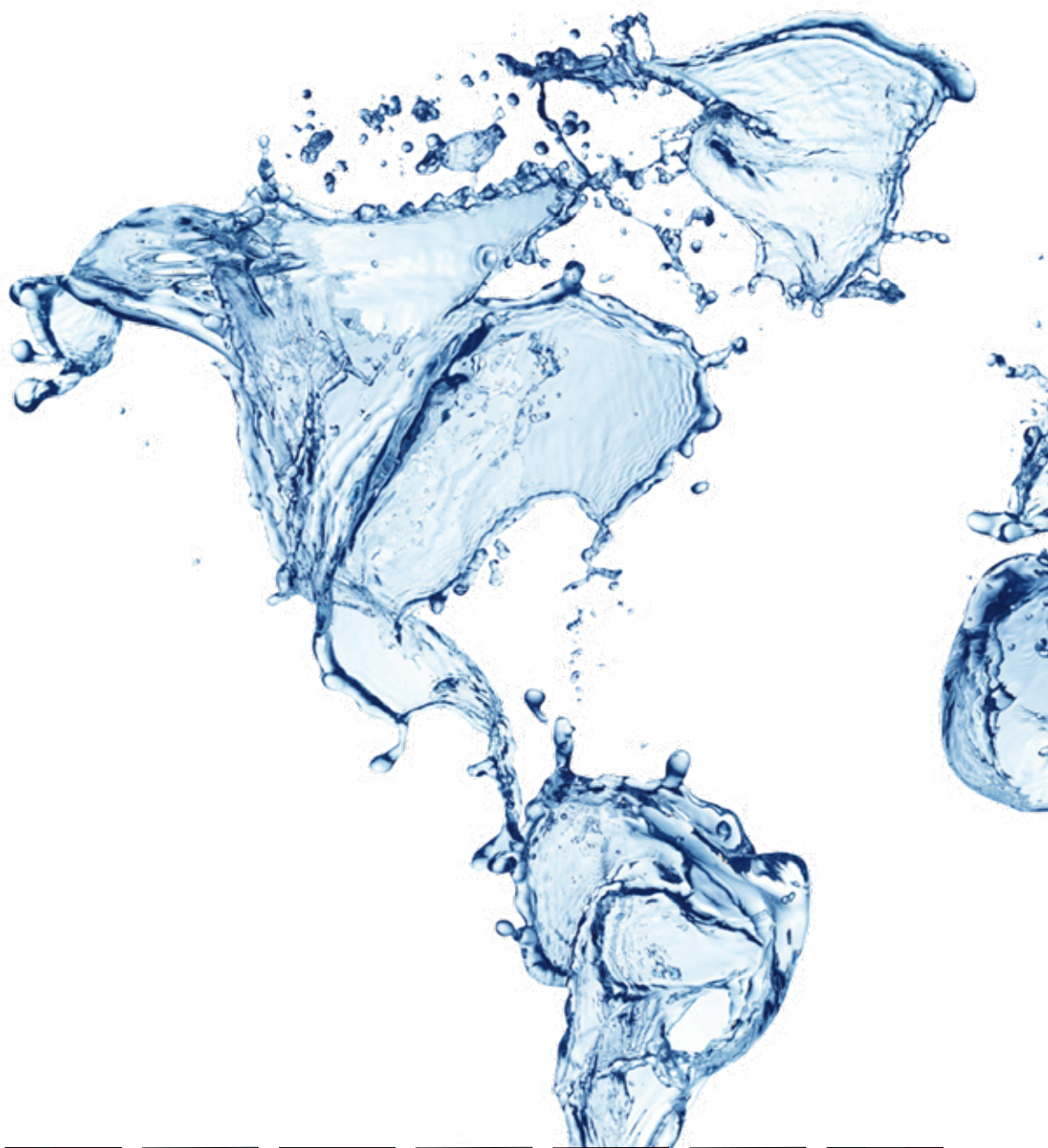
has outstanding unique selling points in every machine segment. These already ensure you fast profitability thanks to low investment costs. Customer satisfaction has top priority for us. Therefore, employees, customers and suppliers are also involved in continuous improvements.

We're looking forward to supporting you as our customer in all areas as an experienced washing specialist.

| Your contacts

Otto Christ AG is a leading, internationally competent provider of vehicle washing technology. Otto Christ AG has a powerful range of products and the leading technologies on the vehicle washing market.

One of the secrets to our success is that: we cater to the special requests, needs and requirements of the individual countries, Christ provides you with direct contact to our sales partners



around the world, you don't have to go without Christ quality no matter where you are in the world. With 8 subsidiaries and 43 contractors around the world, you will be taken care of personally and competently by our contacts directly on-site.

Or you can contact us directly:

Telephone: +49 8331 857-100 or

e-mail: sales@christ-ag.com



Christ
WASH SYSTEMS

Colour palette

Just be creative!

The colours of all models can be adapted individually. The portal frame is hot dip galvanized on all machines. A powder coating in RAL 9007 is possible at extra charge. Other colours are available on request.

Designation	Panelling	PE brush	SENSOFIL+	SENSOBRUSH+
Ultramarine blue RAL 5002	✓	✓	✓	✓
Sky blue RAL 5015	✓	✓	✓	✓
Flame red RAL 3000	✓	✓	✓	✗
Yellow green RAL 6018	✓	✓	✓	✗
Traffic green RAL 6024	✓	✓	✓	✓
Traffic yellow RAL 1023	✓	✓	✓	✓
Traffic orange RAL 2009	✓	✓	✓	✓
Pure white RAL 9010	✓	✓	✗	✗
Telegrey 4 RAL 7047	✓	✗	✗	✗
White aluminium RAL 9006	✓	✗	✗	✗
Grey aluminium RAL 9007	✓	✓	✓	✓
Jet black RAL 9005	✓	✓	✓	✓
SVG design	✗	✓	✗	✗

Colour representations and images are not necessarily accurate. The RAL colour hue specifications are only approximations, and may vary through different surfaces and materials.

Wash materials

The suitable wash material for each application

POLYETHYLENE BRUSH (standard brush supplied with all installations)

We recommend this tried and tested wash material for system concepts that require simple, low-cost washing technology and that mainly wash trucks.



Features:

- Normal stability
- Highest cleaning performance
- Average material abrasion on the vehicle paint
- Complex colour configuration options
- Optimum washing result for large surfaces

Available for:

| TAURUS | MAGNUM | MAGNUM-5 | ECOBUS

SENSOFIL+

We recommend this wash material made of POLYETHYLENE foam for system concepts that require quality with alternative washing technology and especially for bus companies.



Features:

- high stability
- good cleaning performance
- low material abrasion on the vehicle paint
- sufficient gloss level of the vehicle paint

Available for:

| TAURUS | MAGNUM | MAGNUM-5 | ECOBUS

SENSOBRUSH+

SENSOBRUSH+ is made of a mixture of POLYETHYLENE and SENSOFIL+. It's best suited to operators that wash trucks and buses.



Features:

- higher stability
- higher cleaning performance
- low material abrasion on the vehicle paint
- flexible use for smooth and flat surfaces

Available for:

| TAURUS | MAGNUM | MAGNUM-5 | ECOBUS

| Machine portfolio



Model	Model (type)	TAURUS
	System	3 brushes Truck wash unit
	Particularities	Higher contact pressure with lateral brushes with double bearing
Equipment	Portal made of galvanised steel	✓
	Automatic contact pressure of the brushes	✓
	Frequency controlled motors of the drive unit	✓
	Operating concept for bus washes (semi-stationary)	✗
	Bus outside mirror wash program with cross over wash	✗
	Alcove program	✗
	Low-floor drive unit	✗
	Protection of the front mirrors for trucks	✓
	Truck interspace wash	✓
	Gimbal mounted lateral brushes	✗
	Lateral brushes with double bearing	✓
Optional accessories (additional charge)	JETSTREAM special high-pressure	✓
	Christ Shop Terminal	✓
	Separate panel for visualisation	✓
	Operation terminal VARIO-L	✓
	Guide system for manual pre-wash systems	✓
	Manual high-pressure wash	✓
	Pre-spray device	✓
	Permeate for spotless drying	✓
	Underbody wash	✓
	Positioning device	✓
	Wheel guiding pipes	✓
Supplied equipment	Powder coating	✓
	Operation terminal VARIO-XS	✓
	Double protected switchboard plant	✓
	Dosing station for detergents	✓
	Motion rails ST52/S10	✓
Measurement	Wash height (at 100 mm intervals)	3,200 - 5,000 mm
	Wash width	2,900 mm
	Standard track dimension	4,000 mm
	Flexible track dimension	3,430 - 4,400 mm



MAGNUM	MAGNUM-5	ECOBUS
3 brushes Bus / truck wash unit	5 brushes bus wash unit	Stationary bus wash unit
Cross over wash Eliminates every wash shadow	Time saving with the 5 brushes concept	Time saving with asymmetric position of the brushes
✓	✓	✓
✓	✓	✓
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✓	✓	✓
✓	✓	✗
3,200 - 5,000 mm	3,200 - 5,000 mm	3,200 - 4,700mm
2,900 mm	2,900 mm	2,700 mm
4,000 mm	4,000 mm	✗
3,430 - 4,400 mm	3,430 - 4,400 mm	✗





TAURUS

The specialist

The TAURUS unit type was developed especially for carrier, industrial and disposal companies, as well as commercial vehicle wash units. Thanks to this unit type's wide range of accessories, no requirement is left unfulfilled. The logically-built machine equipment and the drive units that have been tried and tested thousands of times around the world from Christ are the central pillar of this wash unit design.

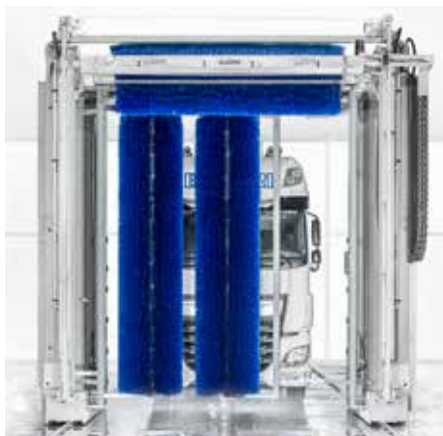
Highlights:

- for carrier, industrial and disposal companies
- for commercial vehicle wash units
- lateral brushes with double bearing
- optimal contact pressure of the brushes
- special wash programs



Optimal contact pressure of the brushes

The wash brushes are controlled electronically (PLC); the brush contact pressure is regulated, which therefore guarantees a contour following and gentle vehicle wash, as well as ensuring that even the most difficult vehicle contours are washed gently and effectively.



Frequency-controlled traction drive

Frequency-controlled traction drives guarantee that the installation starts and stops gently, which cares for the traction drives and the tracks. With motion speeds of between 6 and 18 m/min, extremely short wash times can be achieved.



Special wash programs

In addition to the standard additional programs that are available, such as "Windscreen mirror", "Loading ramp protection" or "Interspace wash", we also offer a wide range of special washing programs. These include silo vehicles and tankers, material or disposal vehicles.



Lateral brushes with double bearing

The double brush bearings ensure that even difficult vehicle contours such as those on tankers, silo or special vehicles are washed with care. This also ensures that the pallet boxes and the under-ride guard are cleaned.

From the practice for the practice

A long service life and low maintenance designs are the main features of our TAURUS commercial vehicle wash units. The torsion-resistant portal design in conjunction with tracks made of rolled steel solid materials guarantee maximum smoothness and cleaning quality. The internal pipework in the spray systems are made of stainless steel as standard.

Special cable conveyor

Our special cable conveyor is made of aluminium and is designed with stable cable carriages. The supply lines for current and water are placed in the guides so that they are easy to maintain.

Hall girders with a span length of up to 6 metres can therefore be bridged without problems.

Switchboard plant wit double protection against water

Our switchboard plant has a double casing and is integrated into the roll-over side piece so that it is water tight (IP65). The front access doors enable direct access to the control system even in narrow wash halls and protect the technology perfectly.

Equipment

Thanks to our comprehensive range of accessories such as chemical pre-wash arches, high pressure units and brush systems for underbody, the washing technology can be adapted to your individual requirements.



Christ

TAURUS

BILGERI
TRANSPORTE

DAF

MM C 8570



MAGNUM

Bus / truck wash unit with 3 brushes

Clean vehicles have become an effective advertising medium for industrial companies, transport companies and omnibus companies.

Furthermore, time-saving, automatic cleaning keeps the value of the vehicles.

In order to meet the special requirements of your fleet, with our MAGNUM commercial vehicle wash unit, we have designed a system that can be configured to suit any fleet.

Our MAGNUM unit type meets all requirements of bus and public transport operators, as well as van and recreational vehicle washing. Even trucks can be washed with it.

Thanks to this unit type's wide range of accessories, no requirement is left unfulfilled.

The logically-built machine equipment and the drive units that have been tried and tested thousands of times around the world from Christ are the central pillar of this wash unit design.

Recommended Christ chemistry:

TRUCK WASH

Active shampoo for commercial vehicles

Highlights:

- Industrial companies, transport companies and omnibus companies
- Time saving, mechanical cleaning
- Gimbal-mounted lateral brushes
- Low-floor vehicle
- Cross over wash







Robust steel portal

The MAGNUM self-driving, fully-automated commercial vehicle wash unit, with its robust, welded and completely hot dip galvanised steel portal, is designed for a long service life.

Optimal contact pressure of the brushes

The wash brushes' electronic control (PLC) ensures contour following, gentle and effective vehicle washing.



Low-floor drive unit for the complete vehicle covering

All commercial vehicle wash units in the MAGNUM range are equipped with our low-floor drive unit as standard. This means that even low-floor buses that can lower can be washed using the lateral brushes. The distance between the bottom edge of the rotating lateral brush and the floor level is just 175 mm.

Modular system

Thanks to the modular system, sensible machine accessories can be added to the MAGNUM for the wash system's specific application. The commercial vehicle wash unit that is equipped with 3

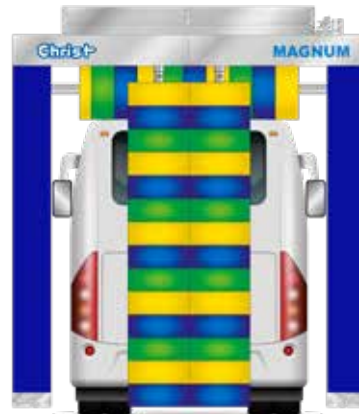
wash brushes as standard can also be provided as a 2-brush version on request (version without horizontal brush).



Bus outside mirror wash program with cross over wash

During the front wash, the lateral brushes wash between the protruding bus mirrors and reroute these when changing over to the lateral surface wash (mirror damage is avoided). The outside mirrors do not have to be removed or folded in.

- The wash area at the front is fully covered between the mirrors.
- Complete cross-over wash at the vehicle front / rear
- Intelligent avoidance of the outside mirrors thanks to active power measurement



Best wash result due to gimbal-mounted lateral brushes

Accurate lateral brush guidance means that complicated vehicle contours are no longer a problem. Even fixed mirrors such as on coaches are not a problem thanks to the gimbal-mounted brush bearings.



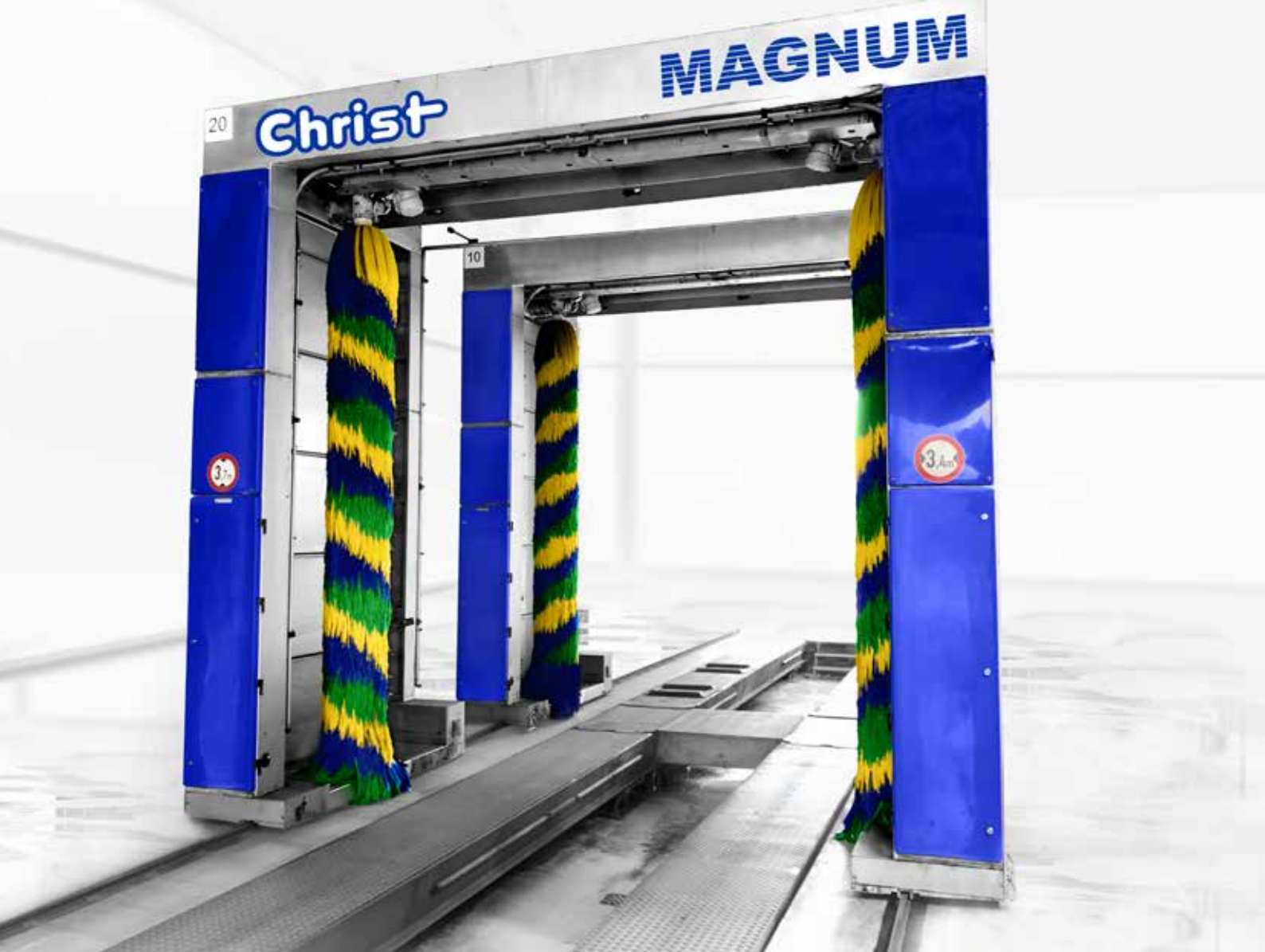
Alcove program

The alcove program is a sensible part of the MAGNUM wash system's program range, which was designed especially for recreational vehicles and caravans. The alcoves are washed gently in conjunction with the SENSOFIL+ gentle washing material.



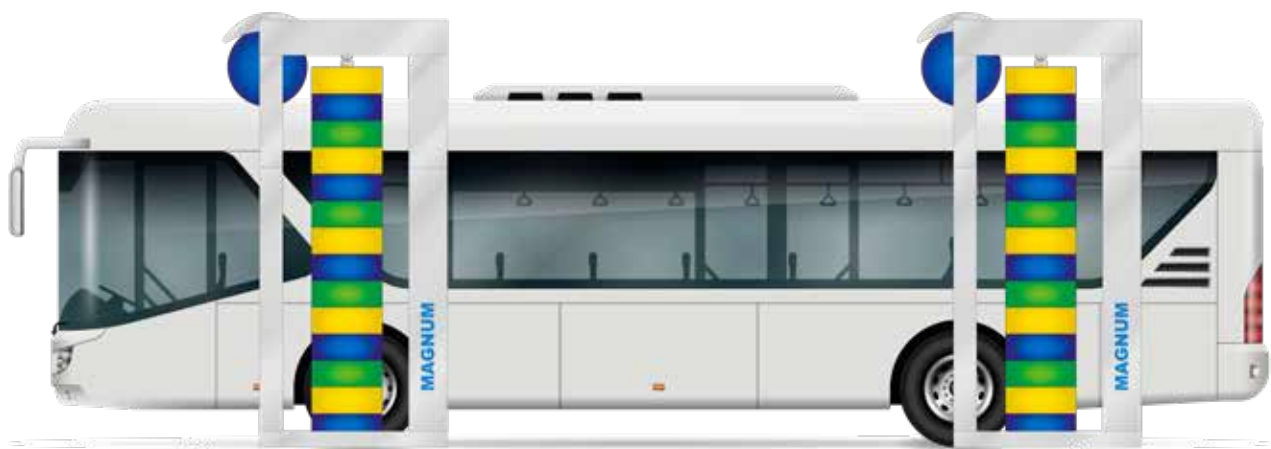
Manual pre-wash device for the external cleaning of recreational vehicle and caravan (optional)

Optimum equipment is provided in conjunction with a manual pre-wash device for vehicle areas that are difficult to access. Commercial vehicle wash unit professionals in the recreational vehicle and caravan exterior cleaning sector extend their offering with manual pre-treatment of "rain stripes" that form over time on parked recreational vehicles and caravans.



Faster cleaning result by means of two portals (TANDEM bus wash unit)

Two MAGNUM installations in sequence form the TANDEM cleaning units, which is especially suitable for operations with high washing volumes. This design enables a washing process that is twice as fast.



Technical version with or without horizontal brush possible



Christ

MAG

Christ

Be

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MAGNUM-5

The fastest of its KIND

Large fleets require fast and effective washing technology. The big challenge is performing a complete wash on the front, side, roof and rear surfaces of the vehicles in order to minimise operating costs over a short washing time. In order to achieve this, the MAGNUM-5 can be operated in the bus wash operating concept (semi-stationary operation) and / or in the commercial wash operating concept (overrun wash).

The innovative 5 washing roller concept of the MAGNUM-5 provides the perfect combination of quality and quantity for vehicle washing and is therefore especially recommended for cleaning in shift operation at transport companies, as a powerful commercial vehicle wash unit or for large courier companies to clean their fleet. Furthermore, the MAGNUM-5 also has all of the equipment features of the basic MAGNUM version.

Highlights:

- semi-stationary wash
- stationary wash
- used in short wash halls too



The optimum brush contact pressure is controlled by our electronically-controlled wash brushes and provides you with a contour following and gentle vehicle wash. Therefore, even the difficult contours on your vehicle can be washed gently and effectively.



Automatic start

In our semi-stationary wash concept, the driver no longer needs to get out. The automated washing process starts immediately after positioning the vehicle. This therefore ensures the fastest wash times.

Highest wash counts due to time saving

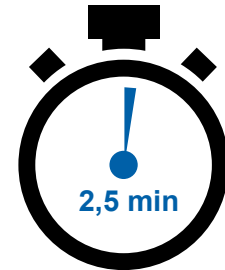
Perfect complete wash for highest vehicle throughput

Semi-stationary operation enables an articulated bus with a length of 18 metres to be washed in around 2.5 minutes without compromising on washing quality. (Front and rear wash with just lateral brushes)

Semi-stationary operation (course)

Phase 1: access of the vehicle

The vehicle drives up to the light barrier.



Phase 2: front positioning

The driver uses the LED traffic light to move the vehicle into the correct position for the front wash.

Front wash with standing vehicle

On the standing vehicle, the installation performs the fully-automated front wash with double cross over wash.

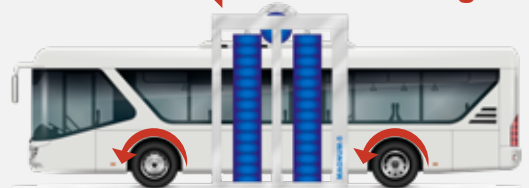
↔ Installation moving



Phase 3: lateral and optional horizontal wash of the moving vehicle

The driver drives the vehicle at a recommended speed of around 12 m/min through the wash system. This provides the roof and lateral wash thanks to the stopped installation while the lateral brushes rotate.

← Bus moving



Phase 4: rear positioning

The driver uses the LED traffic light to move the vehicle into the correct position for the rear wash.

Rear wash with standing vehicle

On the standing vehicle, the installation performs the fully-automated rear wash with double cross over wash.

Installation moving ↔



Phase 5: exit of the vehicle

The vehicle is driven out of the installation's working area.





There is no faster way!
18 metres in 2.5 minutes





The time saving factor has become the dominating decision reason when procuring a bus washing system. This applies to both private coach companies and public transport companies. The logical, well thought-out, asymmetric wash brush arrangement on the ECOBUS accommodates this trend with an extremely effective washing result. Vehicles that are to be cleaned are washed

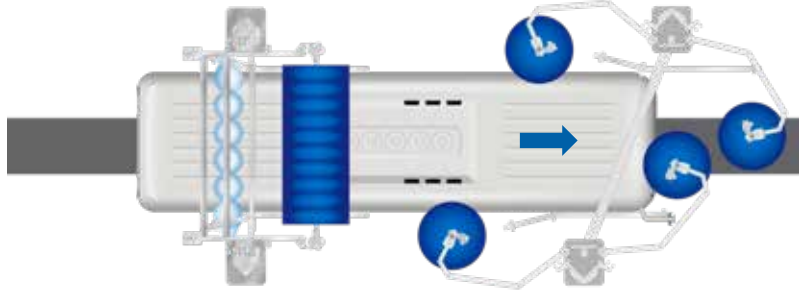
quickly, which therefore reduces operating costs. This pays off especially when cleaning in shifts. In order to guarantee a long service life for this investment item, the frame parts, swivel arms and spray arches in this installation are made completely of hot dip galvanized steel.

Wash course

Time saving due to the asymmetric position of the brushes

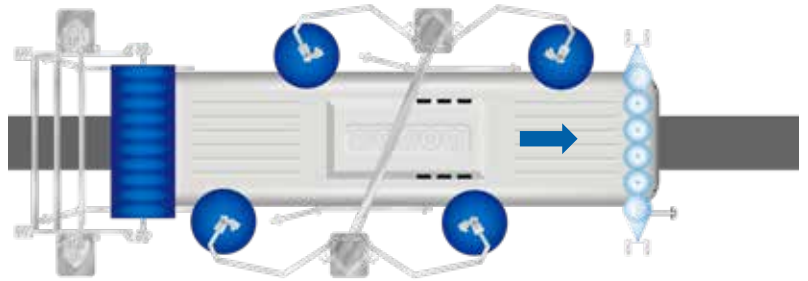
Step 1:

The bus pushes the rotating wash brushes on the brush pair that is in the mid-position outwards. This performs the front surface wash. The first pair of brushes that is in the outer position only moves to the side of the vehicle once the front wash arms have been opened completely.



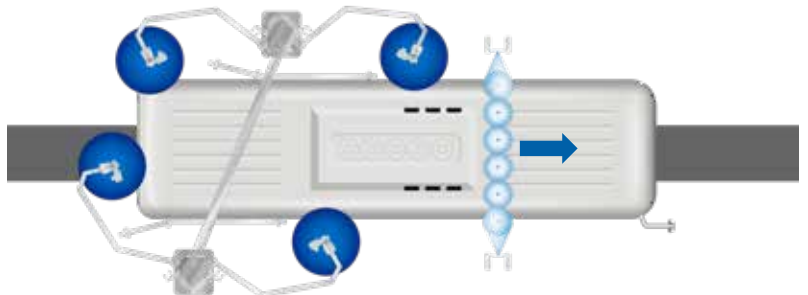
Step 2:

The bus moves through the wash system when the swivel arms are open. This presses the swivel arms pneumatically to the side of the vehicle. The rotating wash brushes in both brush pairs therefore perform the lateral surface cleaning.



Step 3:

The rotating wash brushes in the first brush pair press against the vehicle rear pneumatically and therefore wash the rear surface from the outside to the middle of the vehicle. The wash brushes in the second brush pair complete the lateral surface cleaning.



Extensions for ECOBUS

An additional horizontal brush system extension enables vehicle roofs to be cleaned thoroughly. The horizontal brush is available for different passage heights and passage areas.







JETSTREAM

High-pressure wash

The perfect addition to the wash system if vehicles with special geometries such as silo trucks and special vehicles have to be washed.

The JETSTREAM high pressure device is also designed to pre-clean very dirty vehicles such as tipper trucks and disposal vehicles. Four electro-mechanically oscillating high-pressure nozzle units per wash system side, which are equipped with contra-rotating high-pressure blast nozzles spray the vehicle powerfully while the wash system moves. The front and rear wash is performed by the integrated swivel device for the high-pressure nozzle units. The manual pre-cleaning effort required by the pre-wash staff is reduced significantly with the JETSTREAM.

Highlights:

- mounting kit for MAGNUM / MAGNUM-5 and TAURUS
- high-pressure device integrated and stationary
- oscillating and swivelling
- maximum 10 modules per side
- power of maximum 80 bar



Pre-cleaning function

Of course, the JETSTREAM can also be used to pre-clean all other commercial vehicles. Due to the washing effect and the special visual effect of the wash course, the commercial vehicle wash unit's attractiveness is increased compared to the competition.

The high-pressure pre-wash using the JETSTREAM can be procured and sold especially as an additional wash program in order to increase the wash counts and average wash prices.



Even more efficiency with optimal high-pressure wash (80 bar max.)

Our special high-pressure JETSTREAM that is equipped with oscillating high-pressure blast nozzles is optionally available. This high-pressure unit is available as a stationary and integrated version.

The JETSTREAM solution that is integrated into the wash portal is used wherever there is not much "manpower" available or where the vehicle contour would require a high degree of personal pre-cleaning.



Working pressure of 80 bar max. available

The JETSTREAM can be operated with an optional rotary pump (approx. 20 bar working pressure) or as a high performance variant with two reciprocating diaphragm pumps (up to 80 bar working pressure).



JETSTREAM for the free-standing installation

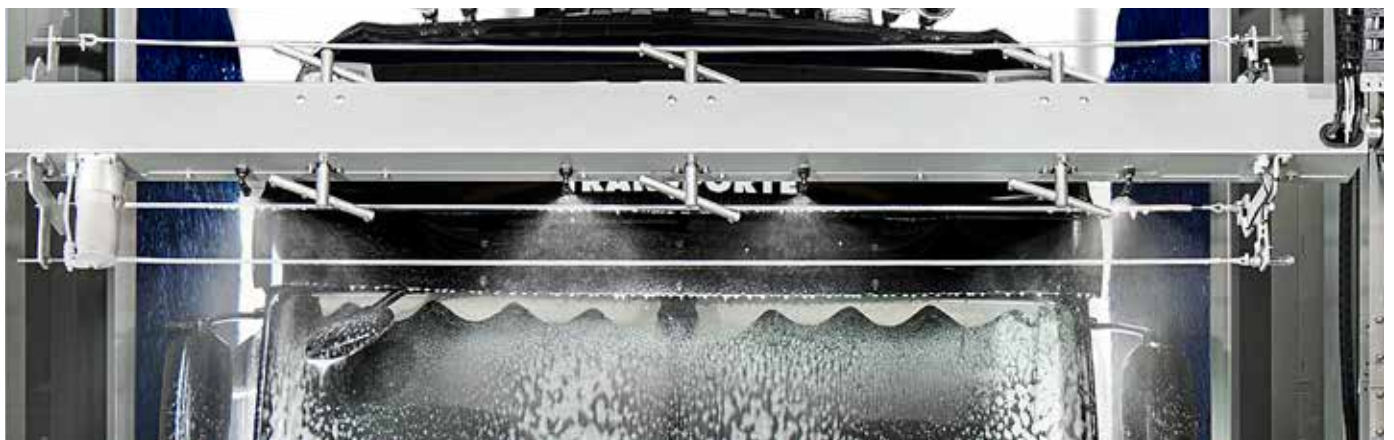
- Stationary high-pressure device
- JETSTREAM with 80 bar max.
- Portal frame made of galvanised steel
- 10 modules per side
- 6 modules controlled individually for the high-pressure underbody wash

The stationary version is used primarily in commercial vehicle wash units. The vehicles are therefore pre-cleaned as soon as they enter the wash hall. The entrance time is used effectively and the manual pre-wash reduced to a minimum.



Pre-spray device with chemistry integrated in the horizontal beam JETSTREAM

A swivelling horizontal beam ensures perfect application of the pre-wash chemistry on the front, roof and rear surfaces.



Recommended Christ chemistry:

TRUCK PRECLEAN

Pre-detergent for commercial vehicles



JETSTREAM horizontal high-pressure

Swivelling and oscillating nozzle units ensure comprehensive cleaning on the vehicle's front, roof and rear area. Optimal complement for bin lorries, tankers and silo trucks.



- Horizontal high-pressure beam, installed at the rear of the portal
- 3 oscillating nozzle units with contra-rotating blast nozzles, 180° swivel device

Christ

MAGNE

Berchtold

M1-C 8570





Active foam device

Visual perception of the washing chemicals thanks to comprehensive application via active foam nozzles. Longer chemical adhesion for effective dirt removal. Additional polish application with separate dosing equipment possible.

Recommended Christ chemistry:

RAPTOR

Alkaline power pre-detergent

Highlights:

- Active foam device by means of fan nozzles
- Visible chemistry effect
- Comprehensive chemical application







AEROPRO

High performance dryer

The requirements of a modern commercial vehicle wash unit are ever increasing. Years ago, the focus was only on the vehicle wash, whereas nowadays, holistic concepts for the commercial vehicle are required. In addition to a qualified wash result, the subject of drying using our fully-automated AEROPRO drying blower is also dealt with.

We now offer our AEROPRO high-performance dryer in our commercial vehicle range. The outstanding feature of our AEROPRO drying blower is that the air flow starts by being directed towards the front of the vehicle slanted from above. By pivoting the blower units or air outlets, the air current (always from above) can be directed towards lateral vehicle sections or roof and rear sections. The variable attachment can be attached to one of our MAGNUM and TAURUS commercial vehicle wash units.

Recommended Christ chemistry:

TRUCK DRY

Gloss drying agent for commercial vehicles

Highlights:

- Mounting kit MAGNUM/TAURUS
- Air outlets made from anodised aluminium
- Pivoting blower units



Technical characteristics:

- Motor power: 2 horizontal blowers with 7.5 kW
- energy optimised with smooth-running fan impellers
- electric swivel drives





| Natural for us...



Double protected switchboard plant

There is a high quality switchboard plant (IP65) in the left vertical. In order to ensure that this remains protected from spray water even under the hardest usage conditions, we have housed the switchboard plant in its own switchgear cabinet. This switchgear cabinet is integrated into the vertical, which is in turn protected using sealed front access doors.

Dosing station for detergents

The right vertical contains the easily accessible dosing station for the commercial vehicle wash unit's detergent. The dosage can be set on the dosing pumps. The dosing pumps pull the detergent from the detergent containers placed on the integrated shelves.



Supply lines

Supply lines (current, water) for integration into the existing cable conveyor or energy chain (length: from the wash system to the wash hall connection point). If a new cable conveyor or energy chain is required, we'd be happy to offer this to you. Our cable conveyor made of reinforced aluminium profile with wall brackets is especially recommended here (designed for high-pressure hose lines, flexible water lines and electric cables).



VARIO-XS

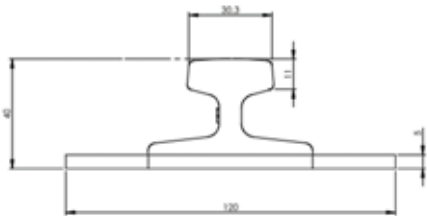
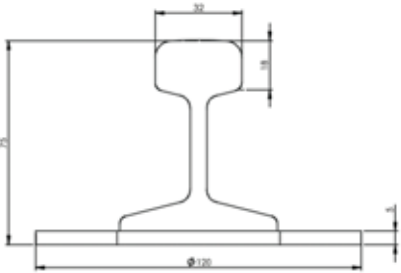
Each Christ commercial vehicle wash unit is supplied as standard with the VARIO-XS operator device that is capable of self-service and intended for wall installation. The VARIO-XS has an LED indication field with membrane keyboard, as well as an emergency-stop and start button in a compact box made of special plastic.

... Including by default

Rails

Rolled full-profile tracks (ST52), galvanised steel (length 25 m left / right). The tracks are equipped with supports to enable the water to flow and are welded on or optionally anchored to concrete. The tracks are also used to hold the tilt safety device.

The rail head on the S10 track is 1.6 times higher, which guarantees a service life that is at least 1.5 times higher when compared to standard rails (higher wearing surface). Furthermore, the S10 track is rolled with a higher carbon content and therefore harder and more wear-resistant, which results in a slightly more complex installation process.



Type	Motion rail S10	Motion rail Christ (ST52)
Measurement	M = 10.0 kg / m	M = 6.6 kg / m
Moment of resistance	WX = 24.4 cm ³	WX = 5.6 cm ³
Length	4 m	4 m
Weight	68 kg / 6 m	31 kg / 4 m
Distance Fastening plate	500 mm	440 mm



Equipment for even more quality

Lateral splash protection Premium

Optimised to install the plant engineering outdoors and therefore equipped to be wind- and weather-proof. The version consists of stable, galvanised and powder-coated 1.5 mm sheets that are assembled in sections in the portal frame. The galvanised sheet is powder-coated in RAL 9007 grey aluminium.



Positioning device

Positioning device with FORWARD/ STOP /BACKWARD LED display for exact vehicle end positioning in front of the wash system. Control via photocells when entering.

Individual design

Use your installation as a billboard. You can use our individually adjustable splash protection to configure your wash system in your own way. With a company logo, slogan or advertising text, you can increase the brand awareness of your company and strengthen your washing business' recognition value. The large plastic tarpaulin that is integrated into the machine provides plenty of space for your corporate identity. Simply send us your required design in a suitable format and we will prepare and print it on the outside of the tarpaulin.



Christ -Shop Terminal (C-ST)

The handy and easy to use piece of equipment with a graphical user interface and a touch screen is next to the cash desk in the shop. It is used to sell vehicle washes according to previously-defined programs and wash program numbers. When the wash program number is entered, the integrated printer generates a ticket for the customer. The piece of equipment itself contains further functions for the operator to check the washing business' accounts.

for even more quality



Guide system for manual pre-wash systems

C-rails and attached cable carriages can be used to guide the spray and high pressure lances easily along the left and right of the vehicle. The lances are parked in the lance holder / hook for lance when not in use.



Manual high-pressure pre-wash

For areas that cannot be reached by the wash system, we offer manual pre-wash systems to apply pre-detergents and powerful high-pressure (plunger pumps).



Visualisation

The visualisation is a graphical user interface that is located on the PLC. A connection with the wash unit can be established using free software (VNC viewer) via Ethernet (PC network).

Picture of the operation panel with configurable functionality. Provides current wash counts and lists the wash and additional programs used. Chronological wash and error information. Record of transponder card washes. Back-up of the wash data from the PLC to the PC or a network drive, or send wash data by e-mail.

Pre-spray device (additional program)

As a stationary variant, the pre-detergent is applied while the vehicle is entering. The variant integrated into the wash portal applies the pre-detergent to the vehicle during a separate portal run over.



Underbody wash systems

The stationary nozzle cane (under floor) cleans the vehicle's undersides while the vehicle is entering the wash hall without losing time. We offer two variants that can be combined with corresponding rotary pumps.



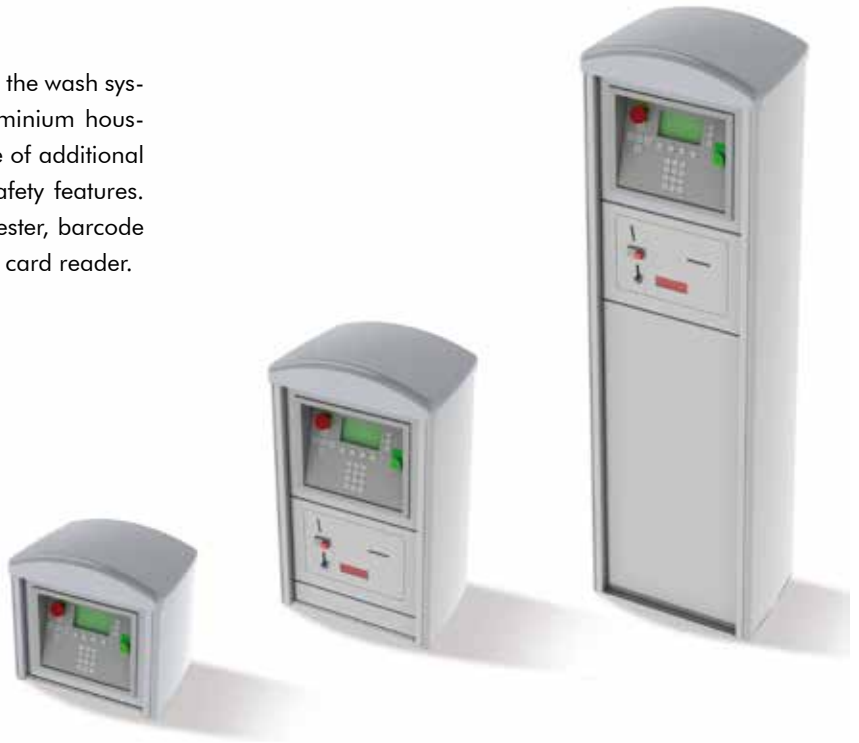
Wheel guiding pipes

Wheel guiding pipes are used to position and align long vehicles better. We recommend one pair at the entrance and one pair at the wash system's starting position.



VARIO-L

The "big brother" of the VARIO-XS makes operating the wash system even more convenient and has a robust aluminium housing. The VARIO-L stands out thanks to its multitude of additional equipment, including for payment systems and safety features. The basic unit can also be equipped with a coin tester, barcode scanner, intercom, audio module or a transponder card reader.



The VARIO-XS and VARIO-L basic units can be equipped with various accessories and therefore tailored to the relevant operating situation and the system concept. The various combination options are provided in the table.

	VARIO-XS	VARIO-L
	Including	optional
Foot installation (display height)	1,600 mm	975 mm / 1,300 mm
Barcode scanner for C-ST ticket		•
Transponder card reader		•
Key-operated switch, access to the installation	•	•
Key-operated switch, switchover self-service / manual operation	•	•
Intercom, emergency-stop equipment in the cash office		•

FONTIS

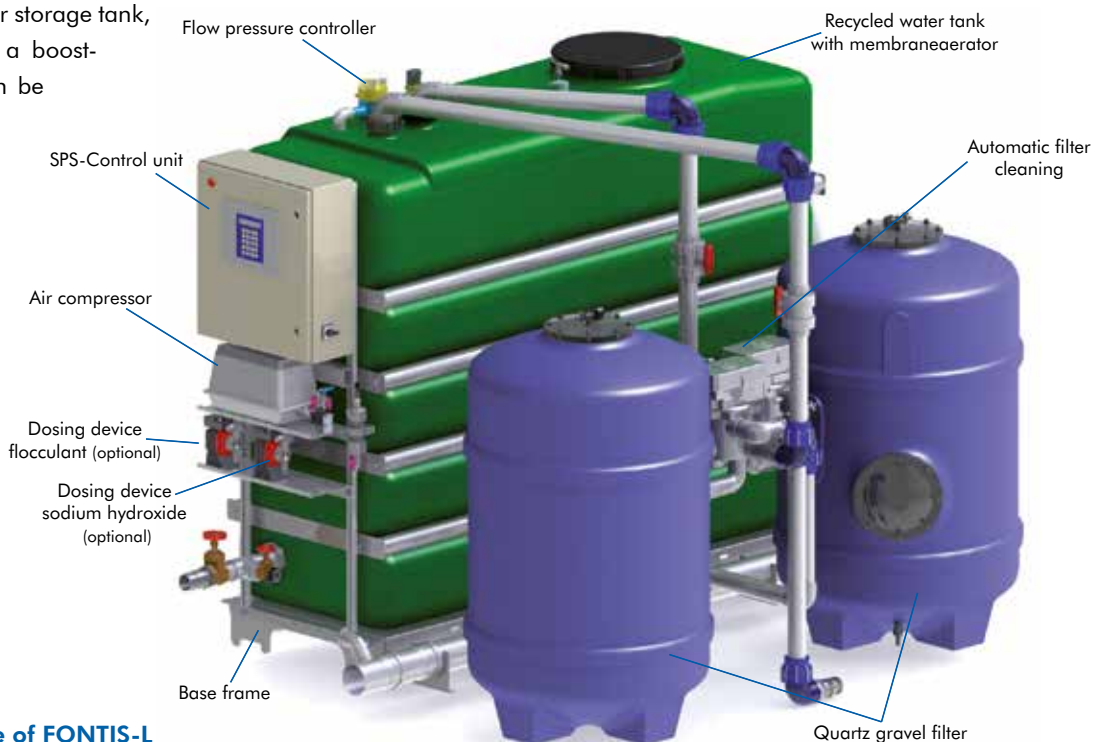
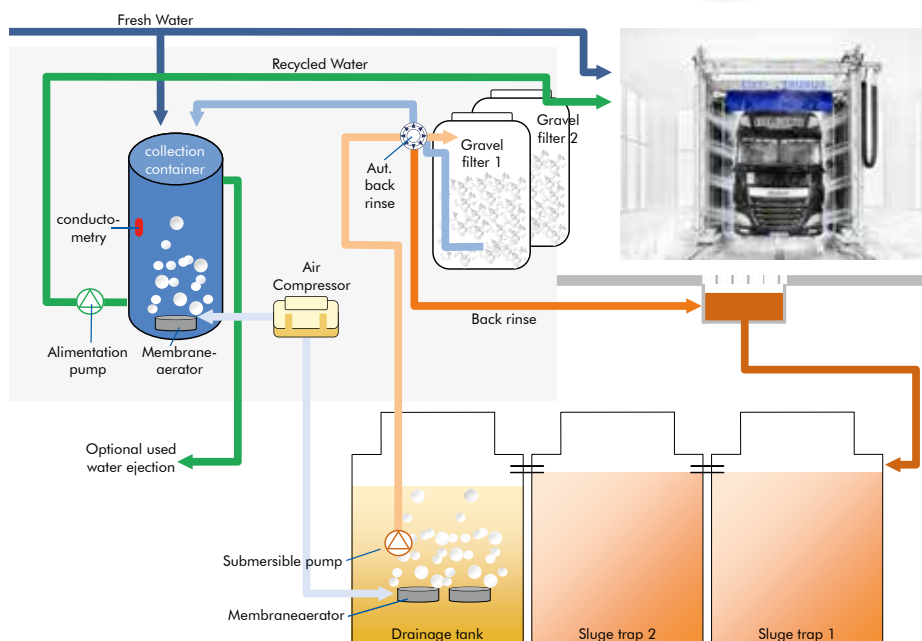
water preparation unit



Water is precious

That makes it all the more important to budget it with extra care. Pure drinking water is often too precious for washing vehicles, which is why it makes sense to use a circulation system to recycle the washing water used. In addition to ecological aspects, legal regulations and economic factors, such as the cost for drinking water and sewage, also play a part in this decision.

FONTIS water preparation units have been developed especially for use with vehicle washing plants. In their compact form, they combine all of the technology including the washing water storage tank, a quartz-gravel filter and a booster pump. The FONTIS can be equipped with an optional chemical pre-treatment stage (flocculation).



Presentation for example of FONTIS-L

MODELL	QUARTZ-GRAVEL FILTER	FILTER PERFORMANCE	STORAGE TANK
FONTIS-M	1	10,000 l/h (166 l/min)	1,000 litres
FONTIS-L	2	20,000 l/h (333 l/min)	2,000 l
FONTIS-L+	2	30,000 l/h (500l/min)	3,000 litres

| All the products at a glance:



Wash tunnels EVOLUTION

The flexible modular system for your wash tunnel, no matter whether it's a short wash tunnel or a high performance system. The EVOLUTION range's focus is on quality, user-friendliness and optimised wash courses. A wide range of alternative technologies and components opens up numerous combination options and offers the optimum solution for any requirement.



Wash park SKYLINE

The modular SKYLINE wash park is the right choice for any location. Two roof designs and outer cladding that can be configured in many ways offer the operator the option to customise. When creating the SKYLINE system, emphasis was placed on energy-efficient technology that optimised operating costs. The equipment can be freely configured so that add-on programs for increasing turnover can be incorporated.



Wash park SKYWING

SKYWING is the eye-catcher in the wash bay area. The attractive roof design, bathed with light, provides appeal from afar and offers car wash in a welcoming atmosphere. In doing so, SKYWING also offers the same flexible options for configuration in setup and wash park equipment as the SKYLINE wash park.



Christ CAR CARE - Heavy duty line

www.christ-carwash-shop.com

Special detergent to pre-clean vehicles in the commercial vehicle wash unit. Clinging dirt starts to dissolve when TRUCK PRECLEAN is applied.

The TRUCK WASH active shampoo for the main clean ensures a thorough washing result when washing with brushes.

Special drying agent with run-off effect for commercial vehicle wash units without blower dryers. The special dryer TRUCK DRY allows the water film to run off spotless.

Roll over wash units

We offer the right car wash for every need. With more than ten different models, we can provide the perfect solution for any application. From our basic models, which promise reliability at a low price, to our top models, which will help your wash business stand out from the crowd with its functions that are unique in the market. Each of our roll over wash units can be fitted with a number of innovative options and technologies to offer the perfect solution for your car wash business.



Vacuum systems

Christ offers the HURRICANE central vacuum system for up to 20 car vacuum places in large car wash centres with a large requirement for vacuum places. Depending on the business model, these can be designed as paid vacuum systems or as a free offer (included in the car wash). HURRICANE is a flexible system that can be optimised to the local requirements.



Train and tramway wash installation

The train / tramway wash systems can be designed in different concepts, such as drive-through wash, semi-stationary wash, or with or without current collector for drive-over wash with trains and tramways. Our variety of frame designs can be fitted with swivel-mounted, split horizontal or continuous wash brushes for cleaning the front / rear ends perfectly.



Xpress

www.christ-carwash-shop.com

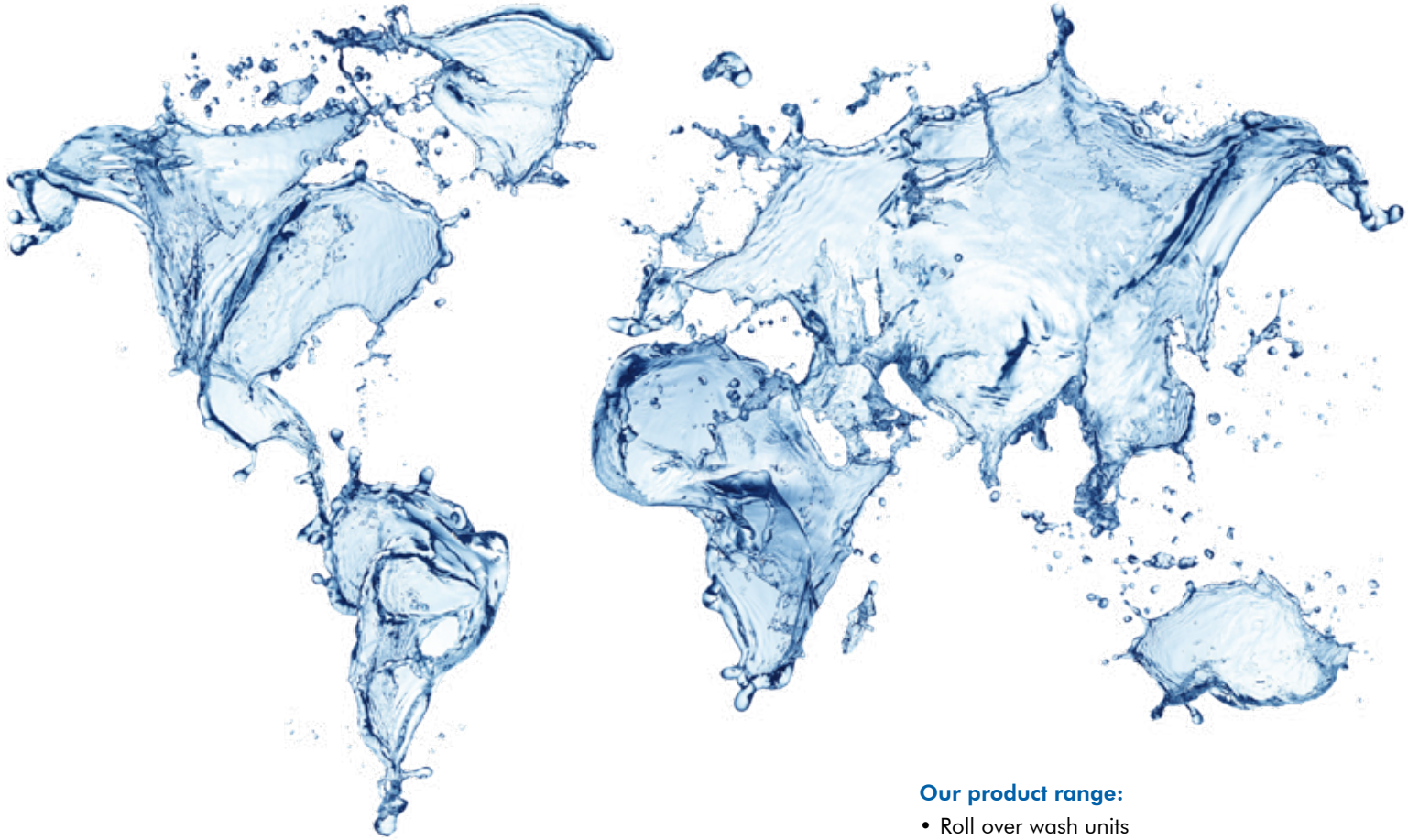
Christ Xpress is the point of access for all car wash equipment. The catalogue and online shop offer Xpress users everything they need for washing businesses, from extra units to work clothes and detergents, to a comprehensive assortment of advertising materials.



Everything from a single source

...from Christ Wash Systems

Christ
WASH SYSTEMS



Our nation-wide customer service guarantees fast help.

- Nation-wide on-site service
- Service central with hotline
- Quick supply with expendable and spare parts already in the service vehicle

Our services:

- Location analysis
- Profitability calculations
- Project planning
- Operator workshops
- Financing concepts
- Marketing help

Our product range:

- Roll over wash units
- Wash tunnels
- Water preparation units
- Self-service wash systems
- Commercial vehicle wash units
- Self-service vacuum cleaners
- Advertising material and accessories about the car wash
- Car wash and care products
- Customer retention system and video surveillance

