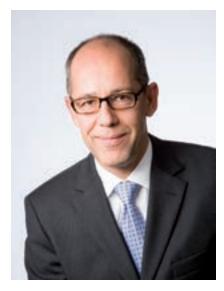


Roll-Over systems The complete programme

www.christ-ag.com



The Real Car Wash Factory



We at the Otto Christ AG see ourselves as one of the leading, most innovative car wash manufacturers worldwide. Owned by the family Christ for over 130 years our company values our organic growth and the continuous improvement of our products. Our main focus is and has always been innovation. We perceive changes as chances and are proud to produce a high tech product that is nevertheless durable and of the highest quality. Our machines offer unique features for each segment of the market and we are proud to always strive to develop them further. Our customers, our distributors and our suppliers are an integrated part of our innovation process and enable us to meet the market demands of tomorrow.

We are looking forward to supporting you in your successful wash business and being a part of your success story.

Otto Christ C.E.O.

"Quality remains - long after the price has been forgotten."

Gottlieb Daimler, founder of the >>Daimler-Motoren-Gesellschaft DMG<<



Headquarters of the Otto Christ AG Administration and production on over 35.333 m^2 roofed area



Production site in Plzen (CZ) with over 29.082 m² roofed production space

Index

OVERVIEW

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Top-Innovator 2009	Top-Innovator 2012	BP safety prize for contractors 2014	Total Safety Award 2014
	Ours	successes	
2009	2012	2014	2015

ACCESSORIES & INNOVATIONS

Your local contacts

We offer high performance systems that are at the cutting edge of Wherever you are, one of our representatives will be happy to assist network of over 30 trusted distributors and 9 subsidiaries.

the industry. One of the reasons of our international success is our you. Each country has its unique culture, people and challenges. This is also true for the wash business. With our global experience

Shri VASH SYSTEMS



we are able to face all requirements: Even if you are facing unusual local representative or us directly by phone: +49/8331/857-0 local demands, we will take up the challenge and develop new or by email: sales@christ-ag.com technologies to assist you in your business. Either you contact our



Our services for you

Advice from professionals

Tailored solutions





Your local partner

- Fast advice on site
- Direct offers on site
- Personal consultation

Our concept

- Analyzing the local demand
- Calculating the return of investment
- Recommending the ideal solution

Our portfolio

- Roll-over systems
- Wash tunnels
- Self-service bays
- Train wash systems
- Water recycling
- Car-care products

Certificates

- DIN EN ISO 9001 (Quality management)
- DIN EN ISO 14001 (Environmental mgt.)
- OHSAS 18001 (Health and safety)
- SCC (Safety certificate contractor)

Planning and permits

- Direct support of local architects
- Supply of technical information needed for permits
- Detailed floorplans for local construction

Project management

- Support in project planning
- Meetings on the construction site
- Detailed information about necessary heavy machinery

Financing

• Our local partners are able to advise you about the available financing methods

With our flexible production we will

your machine

Analyzing localPreparidemand and budgetgetting

Preparing offer and getting approval for financing if needed Order and technical review of site

Fast installations

First grade service



Installation

- Installation by technicians certified by Christ
- Installation in accordance with local safety standards
- Commissioning and testing under supervision
- Instructions on use and maintenance

Chemicals

- Available directly from your local partner
- Christ chemicals are tailored to work perfectly with our machines

Training

• Operator training will be done on site by certified technicians

deliver and install quickly and reliably!

Production of machine

Installation, commissioning and instruction

Service

- Area-wide aftersales service by our local distributor
- Direct access to your personal service technician
- Quick reaction times
- Hotline
- Fast supply of Christ spare parts
- Planned maintenance contracts
- Remote diagnosis via internet available

Marketing

• Marketing support with images and templates

Facelift

• Facelifts of existing systems are also available

Reporting

- Remote reports via internet
- Export and analize all data

Return on investment analysis

Our local partner will be happy to supply you with a custom made business plan to find out your estimated return on investment. Please note that the calculation below is an example, all numbers are subject to change depending on local conditions.

Output		Ott	o Christ AG
	N	larket analysis	
Potential customers in catch Estimated washs per year Sales potential p.a. Sales potential p.m. Expected sales	85.440 7.120 15.000	<u>8.544</u> 85.440	
Expected sales			
		Cost Analysis	
Fixed cos	ts per year	Variable costs*	
Electricity	600,00€	Electricity	1.637,87€
Water	200,00 €	Water	2.398,28€
Maintaince	0,00€	Sewage	0,00€
Insurance	850,00 €	Chemicals	2.714,78€
Waste removal	400,00 €	Maintaince	4.500,00€
Advertisements	500,00 €	p.a.	6.750,92€
other p.a.	0,00 € 2.550,00 €	*depending on no. of washs	
Invest	ment costs	Estate	
Purchase price	50.000€	Costs for estate p.a.	10.000,00 €
Equity	40.000 €	Other costs p.a.	0,00€
Total costs p.a.	1.423,78 €	Initial construction	4.500,00€
	<u>To</u> per year	tal fixed costs 11.424 €	

per month

Initial investment in year 1

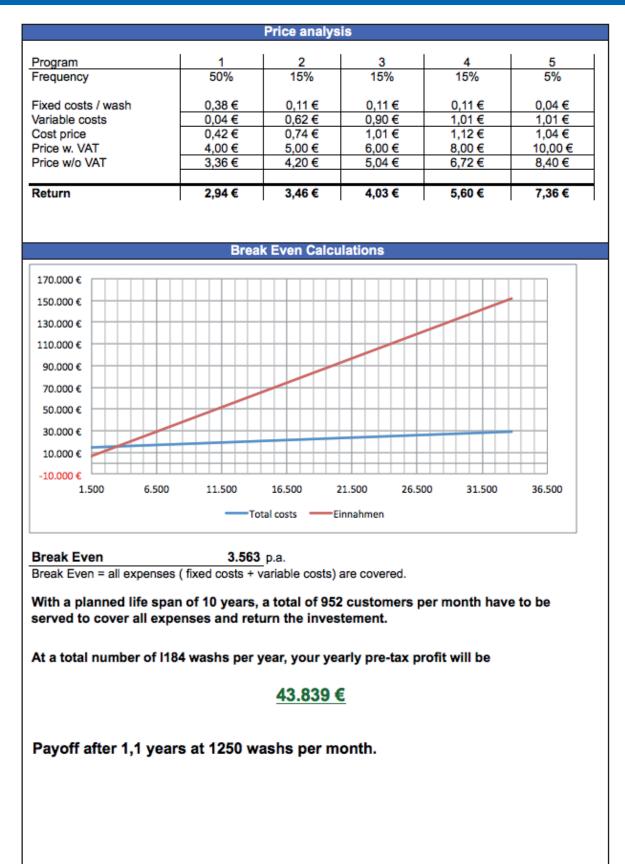
952€

4.500 €

6

- Quick projection of sales figures and costs
- Can be done directly on site, no waiting
- Many locals costs are already included

• High investment security already in planning phase



What we see as "our standard"

Included with each Christ machine without additional costs

Custom-made machines

Each Christ machine is made-to-order according to your request. This way you will always enjoy the newest technologies and will get a state of the art machine right out of the factory.

Individual colours*

Choose your favorite colours for the brushes and plastic cladding of the machine from our selection of colours.

Basic chemical system

The right chemicals are the foundation of a great wash. This is why all of our machines come with two free dosing systems for shampoo and drying aid.

OPTIFLEX sidebrushes

Optimal contouring of the vehicle's sides with our pneumatically controlled side brushes.

Hot-dip galvanised high quality steel frame**

Each roll-over frame is first hot-dip galvanised and then powder-coated. This means an extraordinary resistance against corrosion and long machine life, even in the corrosive environment of a wash hall.

Duplex powder-coating

All our machines are duplex powder-coated for maximal resistance against corrosion.



* on surchage for C16E Leanus

** Leanus: galvanised stands, coated roll-over unit frame





Dry-run protection system

Should the water supply fail at any time, the machine detects the dropping pressure and will stop immediately to avoid damaging the car.

Closed front and rear

All machines come with front and rear cladding in a color of your choice from the Christ colour chart.

Anti-tilt system

Safety comes first! This is why all our machines are equipped with an anti-tilt system.

Brushes

PE brushes are always included, other premium brush materials are available on surcharge (excl. touchless machines).

Self-testing machines

All Christ portals are equipped with a self-testing sequence. The machine checks the perfect function after the switch-on process.

Economical

Our system need less water, electricity and chemicals due to the innovative design.

Many options, many benefits

A short description of the most important options

Active foam



The perfect start for a perfect wash: The car is being bathed in foamed soap. These tensides loosen crusted dirt on the vehicle and are especially effective on muddy or dusty vehicles. The foaming has two benefits: It gives a pleasant visual effect for the client and the chemical is less fluid and can stay longer in contact with the car's surface for higher efficiency.

High pressure pre-wash



After the active foam another cornerstone of a perfect wash: the high pressure pre-wash removes mud, sand and crusted dirt. This helps to avoid damages to the car's finish by sand particles caught in the brushes. Your clients will love the wow factor of the powerful water streaming over their vehicle and you can save time and costs in cutting back on manual pre-wash.

Wheel wash and high pressure wheel wash



Clean rims and tires have become something that a client expects from any wash. Christ offers different solutions that are suited for your needs. The most popular option is a combined brush and high pressure system which we offer with different pressure and water volumes, but we also offer different types of brush only or high pressure only systems.

Under-chassis wash



A thorough under-chassis wash should be included in any premium offer. Christ does exclusively offer a rotating 85 bar under-chassis wash that effectively cleans the car from mud, salt or corrosive chemicals with minimal water consumption. Of course we also do offer the classic fixed or pivoting pipe system.

Jointed side brush



One of our trademark technologies: The patented Christ jointed brush has been developed by Christ and has proven its effectiveness over and over in the past decades. These jointed brushes also allow the successful use of textile washing materials over the entire side brushes and produces outstanding washing results.

Foam wax



A good finish for a good wash: similar to the active foam the foam wax stays longer on the vehicle's surface and creates an attractive gloss finish. In addition to the visual advantages foam wax is also very popular due to its conserving properties. Available for all Christ machines.

Special wax



For clients that want the perfect result: a special wax system can give a premium wash the ideal gloss finish and is very popular with premium clients. In comparison to foam wax, a purer chemical is applied. Special wax will also be polished into the car by the brushes. This option is available in several variations for all sytems, from the classic category and upwards.

Drying



The end of every Christ wash: a thorough drying leaves a satisfied client and lets the car show off a clean and shiny surface. Specially shaped air channels and light barriers allow a very fast and efficient drying process. All Christ roof dryers are contouring dryers, machines of the premium category and above are able to rotate up to 140° to achieve the ideal angle for perfect drying.

Colours

Be creative!

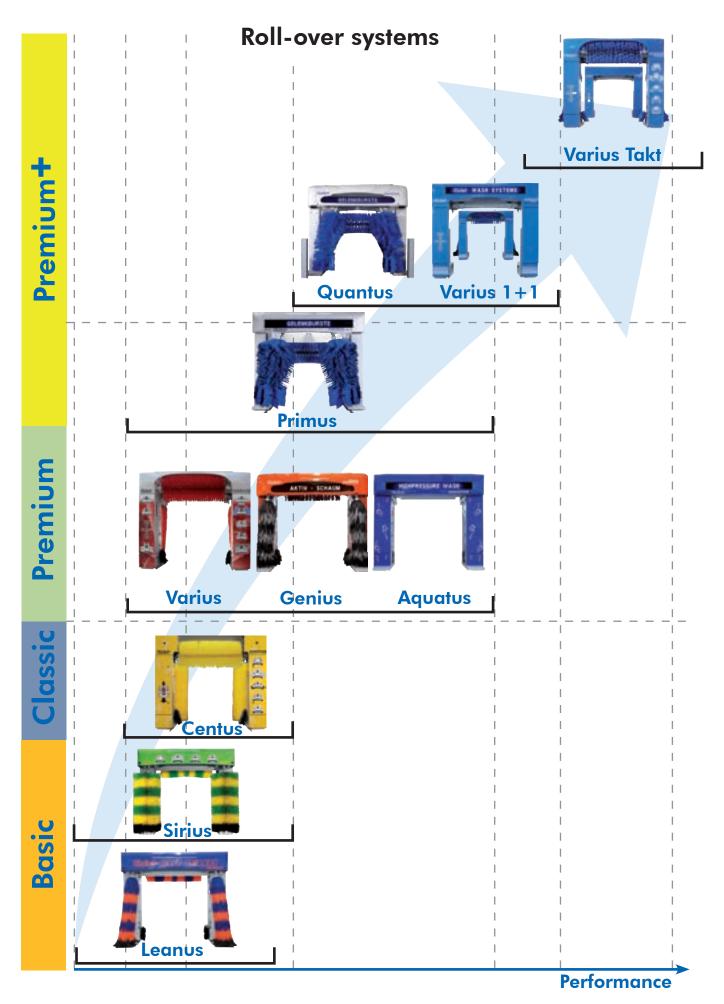
All models available in individual, customized colours. The steel frame is always duplex powder coated in Telegrey (RAL 7047).



Name	Plastic cladding	PE brush	SENSOTEX+	SENSOFIL+	SENSOMIX+	SENSODRY
Ultramarine blue RAL 5002	~	v	×	✓	~	V
Sky blue RAL 5015	~	v	~	~	~	×
Flame red RAL 3000	~	~	~	~	~	~
Yellow green RAL 6018	~	~	~	~	~	×
Traffic green RAL 6024	~	~	×	~	~	~
Traffic yellow RAL 1023	~	~	×	~	×	×
Traffic orange RAL 2009	~	~	×	~	×	×
Pure white RAL 9010	~	v	×	×	×	×
Telegrey 4 RAL 7047	~	×	×	×	×	×
White aluminium RAL 9006	~	~	~	~	~	×
Grey aluminium RAL 9007	~	×	×	×	×	×
Jet black RAL 9005	~	~	~	~	~	~

The exact colours reproduced and pictures cannot be guaranteed. The indication of the colour shades RAL are merely an approximation and can vary according to application on different surfaces and materials.

Our machine portfolio



Our machine portfolio



All roll-over systems are built according to the standards of the German Association of the Automotive Industry



	Model (Type)	LEANUS (C16E)	SIRIUS (C16)	CENTUS (C164)	VARIUS (C163)	
	Category	Βα	sic	Classic	Premium	
Model	Typical operators	Car dealers/ repair shops, fleet management, small petrol stations	Car dealers/ repair shops, fleet management, small petrol stations	Petrol stations, car dealers/ repair shops, fleet management	Petrol stations, car dealers/ repair shops, fleet management	
	System type	Single gantry 3 brush machi- ne with dryer	Single gantry 3 brush machi- ne with dryer	Single gantry 3 brush machi- ne with dryer	Single gantry 3 brush machi- ne with dryer	
	Washes per month	up to 800	up to 1200	up to 1200	up to 1200	
	Brush material	PE, SENSOFIL+	PE, SENSOFIL+ SENSOMIX	PE, SENSOFIL+, SENSOMIX+, SENSOTEX+	PE, SENSOFIL+, SENSOMIX+, SENSOTEX+	
suo	Passage height (mm)	2250/2650/2850	2250 - 2850	2050 - 3100	2300 - 3150	
Jensi	Passage width (mm)	2400	2400	2400/ 2550/ 2700	2400/ 2550/ 2700	
Dir	Track width (mm)	2500 - 3126	2500 - 3126	2500 - 3126	2500 - 3126	
	Pre-wash	AF	AF	AF, RC, SC	AF, RC, SC, IR	
	Wash programs	Standard programs (customizable)	customer-specific	customer-specific	customer-specific	
ر م	Conservation	DA, FX	DA, FX, SWW	DA, FX, SWW	DA, FX, SWW, SWA	
lion:	Drying height (mm)	1700	1700	1700 / 2000	1700 / 2000	
Functions	Special features	Optimized airflow, integrated high pressure pump	Optimized airflow, airflow adjustment flap	Roof dryer with airflow ad- justment flap, passage width 2700 (vans, etc.)	Roof dryer with self adjusting angle, large section for ad- vertisement on front, visual layout possibilities	
	Activation	Pin code system, third-party solutions	Coins/chips, RFID cards, Pin code system, third-party solutions	Coins/chips, RFID cards, Pin code system, third-party solutions	Coins/chips, RFID cards, Pin code system, third-party so- lutions	
	Gearbox drive	\checkmark	\checkmark	\checkmark		
	Direct drive				\checkmark	
	Jointed brush			\checkmark	\checkmark	
ails	Roof dryer contour-flollowing air valve		contour-flollowing air valve	contour-flollowing air valve	contour-flollowing air valve with self adjusting angle	
details	Side dryer	fixed	fixed	fixed (optional)	fixed	
icals	Plastic covers	front & rear	front & rear	front & rear	front & rear	
Technicals	Alarm for low chemicals				\checkmark	
	Pictograms		\checkmark	\checkmark	\checkmark	
	LED front ticker					
	rear mounted LEDs		\checkmark	\checkmark	\checkmark	
	RGB-wheel guiding tubes		\checkmark	\checkmark	\checkmark	

Legend:

- AF = Active foam
- **RC** = Rim cleaner **SC** = Saisonal che
- = Saisonal chemicals
- IR = Insect remover DA = Drying aid
 - = Foam wax

FX

SWW = Special wax (water) SWA = Special wax (air)



GENIUS (C160)	AQUATUS (C166)	PRIMUS (C169)	QUANTUS (C165)	VARIUS 1+1 (C162)	VARIUS TAKT (C161)
Prem	ium		Premi	ium+	
Petrol stations, car dealers/ repair shops, fleet management	Petrol stations, car dealers/ repair shops, fleet management	Petrol stations, car dealers/ repair shops, fleet management	Petrol stations, car dealers/ repair shops, fleet management	Petrol stations, car dealers/ repair shops, fleet management	Petrol stations, car dealers/ repair shops, fleet management
Single gantry 3 brush machine with dryer	Single gantry touchless machine with dryer	Single gantry 3 brush machine with dryer	Single 5 brush machine with dryer	Double gantry 1+1, 3 brushes and dryer	Double gantry Takt, 3 brushes and dryer
up to 1500	up to 2000	up to 1500	up to 2400	up to 2300	up to 4000
PE, SENSOFIL+, SENSOMIX+, SENSOTEX+		PE, SENSOFIL+, SENSOMIX+, SENSOTEX+	PE, SENSOFIL+, SENSOMIX+, SENSOTEX+	PE, SENSOFIL+, SENSOMIX+, SENSOTEX+	PE, SENSOFIL+, SENSOMIX+, SENSOTEX+
2300 - 3150	2250 - 2650	2100 - 2800	2250 - 2650	2300 - 2700	2250 - 2700
2400	2400	2400	2400	2400	2400
2500 - 3126	2500 - 3125	2500 - 3126	2500 - 3126	2500 - 3126	2500 - 3126
AF, RC, SC, IR	AF, alcaline, acidical	AF, RC, SC, IR	AF, RC, SC	AF, RC, SC, IR	AF, RC, SC, IR
customer-specific	customer-specific	customer-specific	customer-specific	customer-specific	customer-specific
DA, FX, SWW, SWA	SC, DA, FX, SWW, SWA	DA, FX, SWW, SWA	DA, FX, SWW, SWA	DA, FX, SWW, SWA	DA, FX, SWW, SWA
1700	1700	1570 - 2570	1500	1700 / 2000	1700 / 2000
Roof dryer with self adjusting angle, Vitesse option	Contact-free washing with OptiStream and high-pressure system	contouring side dryers, Add Dry, Vitesse option	high capacities in stan- dard hall sizes, Vitesse option	Double gantry with seperate washing and drying unit	Double gantry with sepe- rate washing and drying unit, textile brush dryer
Coins/chips, RFID cards, Pin code system, third- party solutions	Coins/chips, RFID cards, Pin code system, third- party solutions	Coins/chips, RFID cards, Pin code system, third- party solutions	Coins/chips, RFID Cards, PIN-Code-System, Third-Party solutions	Coins/chips, RFID cards, Pin code system, third- party solutions	Coins/chips, RFID cards, Pin code system, third- party solutions
\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
contour-flollowing air valve with self adjusting angle	contour-flollowing air valve with self adjusting angle	contour-flollowing air valve with self adjusting angle	contour-flollowing air valve with self adjusting angle	contouring air valve with self adjusting angle	contour-flollowing air valve with self adjusting angle
fixed	fixed	contouring / ADD Dry	fixed	fixed	fixed
front & rear	front & rear	front & rear	front & rear	front & rear	front & rear
\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
				\checkmark	\checkmark
\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

LEANUS

Low price and high reliability side by side



A real "Christ" – but at a bargain. Even with our entry level model Leanus Christ does not make any compromises in build or component quality. All components are manufactured in Europe, the machines are assembled in Christ factories like all other machines. You won't find any low grade components and no cost cutting on the expense of quality. Our Leanus is a high quality machine, but reduced to the essentials.

Each Leanus is buildt by Christ employees in accordance with our usual quality standards, the low price is achieved by high standardization and the use of proven technology. You won't find any cutting edge technology, but this is also a plus for areas where the next service technician is not just around the corner.

The basic model already includes connections for recycled and fresh water and an LED positioning system. The supply pump and high pressure pump can be integrated in the machine, making it possible to forgo any plant room and speeding up the installation. The Leanus is for clients that need a solid machine at a competitive price.







Technical specifications					
Model (Type)	Leanus (C16E)				
Ideal hall size (L x W) [m]	10 x 5				
Passage heights [mm]	2.250				
	2.650				
	2.850				
Passage widths [mm]	2.400				
Track widths [mm]	2.500				
	2.700				
	2.800				
	3.126				
Combined roof/side dryers [kW]	2 x 5,5				

Available technologies:	Active foam	Tire high pressure	HP-prewash	Vitesse option
lectificitiegiesi	Foam wax	Protect Shine Xpress	Vario Touch	Program display
	Under-chassis wash	Opti-contour dryer	Opti-air dryer	Jointed brush

BASIC

Economical



Memory control system

During the brush wash the vehicles contour is measured and saved by the machine. The contour following dryer mirrors exactly the way of the roof brush, safely circumventing any obstacles. Should the car have moved after the brush wash, a light barrier triggers an emergency stop and prevents any damages to the car.



Simple and effective

As our entry level machine, the Leanus is especially easy to install and maintain, even in remote areas. With the integrated supply and high pressure pumps no complicated laying of pipes is necessary and the installation can be finished quickly.



Attractive design

Being an entry level machine is no excuse for an unpleasant exterior: Our Leanus comes with an attractive plastic cladding and brushes in blue and orange. The free choice from the Christ color selection is available on surcharge.

SIRUS

Efficient and durable!



Low price, 100% Christ quality and individually manufactured for you: That is our Sirius.

The fully hot-dip galvanized and powder coated steel frame sets new standards in durability and resilience against chemicals.

As a solid basic machine Sirius has a low power consumption, many different variants and a unique drying system. Features like shampoo, cross over wash, computer controlled brush pressure and an included user terminal are standards for us and come at no additional fee. The optional 85 bar side high pressure can clean even muddy vehicles with 6 stainless steel nozzles. The perfect and conserving finish is done by the optional foam wax system in a separate run.

Sirius is mostly targeted at car dealerships, repair shops and smaller petrol stations with price conscious clients.









Technical specifications					
Model (Type)	Sirius (C16)				
Ideal hall size (L x W) [m]	10 x 5				
Passage heights [mm]	2.250				
	2.350				
	2.450				
	2.550				
	2.650				
	2.750				
	2.850				
Passage widths [mm]	2.400				
Track widths [mm]	2.500				
	2.700				
	2.800				
	3.126				
Combined roof/side dryers [kW]	2 x 5,5				

Available technologies:	Active foam	Tire high pressure	HP-prewash	Vitesse option
leenneregies.	Foam wax	Protect Shine Xpress	Vario Touch	Program display
	Under-chassis wash	Opti-contour dryer	Opti-air dryer	Jointed brush

BASIC

Simple



Side dryers

The 1700mm high side dryer is already included in the standard machine. With a unique air flow system the drying fans of the roof dryer are also used for the side drying, saving on electricity and maintenance costs. The machine uses considerably less power than similar machines in the same range.



Roof dryer with 30° air flap

The contouring roof dryer follows the way of the brush and will give you a good drying result with minimal noise and power consumption. For an improved front and rear drying of vans and transporters we offer the option of an air flap that will redirect the air flow up to 15° to each side.





Program display

The visually impressive LED spots show the progress of the current wash program and lets your clients follow each step of the wash. If the machine is currently not active, different light effects can be programmed.

CENTUS

Wide and high



Our Centus is a high performance system with various features and options and many different designs. You will get the right machine for your location for a fair price.

This machine was developed for the special requirements of car dealers, repair shops and gas stations. Equipped with a distinct air flow system the Centus convinces with superior drying results of the DIVO roof dryer. Available as options are two additional side dryers. A contouring, 2m wide roof drying nozzle will dry roof and sides of all types of vehicles, the clear positioning system makes it easy to drive in and out of the machine.

Centus comes optionally available with an internal passage width of 2,70 m and side drying height of 2,00 m and is the first choice for the washing of transporters and vans.

Main target group are larger car dealers, repair shops, fleet management services and small petrol stations.









Technical specifications Centus (C164) Model (Type) Ideal hall size (L x W) [m] 10 x 5 Passage heights [mm] 2.050 2.250 2.350 2.450 2.550 2.650 2.750 2.850 3.100 2.400 Passage widths [mm] 2.550 2.700 Track widths [mm] 2.500 2.700 2.800 3.126 Roof dryer [kW] 2 x 4,0 Roof/side dryers [kW]* 2 x 3,0/ 2 x4,0

Available technologies:	Active foam	Tire high pressure	HP-prewash	Vitesse option
rectificitogicsi	Foam wax	Protect Shine Xpress	Vario Touch	Program display
	Under-chassis wash	Opti-contour dryer	Opti-air dryer	Jointed brush

CLASSIC

Flexible



LED systems

The LED positioning system gives the driver exact and clear feedback about the correct position of the vehicle in the machine. In addition to the positioning system we also recommend the LED program pictograms that will give your clients feedback about the current progress of the wash program and the features that have been chosen.





Wheel wash

Clean tires and rims have become a must for a modern car wash. Christ offers a wide range of brush, HP and brush and touchless wheel washers and different types of chemical application for a perfect result.





Roof dryer with air flow control

Equipped with two powerful drying fans, the roof dryer follows the contour of the vehicle and will give you an excellent drying result. With the optional air flow flap the system is even able to adjust the air flow $+/-30^{\circ}$ and can give good results for transporters, station wagons and hatchbacks.

VARUS

The individual car wash



Our all-rounder Varius is perfectly suited for a profitable wash business and will not disappoint with its high performance systems.

With the highly variable upgrades and accessories you can customize your Varius exactly to your specific needs. The attractive exterior design with its optional pictogram display will give your location an individual touch and is great for advertisement.

The highlight of this machine is the contouring and selfadjusting roof dryer that always uses the ideal drying angle. The system is electronically controlled and always monitored by light barriers to avoid any collisions between dryer and car.

The C163 Varius is targeted towards owners that are selling their washes like petrol stations, car dealers and repair shops.



Technical specifications						
Model (Type)	Varius (C163)					
Ideal hall size (L x W) [m]	10 x 5					
Passage heights [mm]	2.300					
	2.400					
	2.500					
	2.600					
	2.700					
	2.800					
	2.900					
	3.150					
	2.400					
Passage widths [mm]	2.550					
	2.700					
Track widths [mm]	2.500					
	2.700					
	2.800					
	3.126					
Wheel guiding pipe widths [mm]	2.050					
Roof dryer [kW]	2 x 3,0					
Side dryers [kW]	2 x 4,0					



PREMIUM

Versatile



LED systems

The LED positioning system gives the driver exact and clear feedback about the correct position of the vehicle in the machine. In addition to the positioning system we also recommend the LED program pictograms that will give your clients feedback about the current progress of the wash program and the features that have been chosen.





Side dryers

An optimized side dryer with 1.700 mm drying height is already included in the basic model. You can upgrade to a 2.020mm side dryer if a significant percentage of your customer base has SUVs or vans.





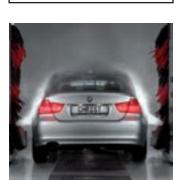
Contour-following roof dryer

In operation for over 15 years and optimized each year: Out contour-following and 140° rotating roof dryer can follow contours of SUVs, sports cars and anything inbetween. Two drying fans with 3 kW each will effectively clear all vehicles of remaining water.



Wheel wash

Clean tires and rims have become a must for a modern car wash. Christ offers a wide range of brush, HP+brush and touchless wheel washers and different types of chemical application for a perfect result.



GENIUS

The smart option



New and improved technologies in combination with proven and tested systems and a great design: Those things characterize our Genius. Crafted with high quality materials, built in Germany and rigorously tested before shipment: This is a machine that will stay with you for a long time. The main difference to the Varius is the position of the brushes, the Genius has the side brushes at the front. Diverse accessories and upgrades are available to adjust the machine to your needs, furthermore each machine will be shipped with exactly the programs you need without any additional cost.

The Genius is targeted towards repair shops and petrol stations with an intermediate number of wash clients. In combination with the Vitesse Option it is even suited for highly frequented locations.



Technical specifications				
Model (Type)	Genius (C160)			
ldeal hall size (l x w) [m]	10 x 5			
Passage heights [mm]	2.300			
	2.400			
	2.500			
	2.600			
	2.700			
	2.800			
	2.900			
	3.150			
Passage widths [mm]	2.400			
Track widths [mm]	2.500			
	2.700			
	2.800			
	3.126			
Wheel guiding tube widths [mm]	2.050			
Roof dryer [kW]	2 x 3,0			
Side dryers [kW]	2 x 4,0			

Available technologies:	Active foam	Tire high pressure	HP-prewash	Vitesse option
localitore gioci.	Foam wax	Protect Shine Xpress	Vario Touch	Program display
	Under-chassis wash	Visus-display	Opti-air dryer	Jointed brush

PREMIUM

Smart



Vitesse option

Exclusively available at Christ: This combination of active foam, oscillating high pressure and brush wash can save up to 20% time per wash. With one feature you can have up to 20% more turnover and your clients will enjoy the performance of the powerful jets. *More details on page 36*





Wheel wash

Clean tires and rims have become a must for a modern car wash. Christ offers a wide range of brush, HP+brush and touchless wheel washers and different types of chemical application for a perfect result.





LED systems

After the LED positioning system has guided the client safely into the machine, he can follow the progress of his wash on the large LED ticker on top of the machine. 6000 LEDs command attention, even if the machine is currently not active. Available also with a coloured, animated Visus-Display.





Contour-following roof dryer

In operation for over 15 years and optimized each year: Out contour-following and 140° rotating roof dryer can follow contours of SUVs, sports cars and anything inbetween. Two drying fans with 3 kW each will effectively clear all vehicles of remaining water.



AQUATUS

True Touchless - Don't compromise!



The development of the Aquatus had one principle: Don't compromise!

Also a brushless machine should still deliver the same results as any other Christ machine: A great wash. The combined chemical applicator and high pressure bar does make this possible. It keeps an even distance to the car so that the chemicals can reach all parts of the vehicle in the same concentration. The combination of different chemicals will soften up even persistent dirt and the contouring high pressure system will clean it off easily.

Following the Christ philosophy there is no great car wash without a great drying system. Also when it comes to drying, the Aquatus does play in the same league as all other Christ machines. A contouring roof dryer, side dryers and a total drying power of 14 kW will leave no water, only satisfied clients. This machine targets countries with a high share of touchless machines but also any operator that is looking for a competitive edge.









Technical specifications				
Model (Type)	Aquatus (C166)			
Ideal hall size (L x W) [m]	10 x 5			
Passage heights [mm]	2.250			
	2.350			
	2.450			
	2.550			
	2.650			
Passage widths [mm]	2.400			
Track widths [mm]	2.500			
	2.700			
	2.800			
	3.126			
Wheel guiding tube widths [mm]	2.050			
Roof dryer [kW]	2 x 3,0			
Side dryers [kW]	2 x 4,0			



PREMIUM

Powerful



Multi-stage chemical application

In several stages different chemicals are applied to the vehicle to soften up any crusted dirt. With our contouring application system the chemicals will be evenly applied to all areas of the car. Two chemicals are included in the basic version, a third is available as an upgrade.





Contouring high pressure

A unique high pressure system follows the contour of the car and keeps the water pressure on each point of the car even. This means a superior wash result at comparatively low water consumption rates. This feature is included in the basic machine.





Oscillating side high pressure

The oscillating side high pressure effectively cleans the sides and sill areas of the vehicle. With 8 powerful jets and 80 L /min is this system similar to the Vitesse High Pressure Option, but is already included in the basic model.





Contour-following roof dryer

In operation for over 15 years and optimized each year: Out contour-following and 140° rotating roof dryer can follow contours of SUVs, sports cars and anything inbetween. Two drying fans with 3 kW each will effectively clear all vehicles of remaining water.





Simply the best



If you were to ask which features are available for the Primus the answer would be very simple: All of them!

As the flagship of the Christ product range the Primus has a lot to offer: Besides standard features like cross over wash, computer controlled brush pressure and contour-following dryer the Primus is equipped with the newest revolution in car wash system, the Direct Drive. This innovative motor system does not need any gearboxes and is able to change the speed of the brush at the blink of an eye. It is controlled by specially developed frequency converters and opens up a whole dimension of new wash programs. In addition to the Direct Drive the major strong suit of the Primus is the unique drying concept with contour-following roof dryers, tilting side dryers and the AddDry option for high vehicles. These features will give you simply the best drying result that is currently available.

All brush materials are of course available, so you can equip your machine with PE, Sensofil, Senotex or Sensomix. The Primus is targeted towards operators with high end clientele or high end petrol stations.



Technical specifications		
Model (Type)	Primus (C169)	
Ideal hall size (L x W) [m]	10 x 5	
Passage heights [mm]	2.100	
	2.300	
	2.400	
	2.500	
	2.600	
	2.700	
	2.800	
Passage widths [mm]	2.400	
Track widths [mm]	2.500	
	2.700	
	2.800	
	3.126	
Wheel guiding tube widths [mm]	2.050	
Roof dryer [kW]	2 x 3,0	
Side dryers [kW]	2 x 3,0	



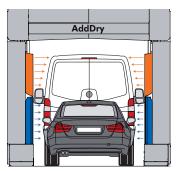
PREMIUM+

Multifunctional



Unique drying system

The contour-following and rotating main dryer, the tilting side dryers and the optional van dryer AddDry all work together to achieve the perfect drying result. Since the AddDry upgrade reaches up to 2.5m, even high SUVs and transports will leave the machine spotless and dry.





Protect Shine Xpress

A new innovation made by Christ: With a special pattern of wax nozzles and temporarily higher rotation rate of the side brushes any program with wax is sped up considerably. You will be able to get up to 40% shorter wash times and still get the same, perfect result. *More details on page 38*





Vitesse option

Exclusively available at Christ: This combination of active foam, oscillating high pressure and brush wash can save up to 20% time per wash. With one feature you can have up to 20% more turnover and your clients will enjoy the performance of the powerful jets. *More details on page 36*





Direct drive

Another Christ-exclusive: The Direct Drive for roof and side brushes disposes of the old gear box based technology and uses frequency converters to control the brush speed. Beside energy savings of approx. 10% this means that if you switch wash materials you can simply adjust the machine with a software update, no work on the hardware necessary. *More details on page 45*



QUANTUS

Compact and powerful





The Quantus 5-brush machine is the work horse of the Christ machines. Developed for locations with high volumes but limited space it can reach a surprisingly high capacity while fitting in a 10m hall.

In combination with the Vitesse high pressure option a volume of 16 cars per hour can be reached with a normal wash program. The drying system has been upgraded to keep up with the high speed and has 1.6 kW more power than a standard Christ dryer. If this is still not fast enough, a special speed option is available that will HP prewash, brush-wash and dry a car in just two runs. Your local Christ partner will be happy to discuss the different options for programs with you, they are already included in the sales price of the machine.

The Quantus is targeted towards locations with a high volume and limited space and is the ideal upgrade if your current machine can't keep up with the demand.

Roof dryer [kW]	
Model (Type)	Quantus (C165)
Ideal hall size (L x W) [m]	12 x 5
Passage heights [mm]	2.250
	2.350
	2.450
	2.550
	2.650
Passage widths [mm]	2.400
Track widths [mm]	2.500
	2.700
	2.800
	3.126
Roof dryer [kW]	2 x 4,0
Side dryers [kW]	2 x 4,0



PREMIUM+

Industrious



Vitesse option

Exclusively available at Christ: This combination of active foam, oscillating high pressure and brush wash can save up to 20% time per wash. With one feature you can have up to 20% more turnover and your clients will enjoy the performance of the powerful 85 bar jets. *More details on page 36*





Contour-following roof dryer

In operation for over 15 years and optimized each year: Out contour-following and 140° rotating roof dryer can follow contours of SUVs, sports cars and anything inbetween. Two drying fans with 3 kW each will effectively clear all vehicles of remaining water.



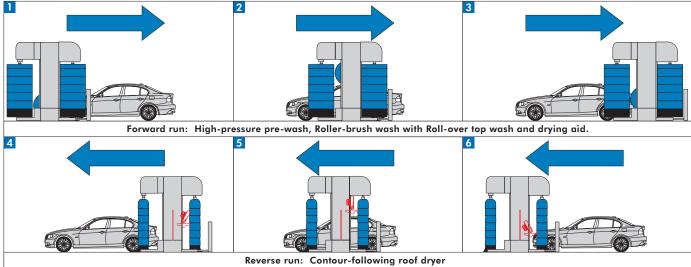


LED systems

After the LED positioning system has guided the client safely into the machine, he can follow the progress of his wash on the large LED ticker on top of the machine. 6000 LEDs command attention, even if the machine is currently not active. Available also with a coloured, animated Visus Display.



The Quantus Express washing programme



Changes to construction and implementation are reserved. Pictures may show accessories that are subject to additional charges.

VAR JUS Double the power



The Christ Varius 1+1 is the team-player of the Christ machines. Two specialized portals, one for washing and one for drying are able to speed up the washing process considerably. On one run several functions can be executed at the same time, so e.g. active foam, brush wash, drying aid and drying can all be done in two runs. The high end dryer with 16 kW does only need one run and shortens the overall washing time as well.

One of the big advantages of the Varius 1 + 1 is its flexibility: With two separate portals even unusual programs are possible at high speeds. Your local Christ partner will be happy to advise you on the possibilities. A visual highlight is the possibility of using a 6000 LED ticker display and LED spots with pictograms at the same time.

The Varius 1+1 is targeted towards operators with high volumes.

Technical specifications			
Model (Type)	Varius 1+1 (C162)		
ldeal hall size (L x W) [m]	12 x 5		
Passage heights [mm]	2.300		
	2.400		
	2.500		
	2.600		
	2.700		
Passage widths [mm]	2.400		
Track widths [mm]	2.500		
	2.700		
	2.800		
	3.126		
Wheel guiding tube widths [mm]	2.050		
Roof dryer [kW]	2 x 4,0		
Side dryers [kW]	2 x 4,0		



PREMIUM+

Team-minded



Oscillating all-round high pressure

The all-round high pressure system comes with 12 point nozzles and 85 bar and is powerful enough to clean even the muddiest car. The back and forth movement of the 0° nozzles achieves a better result than the classical $15^{\circ}/25^{\circ}$ nozzles, and that at the same consumption rate.





Extra powerful rotating dryer

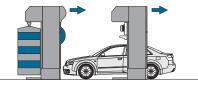
The rotating dryer adjusts automatically to the ideal angle and together with the high performance side dryers a total of 16 kW drying power is packed into the separate drying portal. Due to this high powered system, even 1.5 runs are enough to leave the car dry and ready to go.



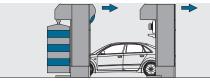
Functional principle Varius 1+1



Car positioning in front of the drying portal. The wash portal is at the back at the starting position.



The drying portal moves from the waiting position to the entrance of the hall position. High pressure wash and foam wash will be carried out.



The following wash portal starts at the same time with the main wash.



In the reverse run a drying aid will be used or a wash and wax agent will be applied.

The following drying portal starts right at the end of the washing process. Time-saving car drying process is achieved with one run only.

VARUS



A wash tunnel in roll-over size: That is the Varius Takt. With its two separately placed portals it can give you up to double the capacity of a single portal unit.

The underlying principle of this machine is the division of labor: While drying portal is still drying a car the washing portal is already starting with the next client. When a car is washed the driver gets a signal to drive ahead into the drying area. This concept means, that the machine is nearly always working on two cars, effectively doubling its capacity. The peak capacity is at 20 cars per hour without any degradation of the wash quality.

In comparison to a full wash tunnel the price and the installation are the main arguments: While a tunnel requires heavy ground works for the conveyor you can simply install the Varius Takt above ground in an existing hall. A special option are the polishing brushes for the drying unit. Those brushes can be used after a special wax program to give the car a high quality gloss finish which does justify higher wash prices. The Varius Takt is targeted towards operators with a very high volume and demanding clients.

lechnical specific	ations
Model (Type)	Varius Takt (C161)
ldeal hall size (L x W) [m]	20 x 5
Passage heights [mm]	2.300
	2.400
	2.500
	2.600
	2.700
Passage widths [mm]	2.400
Track widths [mm]	2.500
	2.700
	2.800
	3.126
Wheel guiding tube widths [mm]	2.050
Roof dryer [kW]	2 x 3,0
Side dryers [kW]	2 x 4,0



34	

PREMIUM+



Double the speed

With two separately working portals Varius Takt is the fastest roll-over system Christ has to offer. This machine won't let you down, even if the weather is good and the clients are lining up. Since washing and drying are in two separate areas it will seem even faster for your clients.





Easy maintenace

The chemicals and the control cabinet are, like with all Christ machines, easily accessible from the front. Due to the separation of drying and washing systems both portals are even easier to understand and maintain and all important modules can be reached directly.





SENSODRY+ polishing brushes

The optional polishing brushes of the drying unit take care of the finishing. The perceived quality of the wash is severely improved by this system and it is up to you if you want to offer special polishing programs or just use it with each wash as an advantage over your competition.

The drying material SENSODRY+ is very soft and is especially effective with Christ special wax.

Vitesse high pressure concept

Save up to 20 % time



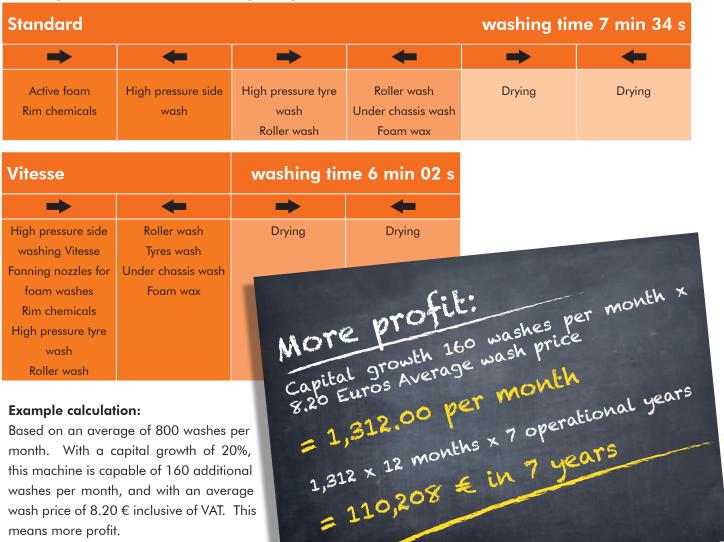
Time is scarce, especially in the wash business. At peak times clients don't want to wait too long for their wash and a high capacity machine can be a true competitive edge. Our solution for this challenge is the Vitesse Concept!

The Vitesse-concept is a unique combination of special functions which are installed on the front side of the unit. High pressure system with 8 oscillating nozzles per side which move at an angle of 25°, a distinct foam applicator with special Vitesse side nozzles and optimized internal processes. In conventional roll-over wash units the first foam run, the high-pressure pre-wash and the brush wash is done in 3 runs, but here all the functions are completed in one single run. So the Vitesse-Concept saves 2 runs per wash and saves washing times per wash and therefore the unit's capacity is significantly increased!

This concept is only available with Christ machines and has been wildly successful since its launch in 2012. At costs of 2-5%* of the machine price the upgrade can give you up to 20% more capacity and will pay for itself within short order.

The high pressure bars each contain four 0° nozzles. Those oscillate 25°, driven by an encapsulated electric motor. The electric motor makes sure that 100% of the high pressure is used for cleaning the car and no energy is wasted creating the oscillation.

Comparison of wash program



Your advantages

means more profit.

- Saves 2 runs per wash
- Saves more than 1:30 min per wash
- 20% more capacity

Available for:

• Up to 2 washs more per hour

LEANUS

PRIMUS

SIRIUS

VARIUS 1+1



Protect Shine Xpress

A very clever overall concept!



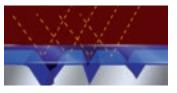
Protect Shine Xpress is an overall concept for a special wax programme of the next generation with 3 components: in addition to the special wax application with its own programme sequence, Protect Shine Xpress includes the specially developed special wax from Christ Car Care and a wide range of marketing tools for the plant operator. Alltogether Protect Shine Xpress is an impressive premium offer for your customers!

The special wax with repair effect

Protect Shine is a premium special wax from Christ Car Care. The combination of long-term conservation, repair effect and a special shiny gloss for the paintwork makes this product an absolutely unique selling proposition on the market. The effectiveness of Protect Shine is increased by each further application. From continual use the car wash customer will notice the benefits and therefore be willed to pay for this, which in turn will result in an increase in revenue for the wash operator.

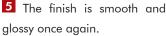


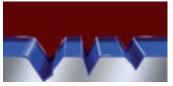
1 A new car has a smooth surface. The light is reflected evenly.



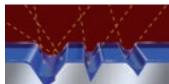


2 The surface is damaged and decreases.





3 Protect Shine is applied after scratched with time, the gloss the wash and attaches itself to the car's surface.



4 If applied regularly, a protective layer is created. Small scratches are being filled.

The perfect add-on to the Vitesse option: Protect Shine Xpress equipment

The special wax from Christ Car Care and the Protect Shine Xpress equipment for Christ wash systems are perfectly synchronised to ensure the optimal wax application and the best possible conservation quality. The highest efficiency is achieved with the combination of the Protect Shine Xpress equipment and the Vitesse option.

Protect Shine is applied by its own fan nozzle heads that allow a large-volume foamed wax

application. The washing customer benefits from this exclusive long-term conservation in the washing process and with increased use, the quality becomes better. This in turn, again, results in higher wash prices being able to be charged.

In combination with the Vitesse-concept and the Christ-exclusive direct drive, the unique Xpress programme sequence is possible: unlike other similar products from other vendors Protect Shine Wax doesn't need to be dried half way through or washed off at the end. A high-pressure washing with Protect Shine conservation is possible with its own programme sequence in only about 6 minutes, which corresponds to a capacity increase of approximately 40% compared to systems from its competitors. The full plant capacity therefore can be maintained, with the long-term conservation product, because the high turnover Protect Shine premium offer can be actively sold in busy times by the plant operator, without long waiting times for the customers.

Effective marketing with Christ advertising materials

In systems with Protect Shine Xpress features, an extensive advertising package is part of the deal. This includes large banners, posters and flyers for Protect Shine. The operator can thus easily and effectively promote its new offer to attract the customer's attention and increase sales significantly.





Colour display system VISUS

The Visus colour display system gives the car wash unit a modern, contemporary look. This central communication unit for wash customers can be seen visibly from a distance. Only the respective, current, important information is displayed and, unlike other systems, no information overlapping takes place. Thus, the Visus colour display system also contributes to operational safety. When not in use it is used as a promotional tool by its animated gimmicks which can be seen from a distance and which draws the attention of passing potential customers.

Moving display screen VISUS



The Visus colour moving screen for car wash units with front sided lateral brushes is integrated in the portal cross beam. Gimmicks and wash programme steps are fully animated and feature, in addition to the text information, the matching motion graphics.

Available for:		SIRIUS		GENIUS
	PRIMUS	VARIUS 1+1	QUANTUS	AQUATUS

Door display VISUS

For portal systems with rear side lateral brushes the Visus system consists of two colour displays in the side beams. In this system, the safety display warnings, the maximum passage height/width and the washing programme steps, are all combined by means of a large animated traffic-light display function. After the washing process, the customer will be rewarded with a smiley.





www.christ-ag.com/cms/presse/multimedia/portalwaschanlagen

Available for:	SIRIUS		VARIUS	
	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

Effect lighting RGB wheel guiding tubes

The landing strip for your customer!

The premium wheel guiding tubes of Christ are highly visible and colour-illuminated with LED technology. Individually controlled moving light functions, animated gimmicky break-fillers and the corresponding washing programme progress lighting effects, all draw the attention of the wash customer. They are thus an attractive advertising tool that clearly distinguishes the washing unit from the competition.

These illuminated wheel guiding tubes also give a guidance function that accurately directs the motorists into the car wash unit and keeps him in a straight position. Of course they also complement the traffic light function of the washing unit.



The aluminum tread protects against wheel/rim damage and remains visually attractive throughout the entire lifetime. No rusting possible. Available as an option are the wheel guiding tubes interrupted at the entrance area to avoid the possibility of slipping.

Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

RGB effect lighting

The lighting show is in the car wash unit!

A wrap-around coloured LED illuminated strip draws even more attention to the car wash unit. Through different lighting effects (for example, pulsating strobe) the car wash unit comes alive - the modern presentation is especially appealing to young wash customers. The individual programme steps are clearly distinguished with different signal colours. The enlargement of the traffic light function, the effect lighting also serves for operational safety. It is the perfect complement for the RGB wheel guiding tubes because the lighting effects are controlled in parallel.



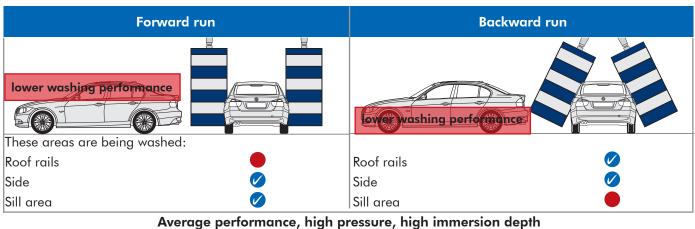
Available for:	SIRIUS	CENTUS	VARIUS	GENIUS
	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

Opti-Flex

Good side-cleaning performance as a standard feature



Opti-Flex is the proven standard technology for the lateral brush wash with roll-over wash units. The fixed-side brushes are especially designed for wear and durability and therefore are the first choice for the lower cost washing operations. The precise control of the contact pressure ensures safe operation and excludes damage to the vehicle. However, 2 overruns are necessary for a complete side wash because the rigid side brushes can only cover the car contour in parts, in each cycle.



Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

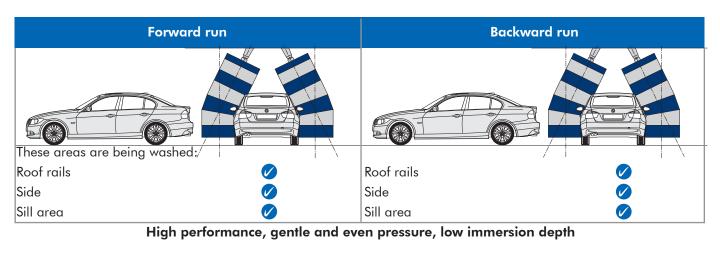
Christ jointed brush

The premium wash with maximum contour coverage



Proven over the years and a patented Christ technology, our jointed brush guarantees a perfect lateral wash. The joint brush is always securely locked, excluding any oscillation of the side brush. The even contact pressure over the entire height guarantees an efficient and a smooth and gentle wash.

The complete vehicle contour is being covered at each overrun, so the cleaning performance can be 'doubled' compared to conventional systems. When washing vertical body sides (e.g. vans) the side brushes are locked vertically. Apart from the technical advantages, the angled brushes are perceived as 'high quality' and a special feature by your customers.

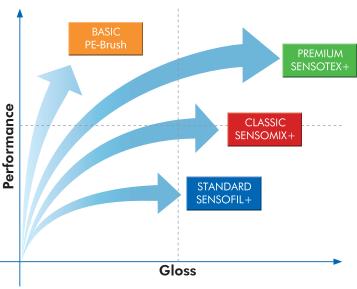


Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

Brush materials

For each application the right material

Besides the standard PE brushes there are different choices of brush material. The following list will give you a comprehensive overview over the advantages of the different types of brush materials. Please note that a foam and high pressure pre-wash is strongly recommended for an optimal result.



Our highlights in detail

Available for:	LEANUS PRIMUS	SENSOFI Advantages: - High durability - Good performa - Low brush abra - Avarage gloss a SIRIUS VARIUS 1+1	ince ision on the cai	r´s surface VARIUS VARIUS TAKT	GENIUS AQUATUS	STANDARD
Available for:	LEANUS	SENSOMI Advantages: - High durability - Very high perfo - Very low brush - High gloss effec	rmance abraison on the	e car´s surface VARIUS	GENIUS	CLASSIC
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS	
		SENSOTEX+ Advantages: - High durability - High performance - No brush abrasion on the car's surface - Highest gloss effect - Can be advertised as "textile wash"				PREMIUM
Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS	
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS	

Direct drive for brushes



Only Christ offers the direct drive for roof and side brushes. This revolutionary system does not need a gearbox and reduces the electrical consumption of the motors by approx. 10%. The frequency of the rotations are controlled electronically and can be adjusted via software. In this way, Christ washing systems with direct drive are today already ready for future wash materials. Other advantages are the fast and wear free direction change of the brush rotation and the 300 RPM slingshot program that frees the brush of any water drops before the drying process starts.



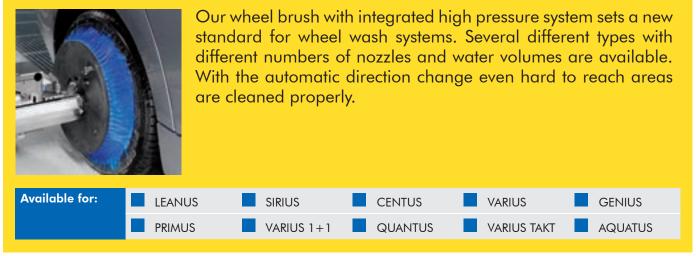
Advantages:

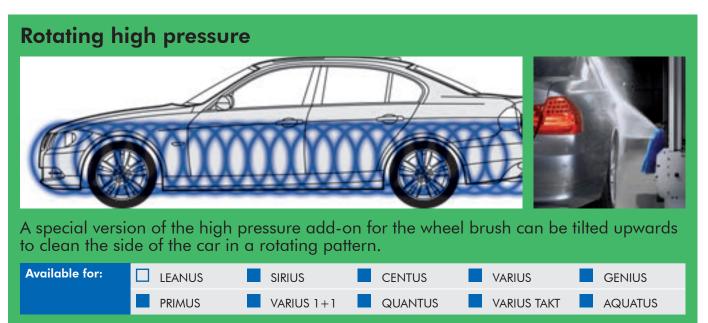
- Low energy consumption and higher energy efficiency
- Variable brush rotation frequency
 - Front + side wash 100 PRM
 - Slingshot program roof brush 300 RPM
 - Slow anti drip program of the roof brush with 10 RPM
- Increased wash performance
- Very smooth and silent wash
- No dripping from roof brush
- Very fast direction change of the brush rotation
- The system can be converted to various washing materials without hardware conversion. (For example SENSOFIL to SEN-SOTEX).

Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS
		VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

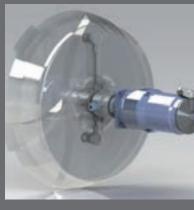
Wheel wash systems

Brush wash





Double rotating high pressure



The wheel brushes are equipped with two HP nozzles. Both nozzles are installed at different radiuses to evenly cover the whole wheel and optimize the HP wash on the side of the car. This wheel wash system is available for the Centus, Varius, Genius, Primus, Quantus, Varius 1+1 models and Varius Takt. The brush uses an optimized pattern and filament length to get the best possible result.

 Available for:
 LEANUS
 SIRIUS
 CENTUS
 VARIUS
 GENIUS

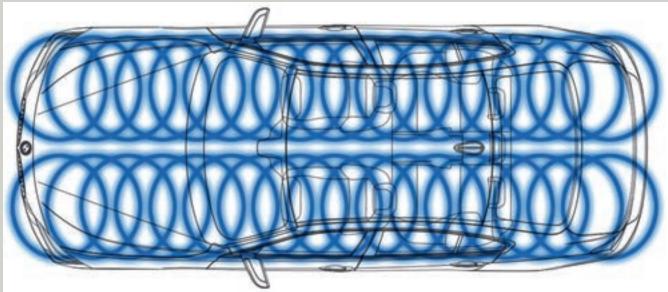
 PRIMUS
 VARIUS 1+1
 QUANTUS
 VARIUS TAKT
 AQUATUS

Under chassis wash



On a mobile sled two 85 bar HP nozzles are mounted on rotating platforms. This rotation in combination with the moving sled covers the whole under chassis evenly with 85 bar jets and stops automatically at the end of the vehicle. The pumps for the system come in their own plastic casing and can even be used also power the HP system of the roll over.





The rotating high pressure jets evenly cover the whole under body of the car.



User terminal VARIO

The functional operating unit in a modular system

The Vario is the central control unit of the Christ roll-over wash unit system. The customer chooses the washing programme he wants and then is in charge of the operation himself. For the operator, the Vario is the central access point, through which all the configurations and operating data is accessed.



VARIO-XS

Every Christ Roll-over wash unit comes free of charge with the selfservice enabling device Vario-XS for wall-mounting. The self-service operation is being activated by entering a wash code manually (possible with a C-ST bought ticket). The Vario-XS has a LED display with membrane keypad, emergency stop and start button in a compact, special plastic casing.

VARIO-L*

The "big brother" of the Vario-XS has a larger panel for even more convenient operation of the washing plant and a robust aluminum casing. The Vario-L is characterized by a variety of additional equipment, among others, payment systems and security features.

VARIO TOUCH-S*

The Vario Touch-S provides the wash customers a modern, responsive touchscreen for operating the system. The casing is made of stainless aluminum and is covered by a high-quality adhesive foil. Individual designs are possible. Vario Touch-S is also suitable for the drive-in operation.

(* = not available for LEANUS)

Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

Accessories VARIO-XS, VARIO-L and VARIO TOUCH-S

All three Vario models are available with the foot mount option. The basic system can be equipped with different accessories and designed to perfectly match the respective operating conditions and system concept. The respective combinations can be found in the table below.

	VARIO-XS	VARIO-L	VARIO Touch-S
Operating concept	Membrane keyboard with	Membrane keyboard with	Touch screen
	LED display	LED display	
Foot mounted (height)	1.574 mm	1.100 mm/1.400 mm	1.100mm/1.400 mm
Audio modul		•	•
Barcode reader for C-ST-ticket		•	•
Operating Concept batch processing		•	•
Operating Concept Drive-In			•
Transponder card reader		•	•
Key switch system access	•	•	
Key switch switching self-service /	•	•	
manual operation			
Token tester (4 fixed programmes)	•	•	
Coin tester (5 coins, 1 token)	•	•	
Coin extractor		•	
Intercom, emergency stop device in		•	
payment area			
Individual adhesive coverings			•







Christ Shop Terminal (C-ST)

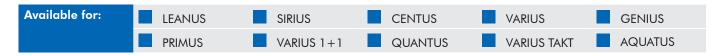
The modern terminal for check-out/payment area

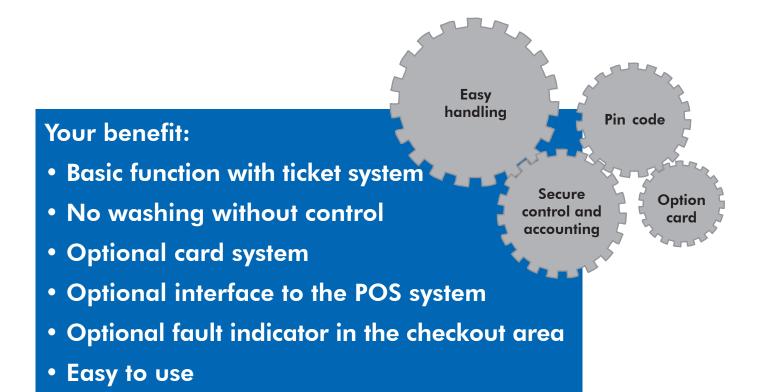
This handy and easy to use device with a graphical user interface and touch control panel is located next to the cash register at the store. With it, the sale of car washes is carried out according to predetermined programmes and wash programme numbers.

6.1

By entering the wash programme number, the integrated printer generates a ticket for the wash customers. The device also includes additional functions whereby the operator can control turnover and sales.

> The shop terminal can also be equipped with a transponder card reader. E.g. prepaid cards or multiple wash cards are used. The cards will be upgraded via the shop terminal. Each wash is recorded in the shift report. In the operating unit of the washing system, the card is either cancelled or the balance remaining recorded. This booking process is logged in the shop terminal.





The Premium version of the C-ST is being connected to the wash unit by network cable, Wifi or electric cable (Powerline) and thus allows for manifold operational modes. The Standard version does not dispose of this connection and hence allows only for the sale of individual wash codes (tickets) and optionally transponder cards.

C-ST / Device version	STANDARD	PREMIUM
Execution	wireless	data cable
Number of connectable machines on site	max 6	max 6
Day / shift counter	•	•
Day / shift print-out	•	•
Shift print-out with serial number	•	•
Time and date on the shift print-out	•	•
Paperless operation	•	•
Adjustment of the ticket validity period	•	•
Possible validity of tickets	1 day to 100 days	1 day to indefinitely
Number of active tickets (unused, stored)	250	Unlimited
Single tickets	•	•
Multiple tickets (1-20 washes)		•
Happy Hour Tickets (differentiated rates)		•
Promotion Tickets (say 3 for 2)		•
Ticket check/ Verification		•
Ticket Cancellation		•
Goodwill Ticket	•	•
Adjustable Header / footer	5 + 5 lines	5 + 5 lines
EAN code of goods	•	•
Bar code for bar code scanner	•	•
Adjustable access code (layer code, etc.)	•	•
Fault indicator		•
POS interface (subject to surcharge option)	Huth, Tokheim,	Huth, Tokheim,
	Bungalski, T-Master	Bungalski, T-Master
Second Terminal (Master / Slave)		•
Pre-conditions provided by customer	1 x 230 V socket	1 x 230 V socket
		Laying data cables from the checkout to the
		washing plant

Christ Advanced Payment System (C-APS)

A simple payment system with additional features

The Christ Advanced Payment System from Comestero combines maximum payment convenience for customers with clever additional features to increase customer loyalty and increase sales of the plant operator.

This user-friendly system allows the self-service operation of the washing unit without on-site staff. With the top model "Simply Start Touch" with the touch controls on a big screen, the customer is guided quickly and accurately through the programme selection to the payment process. Support is available through graphics, video and voice systems and the selection of four interface languages.





C-APS can manage up to 8 wash programs. The payment system allows a wide range of payment options (cash, tokens, debit card, prepaid systems). In addition, it also serves the automatic sale of prepaid systems that provide long-term customer loyalty. Both customer cards and customer key (Euro key) are used. Both systems feature comfortable, contactless transponder technology. C-APS is able to provide the customer, depending on the recharge amount, configurable bonus balance, which results in higher top ups and promotes and strengthens customer retention. The plant operator can therefore configurate the C-APS exactly according to his wishes and the needs of its customers. With a shop terminal, these prepaid systems can also personally be sold at the store.

Christ Advanced Payment System is more than just a self-service and payment terminal; it is a system that supports marketing and selling activities of operator. It can, of course, manage advertising campaigns with special offers. Furthermore C-APS comes with integrated up-selling functions that encourage customers in the selection process to buy higher-valued wash programmes. The system offers customers their own additional options and alternative programmes. It also provides discounts as an additional support guide like, for example, printed coupons valid for a limited period. Coupons are easily cashed by bar code with the next wash, so customer loyalty and frequency of use will increase significantly. An increase of turnover up to 20% can be achieved



C-APS offers a transparent system operation for operator. Sales data and malfunction messages are sent automatically by e-mail and therefore available at all times. Sales and marketing data can also be printed or exported (CSV file format) for further processing.

C-APS is available in several versions and with a wide range of optional features so every operator can configurate the optimum system. By adding prepaid-system clients, other features for customers like self-service washing station or vacuum cleaner can be integrated. C-APS terminal is available with feet stands or for wall installation.



Features	C-APS Simply Start Advance (SSA)	C-APS Simply Start Touch (SST)
User interface	keys	touch screen
washing programme selection	12	8
4 languages	•	•
Graphical, video and audio support		•
Receipt printer	•	٠
Up-selling function		٠
Happy-hour function	•	
Separate prices for high vehicles	•	
PC-software "Suite Config"	•	
Prepaid card	•	•
Promotion coupons (print and import (bar code reader))		•
Managing of advertising campaign		•
Collecting of accounting data	•	•
Email function		•
Export of accounting data	receipt printing, SD-card	receipt printing, CSV Data
Additional modules		
Coin validator*	•	•
Coin output*	•	•
Note validator*	•	•
Credit and debit card module*	•	•
Prepaid system	•	•
Prepaid card output / customer keys	•	•
Prepaid system clients	•	•

Christ Information System (C-IS)

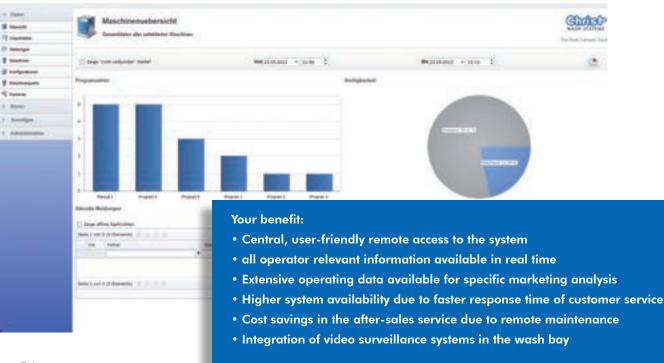
Access to washing unit – any time and from everywhere

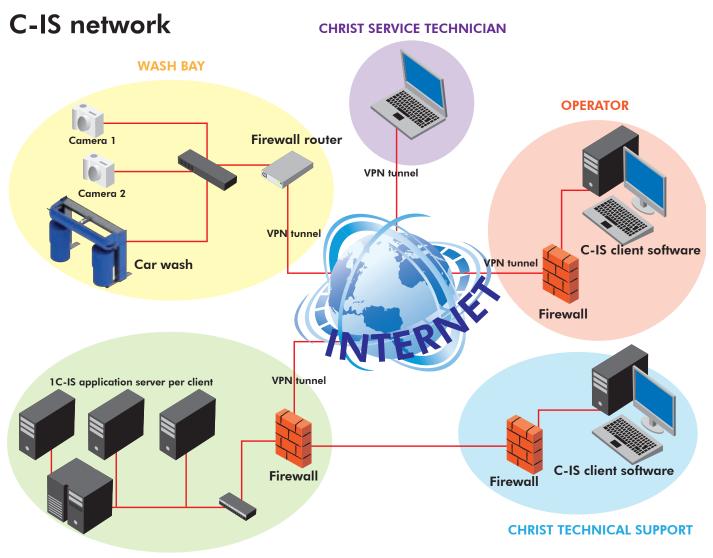
Web-based Christ Information System (C-IS) provides operators with completely new options in daily operation and offers new business opportunities. Washing units and external systems like security cameras for example are connected with the central Christ server via secure internet connection Operators get worldwide access to process data of the system with any web-enabled device (PC, tablet, smartphone, etc.).

Operators of single wash stations can easily control their system by remote-control, without having to be constantly on site. Operators of large wash parks receive a central access point by C-IS for operation and management of their sites. Important operating data such as chemical levels and functions such as the integrated machine self-test are available in real time. Furthermore C-IS gives the operator at any time a quick overview of sales, distribution of the washing programmes, washing times, etc.



This database can be used easily for example to optimise the revenue potential of the installation with specific analysis and the development of individual marketing activities. The C-IS remote control module allows, with an appropriate maintenance contract, the Christ customer service or certified dealers to remotely analyse and resolve interferences. Customer service operations on site are limited to a minimum, and extensive cost savings in the after-sales service are realised. C-IS also allows a remote configuration of the system, including software updates. Machine availability - and thus your revenue potential - rise significantly. These are the reasons why C-IS is used successfully in particular by operators of multiple facilities and sites, operators of self-service car washes without local staff, in units far from service sites and by innovative wash business operators.





C-IS DATA CENTER

Following functions are available		
Support management	• real time problem report to operator and Christ help desk	
	• proactive elimination of faults with full maintenance contract	
	 always complete overview of malfunction history via ticket system 	
Function management	 monitoring of system status via Christ help desk 	
	 Daily functional system check by integrated self-test 	
	 monitoring of chemical levels if available with system type 	
	 configuration and software update with online access 	
Standard version	 real-time access to display/analysis of system counter reading 	
	 real-time access to display/analysis of malfunction history 	
	 analysis of up and down times 	
	• access to single machines	
Premium version (additional features)	 access to individual machines, machine groups or wash parks 	
	 export function (pdf, csv, xls) 	

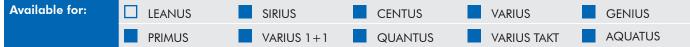
Available for:	LEANUS	SIRIUS	CENTUS	VARIUS	GENIUS
	PRIMUS	VARIUS 1+1	QUANTUS	VARIUS TAKT	AQUATUS

Air-Fit

Air Fit improves the quality of stay in the washing bay by spraying fragrance concentrate and thus ensures a pleasant fresh scent. The activation takes place either via the system control or manually. Especially in washing bays with process water operation the appeal to customers is significantly cost-effectively increased.

Christ Car Care offers a wide range of all-season and seasonal fragrances for Air-Fit. The system is characterized by low operating costs (1 liter concentrate of fragrance lasts for up to 10,000 washes) and variable applications. Only requirement on-site is a compressed air connection. Air Fit is delivered including 1 liter of fragrance concentrate.





Technical container for roll-over wash units

As a cost-effective and flexible alternative to an on-site equipment room Christ offers a ready-to-use technical container for roll-over wash units. They include and protect all external system components and extra equipment from central control cabinet to supply pump and osmosis plant.

Fontis water recycling systems are also available in a technical container. The Christ technical container is the ideal solution for new outdoor systems because only necessary preliminary work is ground work and the laying of supply lines.



model	dimensions	
Technical container standard	2.000 x 1.000 x 2.685 mm	
for basic components, chemical supply, high/medium pressure system		
Technical container XL	3.000 x 1.000 x 2.685 mm	
for basic components, chemical supply, high/medium pressure system,		
water softening/reverse osmosis system		
Technical container FONTIS	2.000 x 1.000 x 2685 mm	
for water treatment plant FONTIS-S		

Vacuum cleaner solo-turbo / duo-turbo

Turbo is our compact suction unit for self-service interior cleaning with one or two suction devices. Operators of roll-over wash units can expand their range of services cost-efficiently to self-service interior cleaning. The high-performance and low-wear technology (side channel blowers) is placed in a sturdy case. The white LED strip surrounding the case guarantees an appealing look in twilight hours. The Turbo self-service vacuum cleaner are provided with high-quality fabric hoses and flexible suction nozzles for smooth-running and easy working.

Turbo vacuum cleaner can be activated with coins or tokens - available on request is the connection to a coin extracting system or the activation with pay-keys or transponder cards. Running time of a vacuum run is individually adjustable, the revenue controlled by a coin counter. Optionally available for Turbo-cleaners are vacuum cleaner islands with galvanized crash protection - the perfect alternative to on-site upstands. The vacuum cleaner island also provides space for the Christ carpet beater and waste bin.



Standard included:

LED stripes integrated in lid (color white). Illumination of the outside of the vacuum box for an appealing look in twilight hours.

SB-SAUGER

Central vacuum cleaning system HURRICANE

For large wash centres with a high demand of vacuum places Christ offers the central vacuum system Hurricane for up to 20 bays. Depending on the business model it can be used by payment or offered as a free deal (included in car wash). Hurricane is a flexible system that adapts optimally to local conditions. The suction pipeline is installed either on site at the existing roof suspensions or supports or supported by free-standing Christ beam supports. The Hurricane vacuum cleaning system is also provided with a technical container.



FONTIS

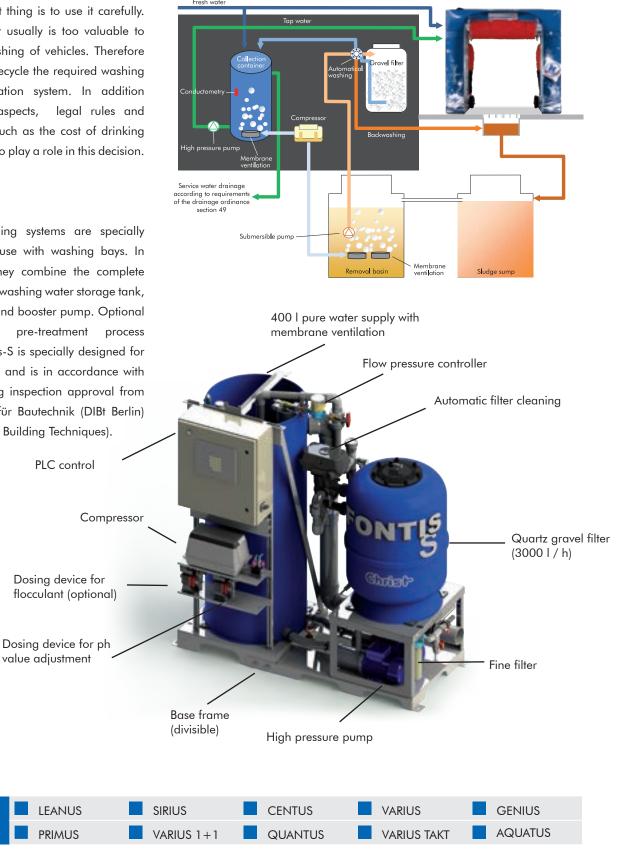


FONTIS water recycling system for roll-over wash units

Water is valuable

The more important thing is to use it carefully. Pure drinking water usually is too valuable to use for just the washing of vehicles. Therefore it is reasonable to recycle the required washing water in a circulation system. In addition to environmental aspects, legal rules and economic factors, such as the cost of drinking and waste water, also play a role in this decision.

Fontis water recycling systems are specially developed for the use with washing bays. In a compact form they combine the complete technique including washing water storage tank, quartz gravel filter and booster pump. Optional feature: chemical pre-treatment process (Flocculation). Fontis-S is specially designed for roll-over wash units and is in accordance with the general building inspection approval from Deutsches Instituts für Bautechnik (DIBt Berlin) (German Institute of Building Techniques).



Available for:

BIOCLEAR (

Water recycling system BIOCLEAR-S for roll-over wash units

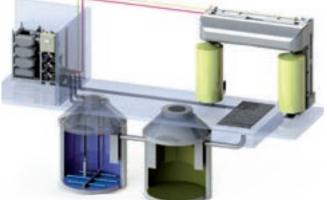
Biological top performance

Biological top performance

This water recycling system of the next generation has an excellent reycling water quality. Pollutants are effectively degraded in a bioreactor. A continuous circulation and ventilation of process water prevents unpleasant odours. Solids in recycling water are continuously discharged. There is no need for a back flush. So the capacity of the water recycling system is continuously available.

Christ Bioclear also disposes of the general building approval by Deutsches Institut für Bautechnik (DIBt Berlin).





Tap water tank

Features

Salt content is measured continuously in order to avoid staining. If necessary, fresh water is added automatically. The bioreactor can also process waste water containing mineral oils. The modern PLC control of the next generation offers a web based system management and monitoring. Bioclear can be integrated in C-IS, so full remote functions are available. Finally, the housing in attractive design enables the installation directly into the wash bay to actively promote the water recycling system technology to the customer. Flow pressure controller

Continuously discharging of solids without a need of a back flush

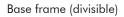
Side channel blower

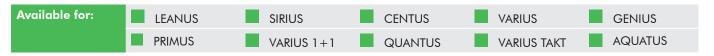
PLC control with touch screen

Fine filter

Booster pump

Up tp 3 high-pressure supply pumps (optional)





All products at a glance:



Car wash tunnels EVOLUTION

The flexible modular system for your washing tunnel, whether space-saving or high-performance system. The focus of the Evolution series is on quality, operator friendliness and optimized washing processes. A wide range of alternative technologies and components opens up a variety of possible combinations and provides an optimum solution for every demand.



DIY car washing park SKYLINE

The modular DIY car wash Skyline is the right choice for each site. Two roof variants and a variety of customizable exterior design offer the operator the ability tfor customization. When designing the Skyline system emphasis was placed on operational costeffectiveness and energy-efficient technology. The equipment can be designed to your own taste, so that yield-increasing supplementary programmes can be implemeted.



DIY car washing park SKYWING

Skywing is the focal point in the DIY car washing plant segment. The bright, attractive roof design attracts attention from a distance and offers DIY car washes in a comfortable atmosphere. It also offers the same flexible design possibilities for equipment of washing parks like Skyline.



Christ Car Care

Christ Car Care offers a complete range of detergents and maintenance care products. Our wash chemicals are optimally matched to our car washes – used in combination they guarantee the best possible result! In addition, Christ Car Care offers highly attractive market innovations such as Protect Shine, which boost the value of your investment significantly. Christ Car Care uses only biodegradable surfactants and ecologically harmful substances such as complexing agents are not used.

Commercial vehicle washing systems for buses

We offer the right wash plant for each bus operator: Transit systems with washing times of 2.5 minutes which are perfect for high throughput for large fleets. Roll-over systems with their special lateral brush suspension are ideal for coaches, buses and lowfloor buses. The automatic circumnavigation of outside mirrors ensures high operational safety. Christ also offers solutions for the washing of trolley coaches.



Commercial vehicle washing systems for trucks

Christ also offers highly specialized washing facilities for trucks. Technical solutions such as automatic mirror circumnavigation or Jetstream all around high-pressure washing with oscillating jets are only offered by Christ Washing Systems. Special solutions for forwarders, contract washing and public transport companies provide the best washing results with low operating costs.



Train and tram wash

Special equipment for automatic cleaning of rail vehicles. These plants are specially designed and produced for the object in mind.



Xpress

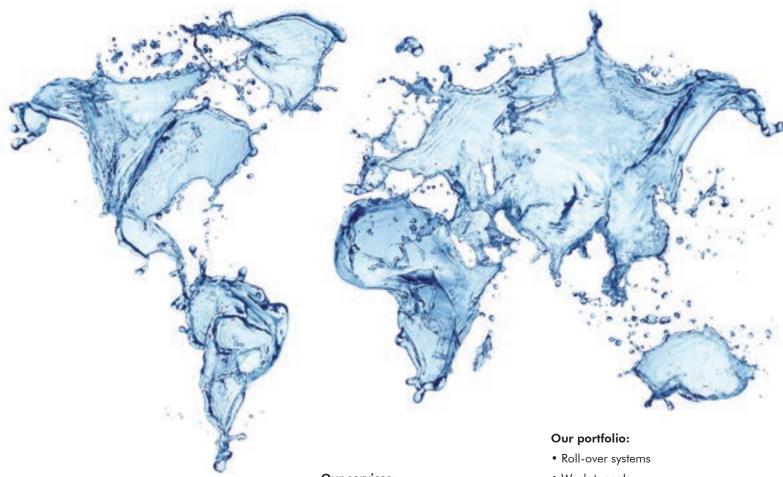
Christ Xpress is the place to go for all car wash accessories. The Xpress catalogue and online-shop offer Xpress operators everything they need for their car wash business – from additional devices and equipment, work clothing to wash chemicals and an extensive range of advertising material.



Christ Wash Systems







One of our certified service technicans is always near you

- Area-wide on-site service
- International service hotline
- Fast supply with spare parts

Our services:

- Local sales representatives
- Renturn on investment analysis
- Project support
- Training
- Marketing support

- Wash tunnels
- Water recycling systems
- Do-it-yourself systems
- Truck/bus wash systems
- Vacuums
- Marketing materials and accessories
- Chemicals
- Payment and surveillance systems





