# **Self-service cleaning systems**

Overall programme





# **Invest in clean cars**

Vehicle washing in the self-service wash bay is all the rage

- More attractive wash programmes
- Improved cleaning performance
- Appealing look and brightness in the wash box
- Operating and payment convenience
- Professional equipment for vehicle interior cleaning





# Lower operating costs, higher profits

Innovative technology is more attractive, more effective and achieves higher returns



Additional turnover of up to 30% thanks to wash bay innovations such as the BUBBLEGUN programmes, underbody wash lance in the open sky wash bay, compressed air guns and mat cleaners.



Savings of up to 30% on oil and gas consumption thanks to modern calorific value heating technology and BUBBLEGUN programmes that do not require hot water.



Standard: frequency converter (FC) for the HP supply units. Potential electricity savings of up to 70% due to photovoltaic modules (use of own electricity).



Savings on fresh water of up to 70% (and proportional sewage charges) thanks to the low-pressure supply of the BUBBLEGUN and pressure reduction (FC) for the 'Stain-free gloss rinsing' programme.



Potential savings of up to 70% on washing chemicals for BUBBLEGUN and regeneration salt for the softening installation. We recommend the BUBBLEGUN chemical range from Christ CAR CARE.





# **SKYWING**

# High-quality steel construction with unique design

- Modern industry design with wing geometry
- Light and transparency for a good wash feeling
- Spacious work area with a wash box width of 5,100 mm and a passage height of 3,100 mm at the exit side
- Bay partition walls: available in different versions
- Optional: HORIZON and WASH VEGAS LED lighting systems



# SKYWING HORIZON LED roof edging

- Attractive lighting options for the SKYWING steel construction
- Improved perception at dusk and during the winter months
- Adjustable lighting optics at the desired time (6 colours to choose from)
- Energy saving LED lighting technology



Optionally available: WASH VEGAS RGB LED effect lighting (page 23)



# **SKYLINE**

# Variable steel construction for all sites

- Attractive and variable design
- Spacious work area with a wash box width of 5,100 mm and a passage height of 3,200 mm (alternatively 3,550 mm)
- Roof designs: trapezoidal sheet flat roof or transparent round roof
- Bay partition walls: available in different versions
- Optional: universal attic system and cladding for pillar for the external vertical pillars







# Universal attic system

- Optional equipment for the SKYLINE steel construction
- Promotionally effective for free-standing self-service wash bays
- Optionally available with energy-saving LED lighting (page 12)
- Different attic designs available (pages 18/19)



- Optional equipment for SKYLINE attic
- For improved perception at dusk and during the winter months
- Available lighting concepts: 'White' or 'Colour'



Attic without lighting



#### Attic with 'Colour' lighting concept

In addition to the white lighting strips, an RGB lighting strip is integrated into the lower attic profile. Adjustable lighting optics at the desired time (6 colours to choose from).



#### Attic with 'White' lighting concept

An LED-lighting strip in the upper attic profile, white light colour for illumination of the advertising surface.





### **SKYLINE**

# Versatile combination possibilities



#### SKYLINE 2+1 planning example

With round roof, attic, cladding for pillar design line WASH VEGAS, glass partition walls, COMPACT container



#### SKYLINE 6+0 planning example

With round roof, attic, cladding for pillar, design line 'Standard' (orange coating, white labelling), glass partition walls, BIG-L container



With flat roof, attic, design line CAR CARE, without cladding for pillar, glass partition walls, COMPACT container



#### SKYLINE 3+1 planning example

With flat roof, photovoltaic modules, attic, cladding for pillar, design line WASH STAR, glass partition walls, BIG-L container, WASH STAR LED star above the container

# **Design concept**

# SKYLINE attic and cladding for pillar



#### Design line 'Standard'

- Powder coating of the attic sheets in a standard paint colour (see below)
- Standard single-colour labelling as per picture, available in white or black
- Powder coating of the cladding for pillar in the same paint colour as the attic if this is included in the scope of delivery
- Design of the operation panel and the wash bay sign with design line 'Standard' (carbon look) if this is included in the scope of delivery (page 21)





#### Standard paint colour: for attic and cladding for pillar

Ultramarine blue Traffic green **Traffic yellow** White aluminium RAL 5002 **RAL 6024 RAL 1023 RAL 9006** Flame red **Pure white** Grey aluminium Sky blue **RAL 5015 RAL 3000 RAL 9010 RAL 9007** Jet black Yellow green Traffic orange RAL 6018 **RAL 2009 RAL** 7047 **RAL 9005** 

Standard labelling CAR WASH: white or black



#### **Design line CAR CARE**

- Powder coating of the attic sheets in deep black RAL 9005
- Standard labelling as per picture
- Powder coating of the pillar cladding in flame red RAL 3000 if this is included in the scope of delivery
- Design of the operation panel and the wash bay signs with design line CAR CARE if this is included in the scope of delivery (page 21)



#### **Design line WASH STAR**

- Powder coating of the attic sheets in ultramarine blue RAL 5002
- Standard labelling as per picture
- Powder coating of the cladding for pillar in ultramarine blue RAL 5002 if this is included in the scope of delivery
- Design of the operation panel and the wash bay signs with design line WASH STAR if this is included in the scope of delivery (page 21)



#### **Design line WASH VEGAS**

- Powder coating of the attic sheets in pure white RAL 9010
- Standard labelling as per picture
- Powder coating of the cladding for pillar in jet black RAL 9005 if this is included in the scope of delivery
- Design of the operation panel and the wash bay sign with design line WASH VEGAS if this is included in the scope of delivery (page 21)





### \*Programm-Empfehlung









































Design line CAR CARE

# Design concept

# Wash programmes and signs



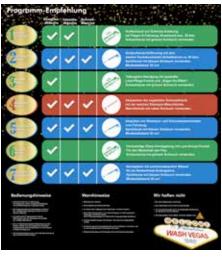


Design line 'Standard' (carbon look)

#### Operating instructions and wash programmes

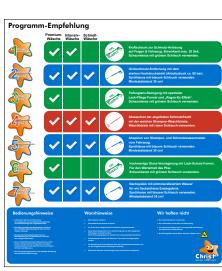
The sign for correct operation of the self-service wash bay system is an indispensable aid for the wash bay user. In addition to the operating instructions, the individual wash programmes and their use are explained and symbolised.





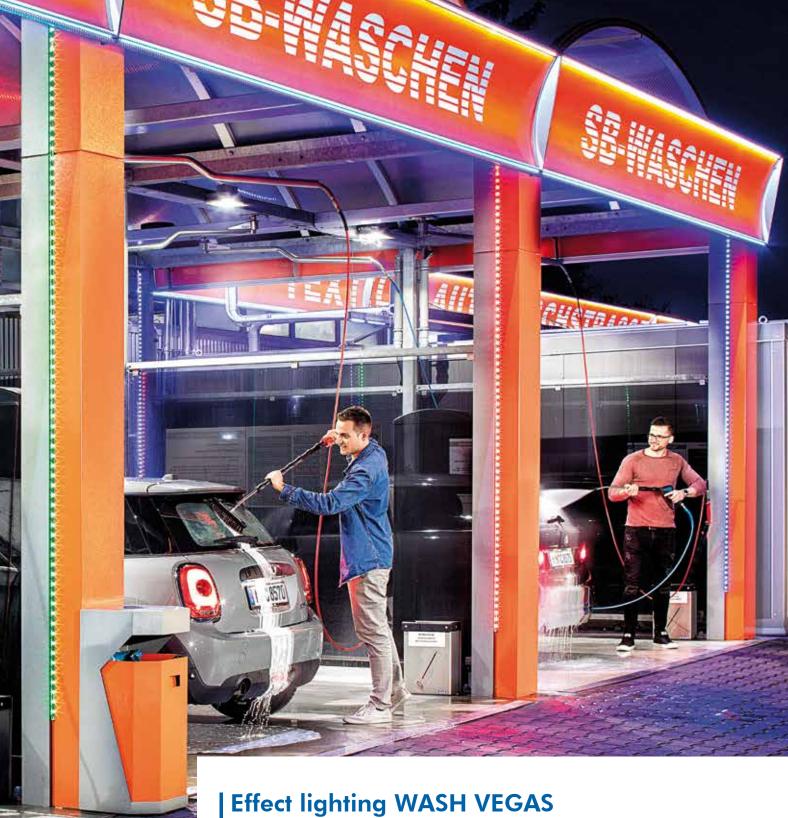
**Design line WASH VEGAS** 





Design line WASH STAR





### For a maximum show effect

- Optional RGB LED lighting system for SKYLINE and SKYWING
- For increasing the outside perception of the self service wash system : lighting animation as idle mode (show effect)
- For increased user convenience: signalling of the wash tool to be used after activating a programme
- Adjustable lighting options at the desired time
- For SKYLINE: integrated into the outer cladding for pillar
- For SKYWING: pre-mounted into profile rails and put on the outer constructional steel pillars



- Designed to supply up to three wash bays
- Flexible container system for different installation plans:
  - free-standing version with boom system (without roofing)
  - combinable with Christ SKYLINE steel construction (pages 8)
  - integrable between the centrepieces of the most popular third-party steel constructions
- Recommended for sites with low self-service wash bay potential
- Complementary product for roll over wash units or wash tunnels
- Ideal for utilising residual plots of land



COMPACT - between 2 pillars



Optional: free-standing splash protection units



COMPACT – between 3 pillars

### **COMPACT**

# Placement example



- 1. Deaeration (container)
- 2. Operation panel (integrated)
- 3. Powder dosing device
- 4. Data printer
- 5. Integrated operation panel
- 6. Lighting (container)

- 7. Fresh water power supply isolation
- 8. BUBBLEGUN (distributor box)
- 9. Control cabinet
- 10. Electric antifreeze heating (container)
- 11. Water circulation (anti-frost device)
- 12. High-pressure supply shelf



- 13. Plate heat exchanger (heating system)
- 14. Heating system with gas fired condensing technology
- 15. Lighting (container)
- 16. Reverse osmosis unit
- 17. Softening installation
- 18. Air compressor
- 19. Equalising sheet (heating system)
- 20. Buffer storage (heating system)

### **SKIP-XS**

# Single self-service system

- Perfect starting model with attractive price/performance ratio
- For commercial wash or internal wash at the car dealer
- Space-saving design ideal for residual plots of land
- No steel construction is required thanks to the integrated swing pipe system
- High-quality container with standard insulation. Optional:
   DURAPROTECT premium panelling (powder-coated stainless steel)
- High quality TOUCH-ME controller with standard frequency converter for high-pressure supply

#### Variable like a large self-service wash bay

- Up to 6 wash programmes possible, e.g. even 'insect-special' and 'stain-free gloss rinsing' (osmosis)
- Configurable integrated anti-frost circulation system
- Multiple heating variants (electric, gas or heating oil) available
- Various payment options such as transponder cards for better customer retention





# **Equipment of the wash box**

Self-service wash systems



**Box lighting** 

Energy-saving LED flat-jets ensure optimum lighting in the wash box.



**BUBBLEGUN** with holder



High-pressure lance with holder



Foam brush with holder



Combined lance holder
For high-pressure lance and
foam brush



#### Ceiling boom 'Premium'

Combinable with the high-pressure lance, BUBBLEGUN and the foam brush. Version made of stainless steel. Z-boom with  $360^{\circ}$  swivel range for swivelling without intersecting.



#### Double ceiling boom

For the high-pressure lance and the foam brush. Version made of stainless steel. 360° swivel range.

#### Cross-arm for open sky wash bay

Cross-arm made of steel, galvanised, passage height 4,300 mm.

Variant 1: connection of 3 individual ceiling booms Variant 2: connection of 1 double ceiling boom





#### **BUBBLEGUN**

# The foam experience for more profit

- Excellent foam formation for maximum customer retention
- One BUBBLEGUN for max. 3 additional programmes
- Perfect handling thanks to its low weight and ergonomic design
- Quick chemical switching times between foam programmes
- More profit thanks to innovative technology
  - up to 75 % less fresh water use
  - up to 75 % less chemical use
  - up to 75 % less energy use
  - up to 20 % more turnover



# Programme FOAM PRE-CLEANER

- High dirt dissolving power
- Intense foam experience
- Long-lasting foaming action



# Programme FOAM POLISH

- Paint care formula
- Gloss level improvement with subsequent use of the 'Softwash brush' programme
- Rain-repellent effect



#### Programme FOAM WAX

- Gloss sealing
- Paint protection formula
- Water-repellent effect

# **Operation panel**

## Self-service wash systems



#### **Operation panel CBT-WPS**

- User-friendly wash programme selection with coloured illuminating buttons (blue = high-pressure lance, red = foam brush, green = BUBBLEGUN)
- Electronic coin tester for coins and/or tokens
- Labelling as per chosen design line (pages 20/21)
- Free-standing with foot part or wall installation version
- Security protection: front door can be closed and installed in a recess
- 'Premium' version: DURAPROTECT frame made from stainless steel with powder coating in RAL 9007, TFT display (multiple colours) as a remaining credit display
- Version 'CLASSIC' frame made from galvanised steel with powder coating in RAL 9007, LCD display (blue) as a remaining credit display

#### **Optional**

- Locking bar with padlock for additional security protection
- Integrated heater to reduce icing and condensation
- Connection for coin suction device for the free-standing operation panel
- A special version of the free-standing operation panel with a second operation surface for car wash customers with wheelchairs (no connection for coin suction device possible)
- Customer card reading unit (the amount is transferred from the customer card to the operation panel) Recommendation:
   C-ST transponder card reader in combination with VENDOR automatic pay station (page 36)
- Banknote reader

#### **VOICE ASSIST**

Optional speech output module for user guidance. When selecting a programme, an audio announcement of the programme designation and the washing tool to be

used takes place.

# Operation panel integrated in the container

Special solution for wash bays adjacent to the Christ container.

Money withdrawal in the container



# Hot water distribution place

Self-service wash systems





**Hot water distribution place, free-standing**For supply of hot water after coin insertion

Hot water distribution place, integrated in the BIG container

#### **VENDOR**

### Automatic pay station

- Innovative self-service automatic pay station for use at self-service wash systems, roll over wash units or wash centres (self-service wash systems with roll over wash unit and/or wash tunnel)
- Operation via modern, waterproof 10.1' touch screen
- The customer-friendly interface enables simple operation and easy payment
- Different payment methods, such as cash, barcodes, transponder cards, debit/credit cards or NFC can be purchased as an option according to customer wishes and can be installed into the vending machines.
- High customer retention when equipped with transponder card reader (credit customer cards)





#### **Equipment options:**

- Wall installation frame
- Coin tester
- Banknote reader
- Coin hopper (3 pieces max.)
- Barcode scanner
- EC card terminal and NFC
- Transponder card reader (customer cards)
- Card dispenser ( customer cards)
- Ticket printer
- Connection accessory for Christ roll over wash unit

### **Container**

## Self-service wash systems



#### **Available container variants**

Model	Measurements*	Door system	Accessibility	Places**	Remaining free surface***
SKIP-XS	L 1.6 x W 1.0 x H 3.7 m	1 cabinet door on one side	no	max. 1	none
COMPACT-S	L 5.0 x W 0.9 x H 2.7 m	3 cabinet doors on one side	no	max. 3	none
COMPACT-M	L 5.3 x W 0.9 x H 2.7 m	4 cabinet doors on one side	no	max. 3	none
BIG-L	L 6.1 x W 2.4 x H 2.8 m	1 access door	yes	max. 6	none
BIG-XL	L 9.0 x W 2.4 x H 2.8 m	1 access door	yes	max. 6	max. 6 m <sup>2</sup>
BIG-XXL	L 11.9 x W 2.4 x H 2.8 m	1 access door	yes	max. 6	max. 12 m <sup>2</sup>
BIG-DOUBLE	L 6.1 x W 4.6 x H 2.8 m	1 access door	yes	max. 9	max. 6 m <sup>2</sup>

<sup>\*</sup> These are rough measurements and are only used for the product overview. For a binding installation and foundation plan, we are happy to make technical planning documents available with binding specified dimensions.

<sup>\*\*</sup> The container is designed for this maximum number of bays (wash boxes plus open sky wash bays). It may be necessary to choose a larger container depending on the container equipment chosen.

<sup>\*\*\*</sup> This free surface can be used for other installations or as a storage area. This may be reduced depending on the container equipment chosen.

# **TOUCH-ME** control

# Self-service wash systems



#### Central touch screen operation panel

- Simple and clear operator access
- Logical and intuitive structured user interface
- Can be operated with fingers or the touch pen.
- Information and settings can be selected quickly and precisely.
- With on-site internet connection: remote access via the internet is possible



#### Control cabinet

- Secure system control and monitoring
- Free stored programme control (SPC)
- Future retrofits are possible without problems
- Coated steel plate switchgear cabinet
- Protected placement of the electric mounting parts



'Main level' - access to the submenus. Current operating status indicator.



'User permissions' - password protected menu release for the operator and staff.



'Time intervals' setting - specification of the programme execution times (monetary value per minute).



Detailed sales recognition (cash, tokens, customer cards) at the wash centre



'Settings' submenu - access to the individual setting areas.



'Opening hours' setting - configurable time ranges for certain weekdays.



'Wash data' submenu - access to the individual query areas.



Data backup with USB drive on the controller. Data inquiry via remote access is optionally available.

# Supply technology

### Self-service wash systems



#### High-pressure supply device

- High-quality high-pressure pump shelf
- Can be mounted in the container or in the on-site installations room.
- Maintenance-friendly access to all components
- Different high-pressure supply units available, e.g.
   'HP-premium' version for a powerful working pressure of approx. 85 bar at 10 l/min and smooth 915 rpm
- Pipelines made of stainless steel and high-quality elements
- · Designed for a long operational life and optimum functionality
- Standard: frequency converter (FC) for the high-pressure supply units

#### **Economical operation with frequency converters**

- Control of the HP supply unit using programme-based frequency setting
- Pump pressure and volumetric capacity are optimally adjusted to the respective wash programme.
- Up to 4 high-pressure parameters are available as setpoints
- Standard setting e.g. with the 'HP-Premium' high-pressure supply unit
  - $\bullet\,$  'High-pressure wash' programme: FC setting 50 Hz for approx. 85 bar at 10 l/min
  - 'Fresh water rinse' programme: FC setting 40 Hz for approx. 75 bar at 8 l/min
  - 'Stain-free rinsing' programme: FC setting 30 Hz for approx. 42 bar at 5.5 l/min
  - 'Hot wax' programme: FC setting 20 Hz for approx. 20 bar at 4.4 l/min
- More profit thanks to useful savings on water, electrical power and chemicals
- The 'Stain-free rinsing' and 'Hot wax' programmes can be applied in a more targeted way and with less spray mist.
- To increase customer retention, part of the cost-savings can be passed on via extended programme execution times.



Softening installation



Double softening installation



Reverse osmosis unit 250 l/h Optional: 500 l/h or 750 l/h

# **Heating system**

# Self-service wash systems

#### Heating system with fired condensing technology

- Environmentally friendly heating system for gas or fuel
- Combustion exhaust emissions are also directed through an integrated heat exchanger.
- Heat from the exhaust emissions is recovered and supplied to the hot water.
- This is environmentally friendly and saves heating costs

#### Plate heat exchanger

- System separation between washing water and the heating system
- Safe heat transfer from the primary circuit of the heating system to the secondary circuit for the washing water

#### Control unit for customer provided floor heating

- System separation between the heating system and the floor heating
- Our control unit is connected to the circular heat distributor provided by the customer for the floor heating.
- With this, the integrated floor heating in the wash bay foundation (wash surface) is supplied with heat and the formation of ice on the wash surface is reduced.



# **Equipment**

# Self-service wash systems







SKYLIGHT with LED lighting

Billboard holder











AIR-FIT fragrance dispenser





Sound system

**Christ WASH APP** 







# LEGIO-PROTECT/LEGIO-DEFENCE

### Hygiene prevention for self-service wash systems

As the operator of a self-service wash systems, you are obliged to provide hygiene and operational safety to your car wash customers due to existing and future standard requirements (e.g. performing regular legionella sampling).

Christ provides two technical equipment options to assist you as operator to prevent the spread of legionella in your wash bay system.\*

#### **LEGIO-PROTECT**

- Circulation programme to prevent standing pipe water
- If there have not been any washes at the wash lance within a period of 2 days, it is automatically flushed out by the system.

#### **LEGIO-DEFENCE**

- Dosing system for hydrogen peroxide to reduce legionella in the water-bearing lines of the self-service wash systems
- Injection takes place directly into the fresh water storage tank and anti-frost container in order to reach all the subsequent water-bearing lines.
- \* LEGIO-PROTECT and LEGIO-DEFENCE aid in preventing the spread of legionella. Both systems do not guarantee freedom from legionella and also do not absolve the operator from their obligation to do regular legionella sampling and the hygiene responsibilities at the self-service wash systems as per the operation manual and valid standard requirements.



# **FLY-REX** pre-spray column

## Additional offer for roll over wash units

- Pre-spray column for alkaline pre-cleaner
- Attractive additional offers at the roll over wash unit
- Increase of the average wash price thanks to additional turnover
- Targeted dirt removal before the automated car wash
- Optimised total wash results for satisfied customers



#### **FLY-REX** insect remover

- Effective alkaline pre-cleaner
- Application: insect removal and rim cleaning







# MULTI-JET High-pressure pre-wash place

Additional offer for roll over wash units

- Attractive additional offer at the roll over wash unit
- Optimised total wash results for satisfied customers
- High-pressure pre-wash place for the removal of dirt with the high-pressure lance
- Increase of the average wash price thanks to additional turnover
- Preparation of the vehicle on the automated car wash
- Powerful working pressure of approx. 85 bar at 10 l/min

#### **Easy handling**

- Anti-frost device optionally available
- Easy operation thanks to clear operating instructions
- No daily assembling and disassembling like with mobile high-pressure devices
- Problem-free guiding of the high-pressure hose around the vehicle
- Low space requirement in or in front of the wash hall
- Avoidance of hose loops in the driving range





# MULTI-JET High-pressure pre-wash place

## Additional offer for roll over wash units

#### **Equipment options for MULTI-JET**

- Hose reel for wall installation in the wash hall
- Boom made of hot dip galvanized steel for installation in front of the wash hall
- Single boom or ceiling boom for extension to the cross-arm of the boom
- Ceiling boom with wall pillar for attaching in front of the wash hall
- C-rails with cable carriage for wall installation in the wash hall
- Central coin tester as a payment system for the pre-wash
- High-pressure lance with lance holder



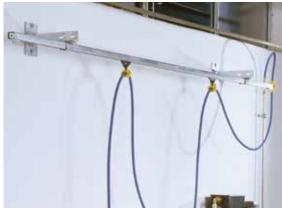
High-pressure lance with lance holder



Ceiling boom with wall pillar



Hose reel



C-rail with cable carriage

# Vacuum systems

Interior cleaning of the vehicle with concept



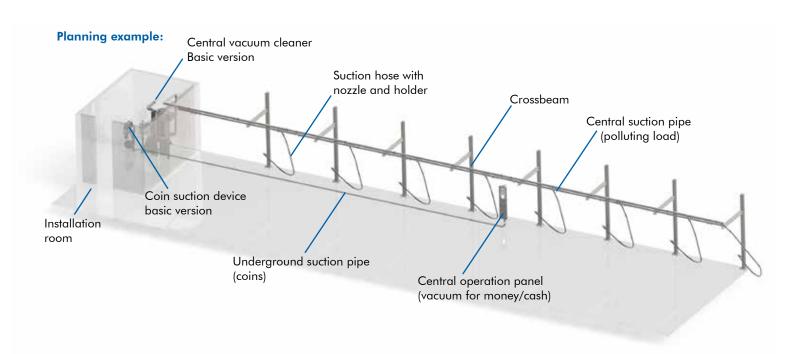




# Central vacuum cleaning system

- Flexible placement of the suction point on the land
- Perfect addition for the wash centre with a great need for vacuum cleaning stations
- Operating concepts: vacuum system for a fee or free-of-charge vacuum system
- Hose feed from above for better accessibility when vacuuming in the car
- Space-saving planning without upstand between the individual vehicle vacuum stations
- A separate vacuuming point can be installed for each side of the vehicle upon request.
- Optional: crossbeam system (with or without roof) for holding the central suction pipe









### Central vacuum cleaning system 'Indoor concept'

- Professional self-service interior cleaning is the focus of the modern wash centre.
- A high-quality offer for vehicle interior cleaning and vehicle finish is a central element of customer retention and therefore acceptance and success of the entire wash centre.
- Indoor concept: the central vacuum cleaning system in addition to other vehicle care equipment is installed in its own hall.

#### Planning variants for indoor vacuuming bays

- Variant 1: set up of the indoor vacuuming bay after a wash tunnel or roll over wash unit. Access only possible after the car wash
- Variant 2: set up as a free-standing indoor vacuuming hall. Access for an one-off payment at a barrier

#### Useful accessories for a successful indoor concept

- Compressed air pistols for blowing out the ventilation slots and difficult to access areas
- CAR-MAT mat cleaners for automated cleaning of the foot mats (see page 73)
- Sink mounting kit for CAR-MAT, e.g. for washing towels
- Point of sale for vehicle products and microfibre towels, e.g. QUICK&BRIGHT product series from Christ CAR CARE
- Fragrance dispenser for the interior
- Car tyre inflation device



Basic version

#### **HURRICANE** as SOLO version

- Designed for the operation of max. 10 vacuuming places
- Equipped with a frequency-controlled and maintenance-free 12.5 kW lateral canal compressor
- 4 air filters are used with a total filter surface of 8 m² to reduce dust.
- The air filters can be installed/removed easily and without tools.





#### **HURRICANE** as **DUO** version

- For large vacuuming stations with more than 10 vacuuming places
- Model variants for 12 to 20 vacuuming places are available.
- Equipped with two frequency-controlled and maintenance-free lateral canal compressors. The power of the lateral canal compressor depends on the type selected (number of vacuuming places)
- The second lateral canal compressor is automatically switched on if needed.
- Increased filter chamber with 7 air filters and a total filter surface of 14 m<sup>2</sup>
- Central and user-friendly dirt removal ('Easy-Waste-Box',100 I volume)
- Compressed air equipment with built-in compressed air chamber for aiding filter cleaning (a compressed air system provided by the customer is required in order to fill the compressed air chamber)

# Equipment



# Container for central vacuum cleaning system

- The HURRICANE can be installed in a container (e.g. installation outdoors)
- Hot dip galvanized steel frame, panelling with coated sandwich panels
- Front cabinet doors for optional access to HURRICANE

#### **Technical data**

Approx. in mm	Length	Width	Height
For HURRICANE SOLO	2,000	1,000	2,665
For HURRICANE SOLO with coin suction device	3,000	1,000	2,665
For HURRICANE DUO	3,000	1,000	2,665
For HURRICANE DUO with coin suction device	4,000	1,000	2,726



#### **Equipment for the vacuum place**

- Suction pipe made of aluminium
- Plastic suction hose, grey standard colour
- Crevice nozzle with integrated isolating bar and rotary articulation

#### Fastening options for the suction pipe

- Option 1: crossbeam made of hot dip galvanized steel (without roof), per vacuum place
- Option 2: constructional steel system with roofing, per vacuum place

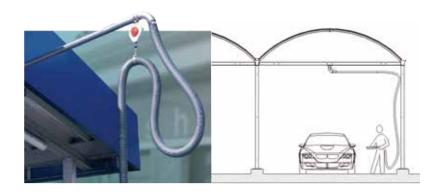




#### Intermediate filter

• With underground suction pipe





# 360° ceiling boom for vacuuming with spring balancer

- Full freedom of movement around the car
- Hose contact with the floor is prevented by the spring balancer.

#### Nozzle holder for wall installation

• Crevice nozzle holder on the equipment for the vacuum place

• Fastening to the wall, the crossbeam or steel construction possible





#### Column

- Addition of pushbuttons or coin tester
- Attaching the nozzle holder

#### Nozzle holder free-standing

- Crevice nozzle holder on the equipment for the vacuum place
- Free-standing fastening onto the foundation provided by the customer



# Vacuum place activation



#### Free vacuuming

- The 'free vacuum cleaner' concept is a customer magnet
- Car wash customers can vacuum as long as needed without having to pay.
- To cover the operating costs, the operating and financing costs of the vacuum system are calculated into the vehicle washing price.
- Access to the vacuum station should be planned so that 'free vacuuming' is not possible without having the car washed.



#### **Push-button**

- For activating the HURRICANE
- Either without or in combination with the pinch valve

#### Vacuum for money

- Additional turnover thanks to release of the suction hoses for a fee
- Recommended for self-service wash centres and wash system locations whose vacuum area is freely accessible.

#### Coin tester

- Applicable only in combination with pinch valve
- The pinch valve opens after coin insertion and vacuuming can start (time adjustable).
- Combinable with a coin suction device as a free-standing version



#### **Pinch valve**

- The suction hose is released after activation by the pinch valve opening.
- After the time interval ends, the pinch valve locks the suction hose again.

# Central operation

#### **Central operation panel**

- The car is driven into a free vacuum place.
- Payment takes place at the centrally positioned operation panel.
- The desired vacuum place is selected, its pinch valve opens and vacuuming can start (time adjustable).
- Combinable with coin suction device
- Extendable with a reading unit for transponder cards (e.g. VENDOR)







### SOLO-TURBO/DUO-TURBO

### Premium single/double vacuum cleaner

#### Optional: special paint

- Instead of standard coating (grey aluminium RAL 9007), the aluminium sheets are coated in a different Christ standard colour.
- Casing outer edges remain uncoated aluminium



#### Optional: Christ design line

- Suitable for the design line of SKYLINE steel construction
- Design line CAR CARE
- Design line WASH STAR
- Design line WASH VEGAS

#### Standard: integrated LED stripes

- RGB LED stripes integrated into the cover edge, adjustable to multiple colours
- Illumination of the outside of the vacuum cleaner housing for an appealing look in the twilight hours

#### Standard: premium suction hose

- Fabric suction hose and flexible crevice nozzle with integrated isolating bar
- Light, flexible yet stable for more comfort when vacuuming

#### Optional: sound insulation

- Installation of a sound-absorbing mat in the casing of the Christ single vacuum
- Noise reduction of the vacuum cleaner to a maximum of 70 dBA (outside on the casing)





### **ORBIT** cross-arm

## Equipment option for double vacuum DUO TURBO

#### Stand out from the competition

- Convenient equipment options for optimum suction hose management
- Increase of the attractiveness of the vacuum cleaner bay for more frequency at the wash centre
- Higher average wash price thanks to additional vacuum cleaner turnover
- More washing at the wash system thanks to the attractive vacuum cleaner bay

#### **Technical features**

- Stable, hot dip galvanized and powder-coated steel construction
- Two 360° vacuum rotary joints (left vacuum place/right vacuum place)
- Extension of the vacuum hoses to the vacuum rotary joints
- Hose feeding 'from above' as with a central vacuum system
- Spring balancer system to prevent hose contact with the floor
- Maximum freedom of movement around the vehicle thanks to the 360° vacuum rotary joints

#### **Option**

- The ORBIT cross-arm can be additionally supplemented with compressed air guns and mat holders upon request
- A range of variants is available for vacuum station activation, for example push-buttons with free vacuum cleaners or various pay points for vacuum cleaners subject to a fee, e.g. coin collectors, barcode readers, customer card readers.





## SOLO-ECO/DUO-ECO

Single/double vacuum cleaner



#### SOLO-ECO/DUO-ECO

- Powder-coated aluminium casing, without mast and LED stripes
- Coating: standard colour grey aluminium RAL 9007
- Suction device: removable industrial vacuum cleaner (motor unit is on the dirt bucket). Two industrial vacuum cleaners are used for the double vacuum
- Preparation for the connection to a 230 V current supply
- Suction hose design as plastic hose without fabric covering
- Mechanical coin tester for the insertion of 1 coin and 1 token with the same value.
   Two coin testers are installed for the double vacuum.
- Timer control with counter integrated into the casing



## **Accessories**

# Single/double vacuum cleaner



#### Island for vacuum cleaner

- Alternative solution as access protection if no upstand in the vacuum place area is possible.
- The stable, hot dip galvanized frame construction features optimum protection for the vacuum cleaner placed on it
- The Christ mat beater and Christ waste bin can also be fastened to the island for vacuum cleaners with grids.

#### Mat beater

- To beat foot mats manually
- Galvanised mat grids with dirt collection container as a drawer

#### Waste bin

- To collect waste at the wash centre
- Casing made of aluminium with front slot opening
- Coating: standard colour grey aluminium RAL 9007



# Coin suction device

# For up to 8 suction points

- Suction device for central and secure safekeeping of inserted coins / tokens at individual pay points
- Coin suction device as a combination device with a pinch valve and a suction hose per suction point
- A lateral canal compressor is used as a vacuum system.
- The coin suction device sucks in the coins through suction hoses (the hoses are drawn into on-site floor empty conduits).
- Coin box with lockable access doors and a capacity for up to 3000 coins
- Installation in the Christ container or customer-provided installations room (max. 50 RM suction lines)
- Activation of the coin suction device by the Christ coin tester controller in the operation panel or using the Christ coin unit with connection for coin suction device
- Suction duration and operating time adjustable (Default value: 60 seconds after activation)



- The mat is held by the customer and moved up and down in the insertion opening (cleaning half of the mat).
- The mat is then rotated and the other half is cleaned.

#### **Option**

- Version with push-buttons instead of coin tester (free use)
- Alternative pay points can be configured, e.g. transponder card reader
- Installation of a stainless steel water distribution place with tap and outlet

## All the products at a glance:



#### 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.



#### **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.



#### **FONTIS**

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).



#### **Christ CAR CARE**

#### www.christ-carwash-shop.com

Christ CAR CARE offers a full assortment of wash and care products. Our detergent is perfectly calibrated for our wash systems – using the two in combination guarantees the best possible results! Christ CAR CARE also offers highly attractive market innovations, such as PROTECT SHINE or the BUBBLEGUN product series, which significantly increase the turnover potential of your facility. Christ CAR CARE also offers you numerous advertising materials for your wash centre.

#### Commercial vehicle wash units for buses

We offer the right wash system for every bus operator: Drivethrough facilities with wash times of 2.5 minutes are optimised to high throughput for large fleets. Portal wash units with their special brush suspension are especially suited for coaches and lowfloor buses. The automatic mirror bypass ensures a high level of operating safety. In addition, Christ offers solutions for washing trolleybuses, for example.



#### Commercial vehicle wash units for trucks

Christ also offers highly specialised wash systems for trucks. Technical solutions, such as the automatic mirror bypass for buses 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.



#### Train and tram wash systems

Train and tram 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

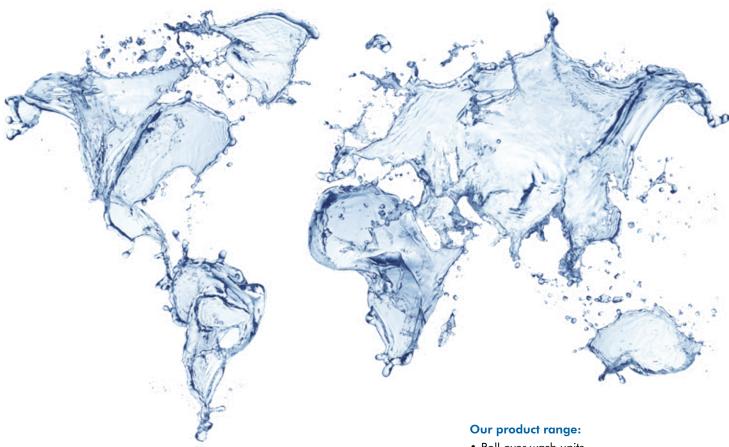
Christ Xpress is the point of access for all car wash equipment. The catalogue and online shop offer Xpress users everything they need for washing businesses, from extra units to work clothes and detergents, to a comprehensive assortment of advertising materials.



# **Everything from a single source**



# ...from Christ Wash Systems



#### 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

- 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



