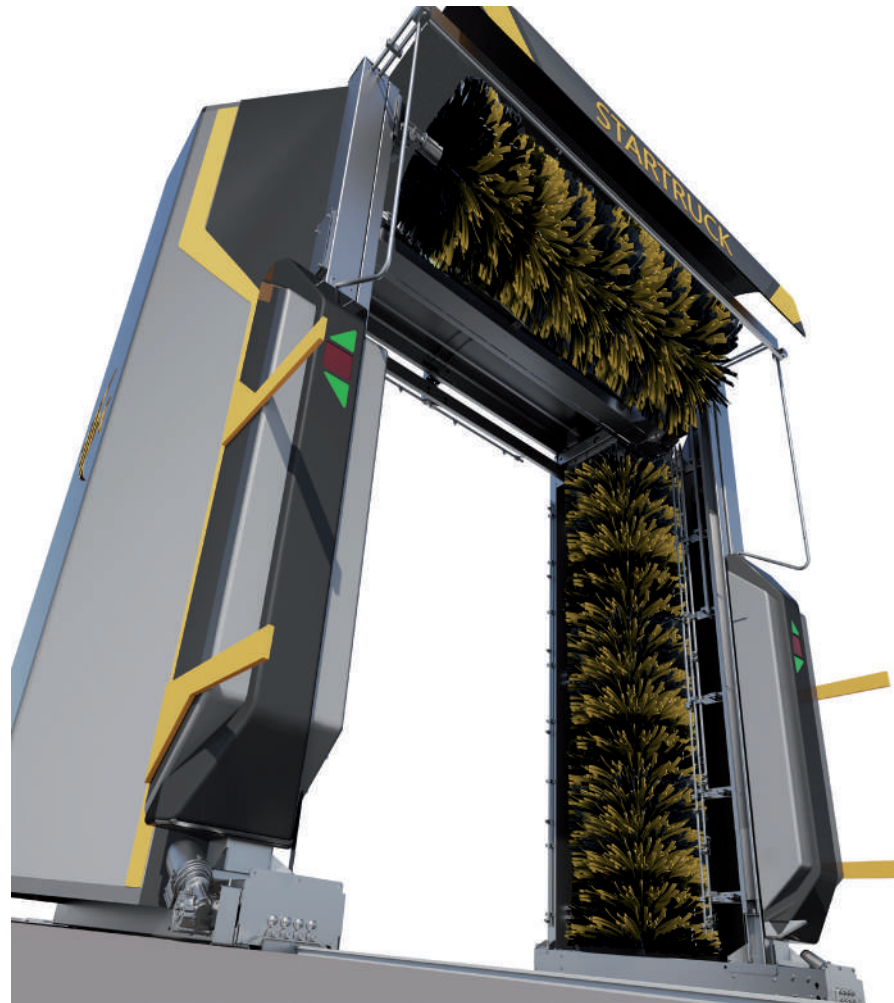




# STARTRUCK





# STARTRUCK



# Catalogue

## STARTRUCK

### STARTRUCK TECHNICAL FEATURES

Supporting structure in tubulars and hot-dip galvanized steel, consisting of four columns in the lower part at the bottom of the rollover, and connected into the upper part by beams, on which is fixed the group that bears the vertical brushes trolley.

Cabinet for the electrical board, and cabinet for hydro-pneumatic groups and chemical products, realized in glass fiber with modern and functional design.

Water-proof gearboxes, in special anti-corrosion alloy.

Wide programming possibilities in order to wash automatically: trucks, buses, vans, cars, with possibility of specific management of various type of mirrors, spoilers, platforms with side banks, trailers, hooks, rear hydraulic platforms, etc...

Front and rear double brushes overlapping.

Supplying all four different chemical products.

Color display screen 7" for the total management of the programs and settings, with shatterproof buttons for a simple and quick programs selection.

### Structure

- Hot-dip galvanized steel frame
- Rollover direct drive, through inverter
- Stainless steel fasteners

### Vertical Brushes

- Four-beam guide in hot-dip galvanized steel
- Power electronic control
- Electrical moving through toothed belt
- Front and rear double brushes overlapping
- Safety devices for excess brushes pressure

### Horizontal brush

- Electric lifting through inverter
- Power electronic control
- Guides in hot-dip galvanized steel
- Double lifting belt with safety sensors

### Medium pressure and high flow pre-wash

- Lower side medium pressure (optional)
- Side medium pressure (optional)
- Side medium pressure with rotating heads (optional)

### Standard features

- Hydraulic circuit with electro-valves and dedicated ramps
- Shampoo dosing pump
- Control terminal in wall box with numeric keypad and color display

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Cutting-edge technology for a lasting success and reliability.

### DATA SHEET

#### Machine dimensions (mm)

Washing height	4.200	4.600
Machine height	5.200 (4870*)	5.600 (5270*)
Machine width	5.000	
Washing width	3.500	
Machine depth	2.900	
Machine weight (kg)	2.250	
Distance between the rolls	3.800	
Rolls length	[3.700 ± 3.900 ± 4.000 upon demand]	18.000 [26.000 optional]

\* With horizontal brush at rest

#### Technical data

Translation speed	m/min	0-20
Water pressure	Bar	3-5
Air pressure	Bar	8
Voltage	Hz	400 3/N/PE 50 230 3/N/PE 60 optional
Total power	kW	6,5
Control voltage	V	24

#### High flow medium pressure (optional)

Water high pressure	Bar	20
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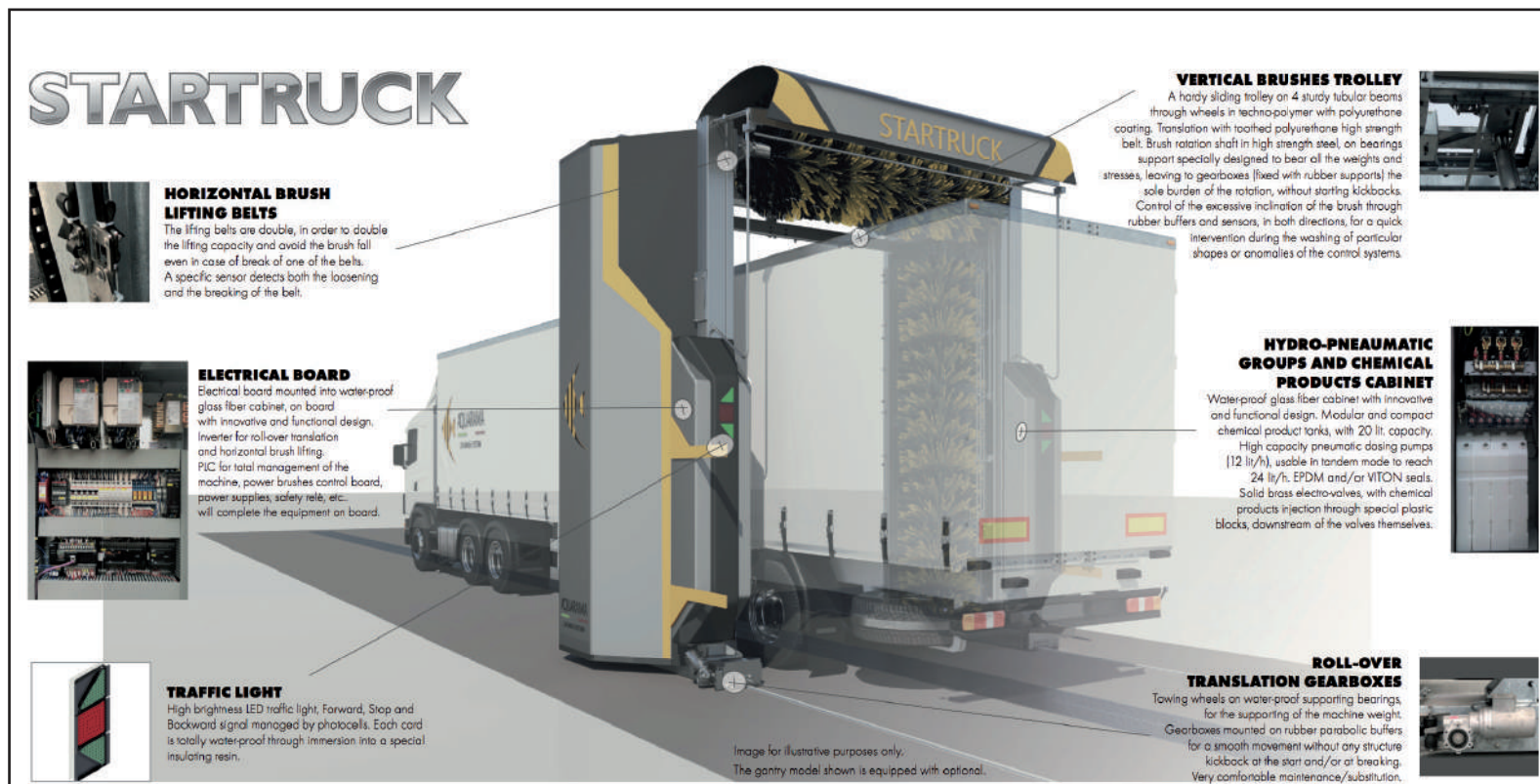
Data are just average and indicative

## The power of technology STARTRUCK



# Catalogue

## STARTRUCK



**HORIZONTAL BRUSH LIFTING BELTS**  
The lifting belts are double, in order to double the lifting capacity and avoid the brush fall even in case of break of one of the belts. A specific sensor detects both the loosening and the breaking of the belt.

**ELECTRICAL BOARD**  
Electrical board mounted into water-proof glass fiber cabinet, on board with innovative and functional design. Inverter for roll-over translation and horizontal brush lifting. PLC for total management of the machine, power brushes control board, power supplies, safety relay, etc... will complete the equipment on board.

**TRAFFIC LIGHT**  
High brightness LED traffic light, Forward, Stop and Backward signal managed by photocells. Each cord is totally water-proof through immersion into a special insulating resin.

**VERTICAL BRUSHES TROLLEY**  
A hardy sliding trolley on 4 sturdy tubular beams through wheels in technopolymer with polyurethane coating. Translation with toothed polyurethane high strength belt. Brush rotation shaft in high strength steel, on bearings support specially designed to bear all the weights and stresses, leaving to gearboxes (fixed with rubber supports) the sole burden of the rotation, without starting kickbacks. Control of the excessive inclination of the brush through rubber buffers and sensors, in both directions, for a quick intervention during the washing of particular shapes or anomalies of the control systems.

**HYDRO-PNEUMATIC GROUPS AND CHEMICAL PRODUCTS CABINET**  
Water-proof glass fiber cabinet with innovative and functional design. Modular and compact chemical product tanks, with 20 lit. capacity. High capacity pneumatic dosing pumps (12 lit/h), usable in tandem mode to reach 24 lit/h. EPDM and/or VITON seals. Solid brass electro-valves, with chemical products injection through special plastic blocks, downstream of the valves themselves.

**ROLL-OVER TRANSLATION GEARBOXES**  
Towing wheels on water-proof supporting bearings, for the supporting of the machine weight. Gearboxes mounted on rubber parabolic buffers for a smooth movement without any structure kickback at the start and/or at breaking. Very comfortable maintenance/substitution.

Image for illustrative purposes only.  
The gantry model shown is equipped with optional.

---

**HORIZONTAL AND VERTICAL BRUSHES**  
In Polyethylene diameter 1100 mm with differentiated density in the various areas in order to ensure a strong washing where necessary, but also minimum impact on fragile elements (mirrors, spoilers, etc.). Available: Carlike polishing brushes (optional for bus washes).

**HIGH FLOW AND MEDIUM PRESSURE ROTATING HEAD**  
The combination between head rotation and roll-over translation, together with the high flow (from 60 to 100 lit/min each rotating head, at 20 bar and with straight jet nozzles), ensures a strong and deep washing of the most critical parts of the vehicle, maybe also those ones not properly reachable by the brushes.

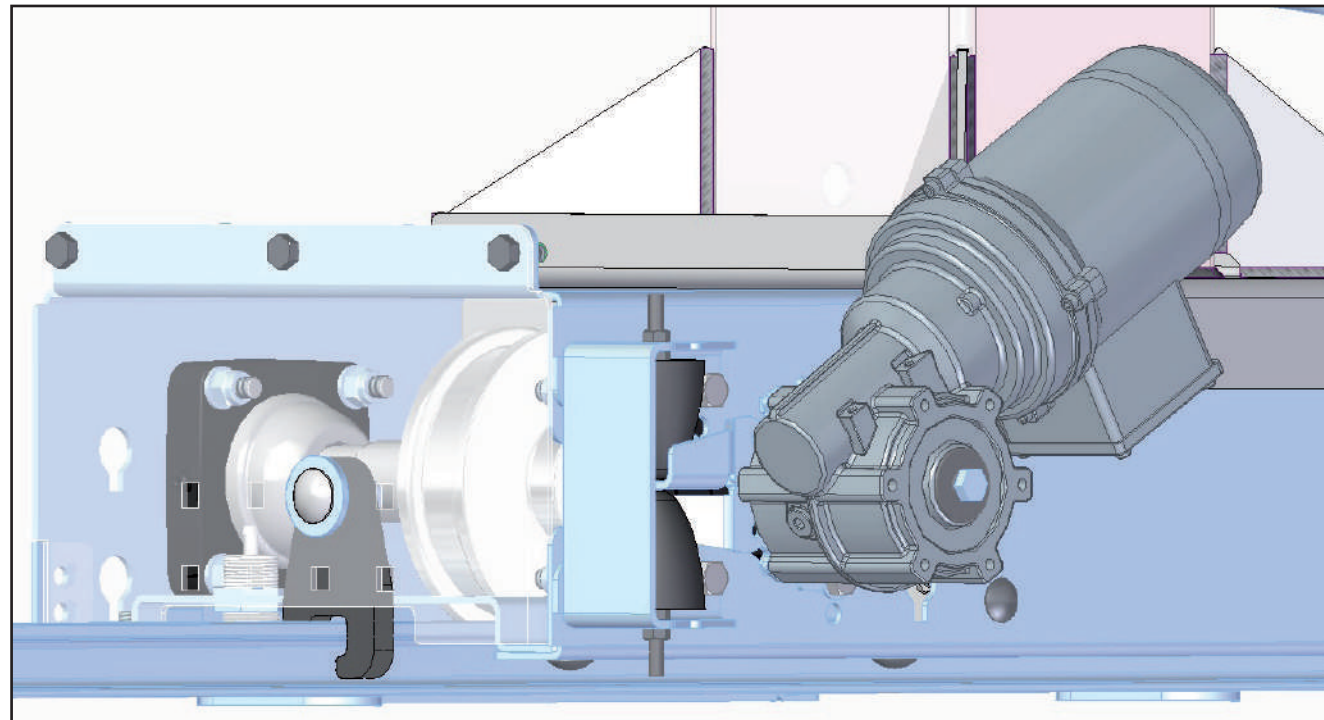
**DRIVE THROUGH UNDER-CHASSIS WASH**  
A series of nozzles with vertical jet properly positioned under the floor, allow a deep cleaning of the vehicle's chassis. Also in this case medium pressure with high flow is used.

Washing width: 3500 mm

Available washing heights: 2600 mm, 2350 mm

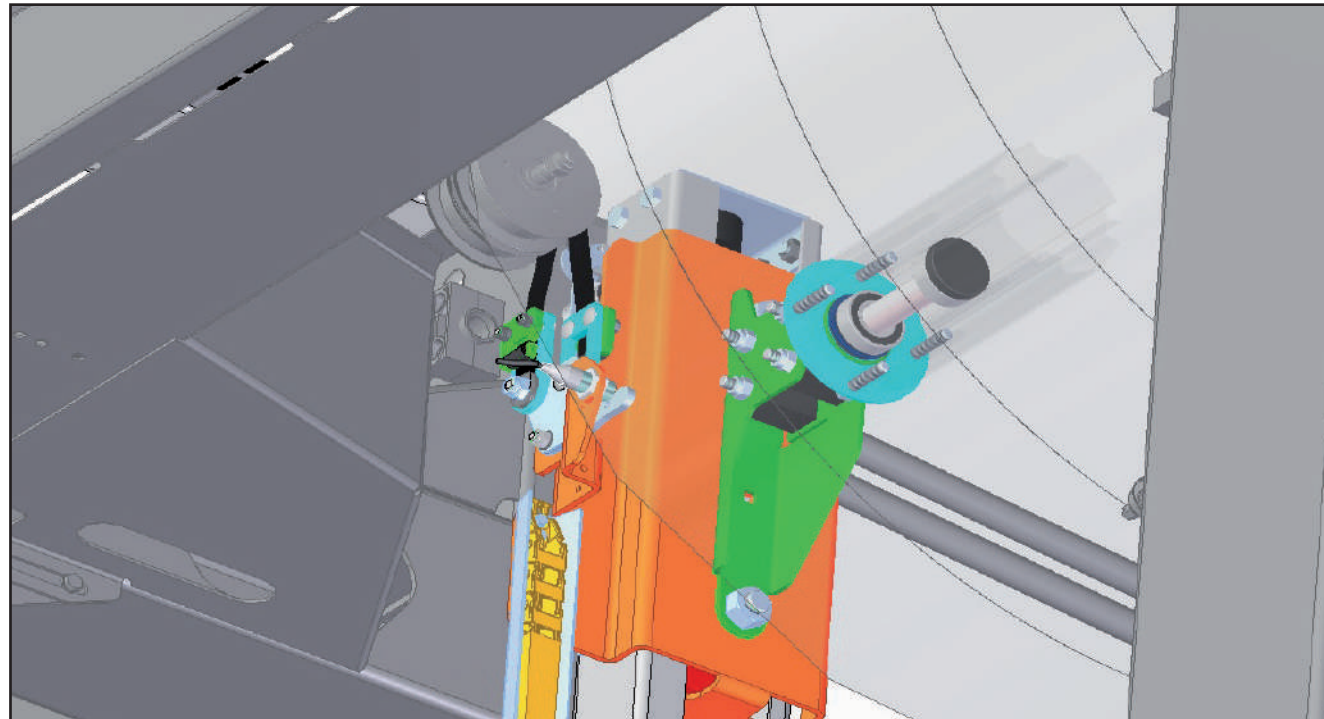
## ROLL-OVER TOWING

- Towing wheels on water-proof supporting bearings with additional seals
- Water-proof gearboxes in special anti-corrosion alloy
- Gearboxes fixed on rubber parabolic buffers
- Fluid movement without kickbacks for the general structure at starting and / or at braking
- Simplified maintenance / replacement
- Inverter



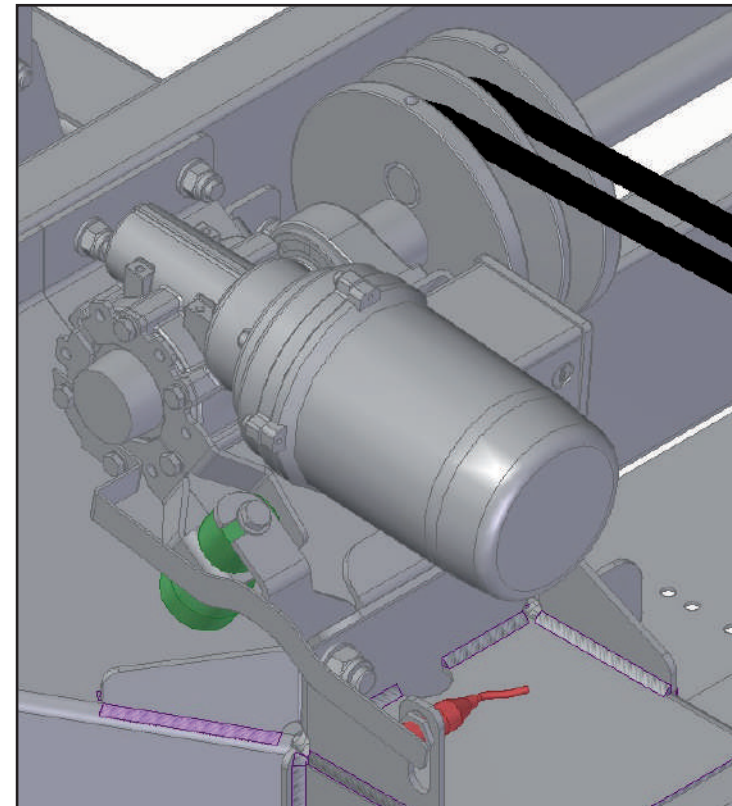
## HORIZONTAL BRUSH LIFTING BELTS

- Double lifting belts
- Double lifting capacity
- Safety against brush fall, even in case of a belt breakage
- Detecting, loosening and belt breaking sensor



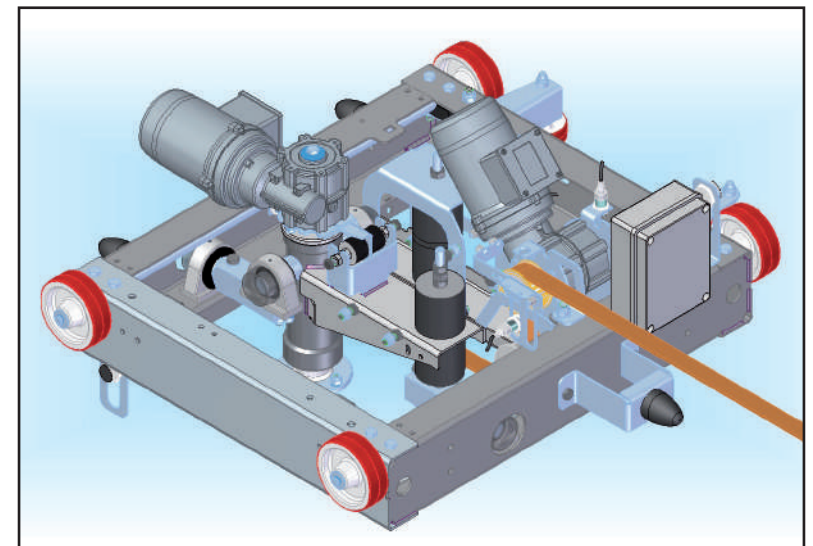
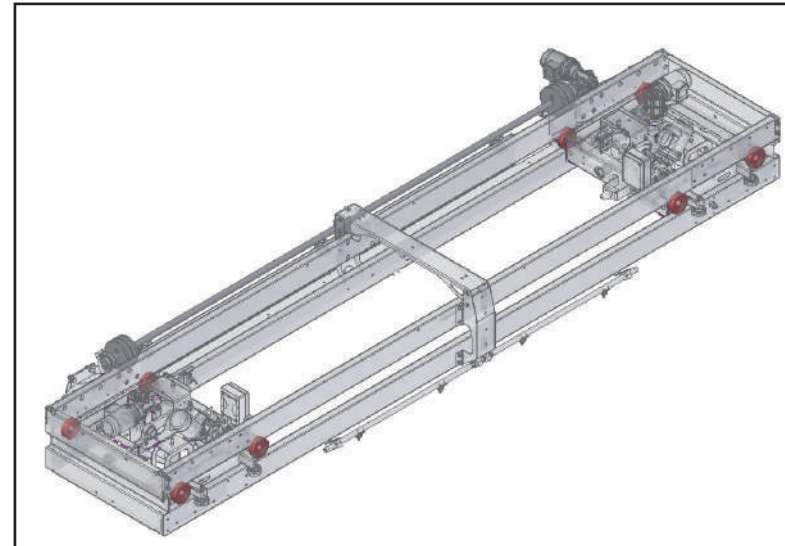
## HORIZONTAL BRUSH LIFTING GEARBOX

- Water-proof gearboxes in special anti-corrosion alloy with IP65 parking brake
- Gearboxes fixed on rubber parabolic buffers
- Fluid movement without kickbacks
- Safety in case of hooking of the horizontal brush under the side banks, refrigerators, etc.
- Inverter



## VERTICAL BRUSHES TROLLEY

- Sliding trolley on 4 strong tubular beams.
- Techno-polymer wheels with polyurethane coating
- Toothed belt in high T32 polyurethane resistance
- High resistance brush shaft,
- Bearings support to bear weights and stresses
- Gearboxes, in special anti-corrosion alloy
- Gearbox for rotation only, with rubber supports, no kickbacks at starting
- Control of the excessive lateral inclination of the brush using rubber buffers and sensors
- Control of the excessive front / back inclination of the brush using rubber buffers and sensors
- Back and front brushes overlapping
- Frontal brush overlapping with 1 or 2 brushes



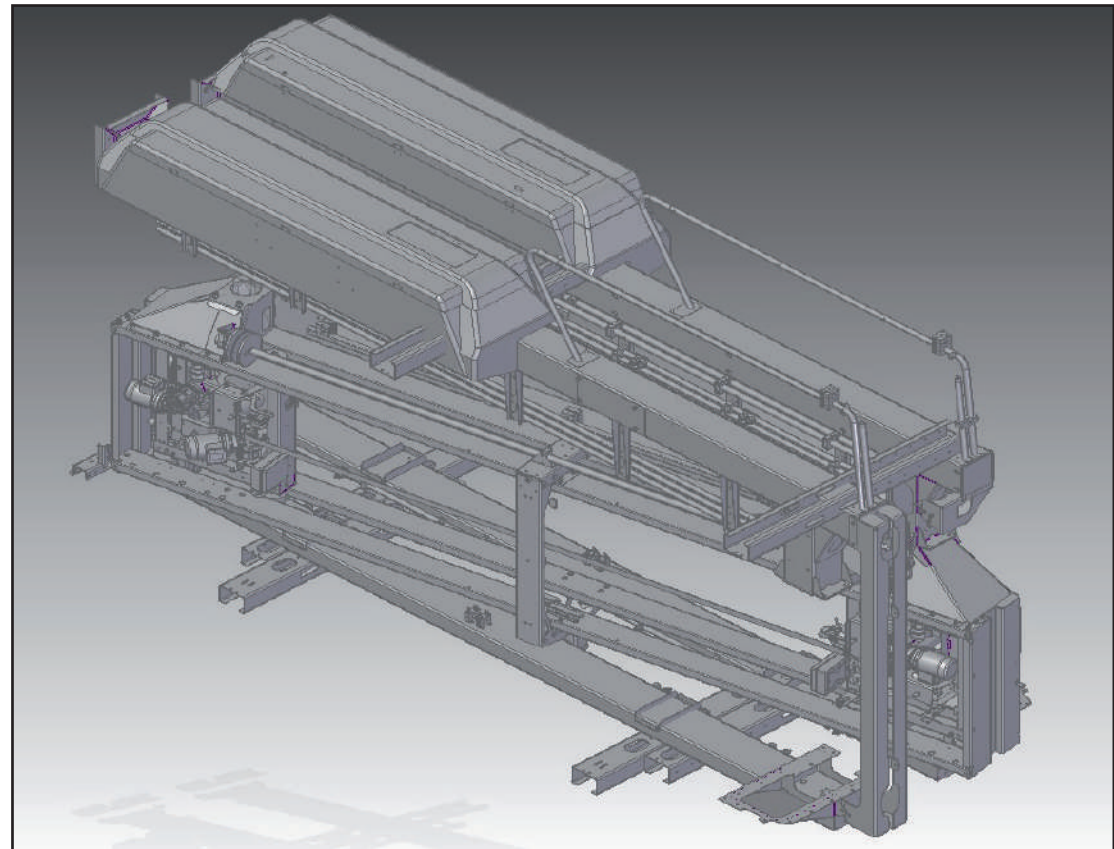


## BRUSHES

- Large diameter brushes 1100 mm
- Speed of the power relief sensitivity and related control
- Available CarLite ® brushes (optional for bus washes)
- New rotation directions
- New brush control concepts.
- Back and front brushes overlapping
- Frontal brush overlapping with 1 or 2 brushes

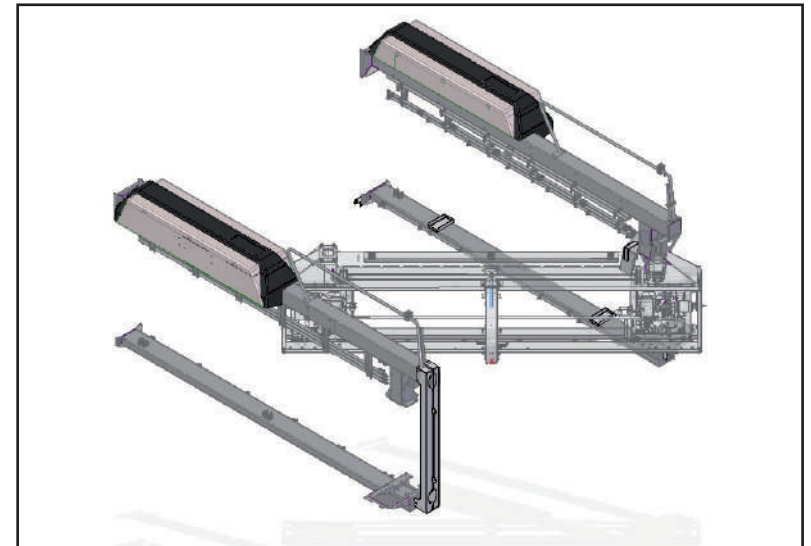
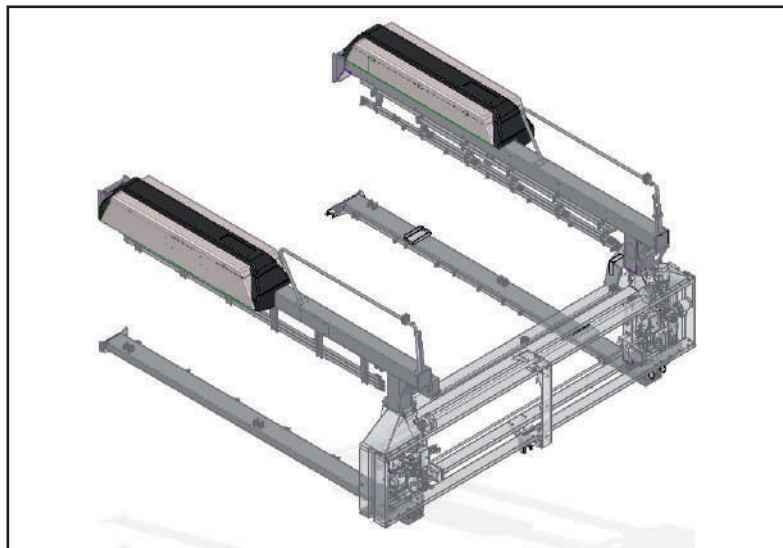
## TRANSPORT

- Monoblock completely assembled and wired
- Transport on standard truck
- Container transport kit



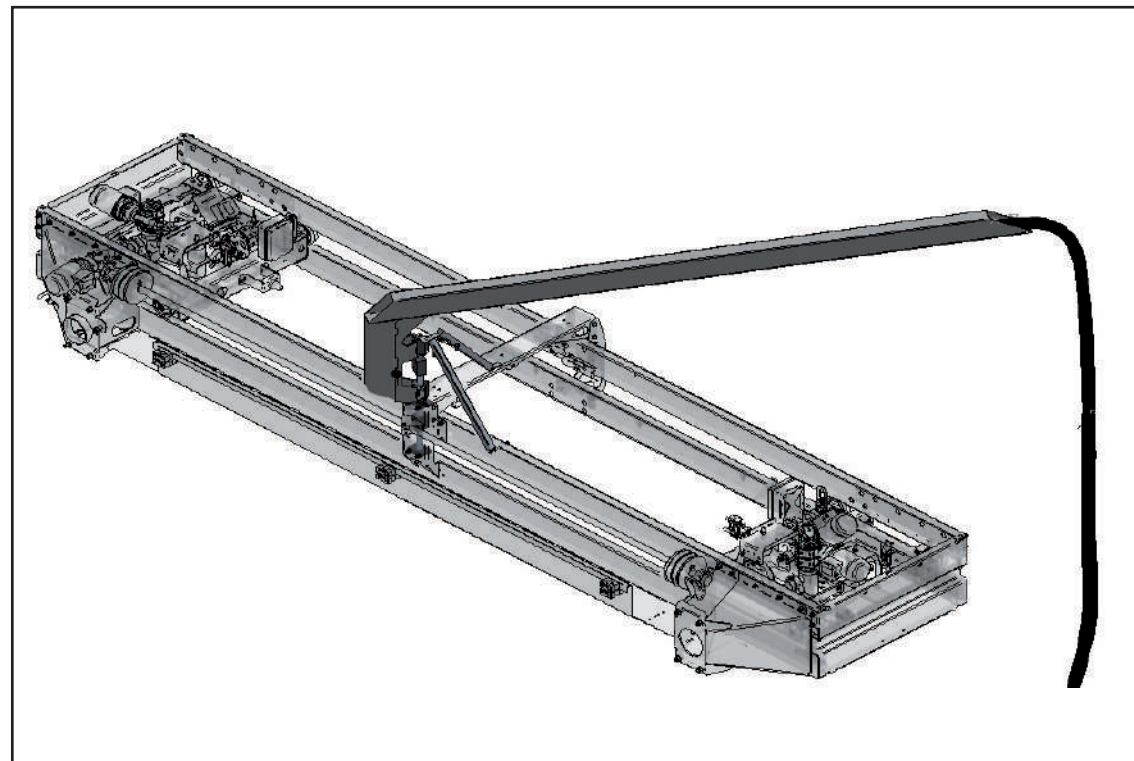
## INSTALLATION

- Opening at installation
- Wiring already performed
- Vertical and horizontal brushes to be fixed on site



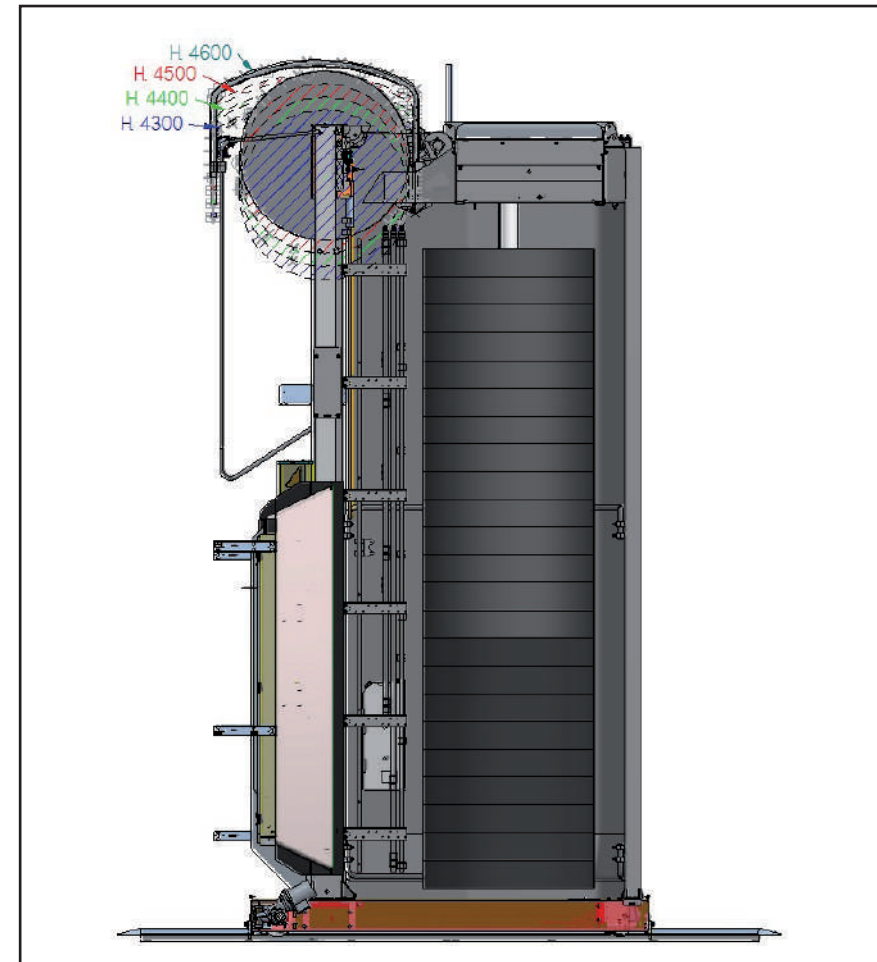
## MOBILE ARM FOR MACHINE SUPPLY

- Simple solution
- Single object for both supplying sides
- Currently NOT available for medium pressure



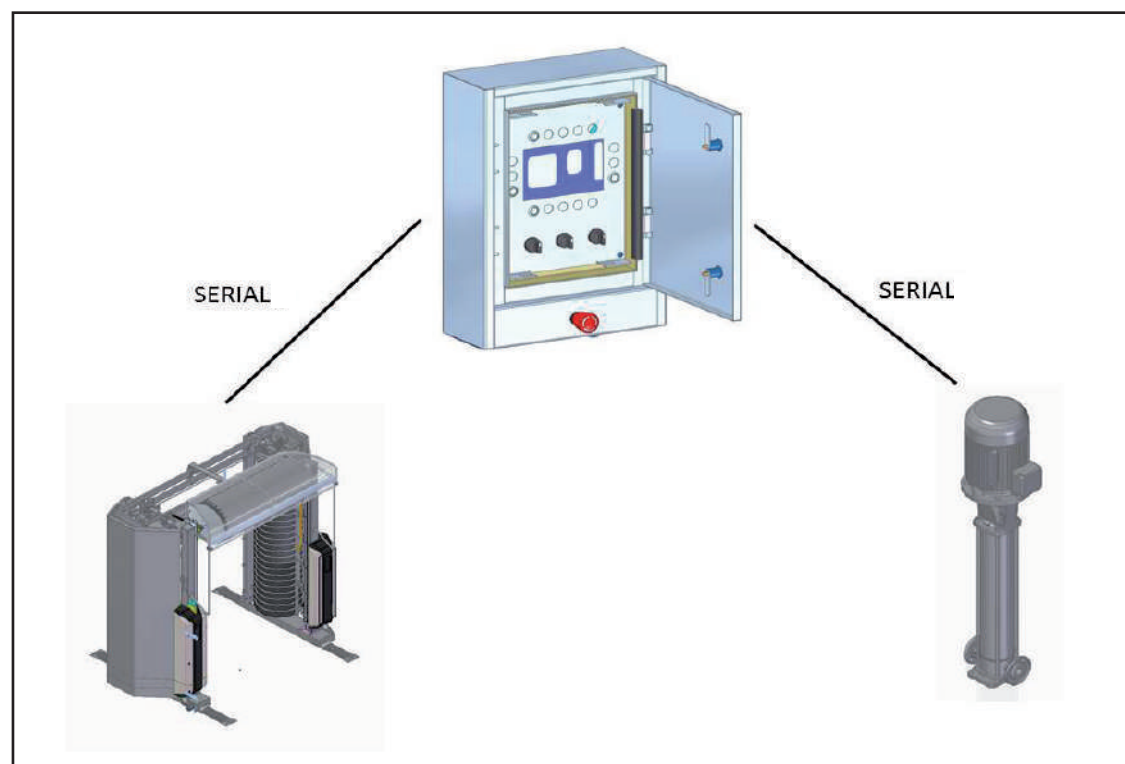
## HEIGHT ADAPTATION FOR CLOSED BAYS

- 4 upper positions for horizontal brush
- 4 washing heights: 4600 - 4500 - 4400 - 4300
- Adjustable upper splash guard



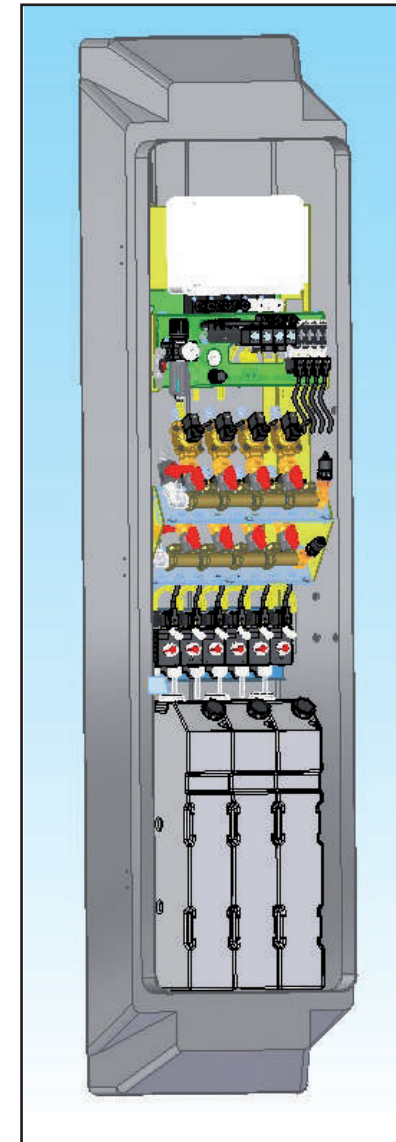
## ELECTRIC STRUCTURE

- Control panel on the ground outside the bay, operator safety
- Serial communication between roll-over and control panel, and between control panel and technical room
- Quick and safe wiring



## VALVES AND PRODUCTS CABINET

- Cabinet for hydro-pneumatic groups and chemical products in glass fiber with modern and functional design
- No corrosion
- Chemical injection in plastic block.
- Pneumatic dosing pumps 6 and 12 [l / h] up to 24 [l / h] each product (with 2 pumps)
- EPDM seals for alkaline, VITON for acids
- 20-liter modular tanks [l]



## CONCEPT

- Medium pressure 20 [bar]
- High flow rate from 270 to 540 [l / min]
- Large diameter nozzles
- Dirt removal based on impact of the liquid and not on pressure
- Much efficacy even at a greater distance from the jet

## UNDERBODY

- Underbody at passage at the beginning of the bay
- Medium pressure and high flow
- Same pumps of the roll-over medium pressure
- Photocell activation

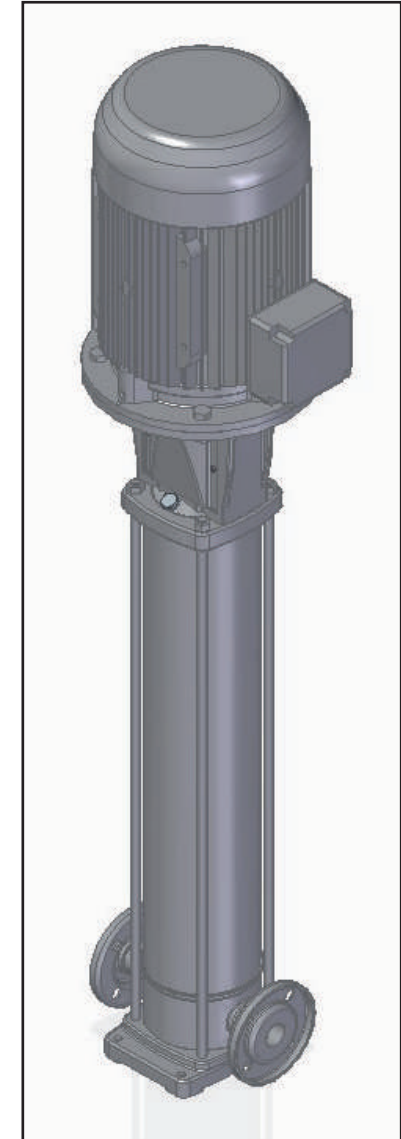
## MEDIUM PRESSURE

- Pneumatic MP valve groups on board (if necessary)
- Side MP pre-wash
- Intensive MP pre-wash, low part
- Fixed upper MP pre-wash
- Possibility, by program, of MP exclusion on delicate parts of the vehicle



## MEDIUM PRESSURE PUMPS

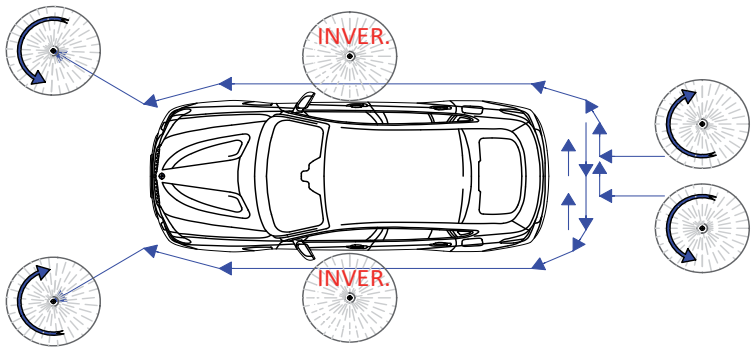
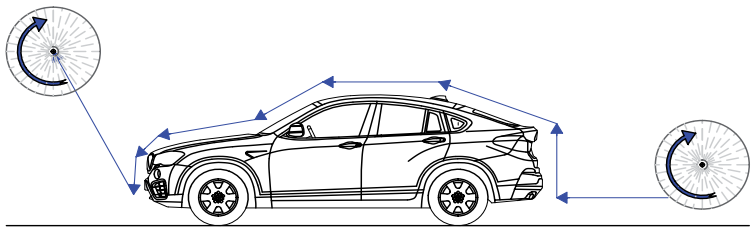
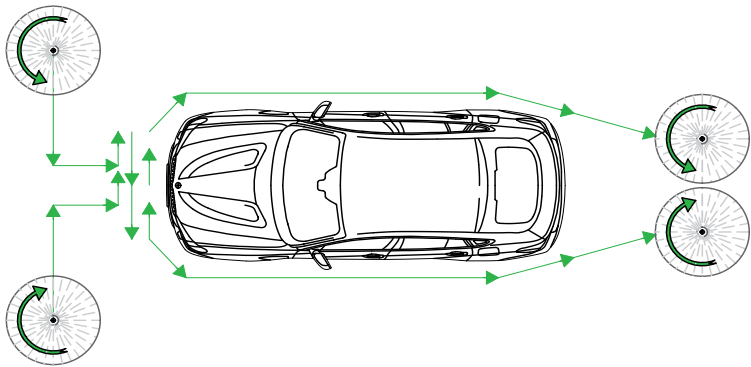
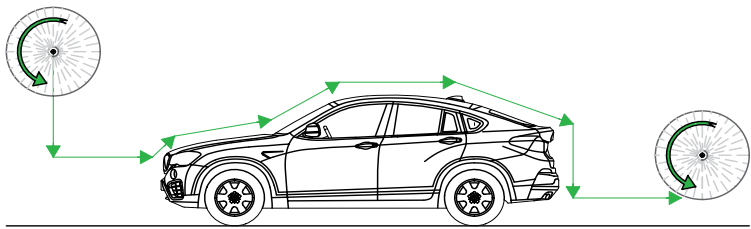
- Vertical multistage centrifugal pump
- Seals subjected to no particular wear
- Low water quality required
- Currently pump of 15 [kW] of 270 [l / min] usable single or in tandem

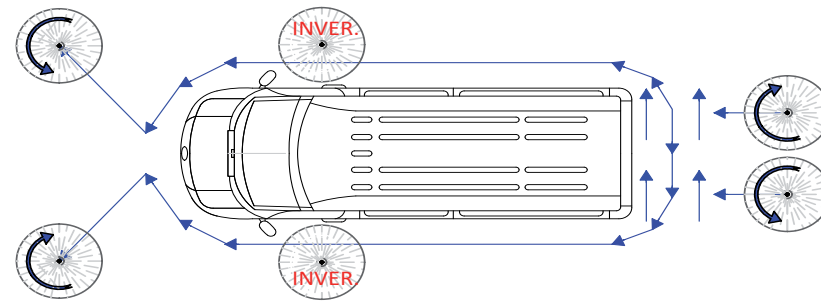
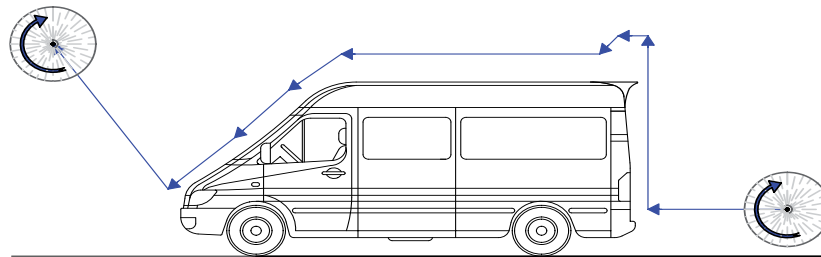
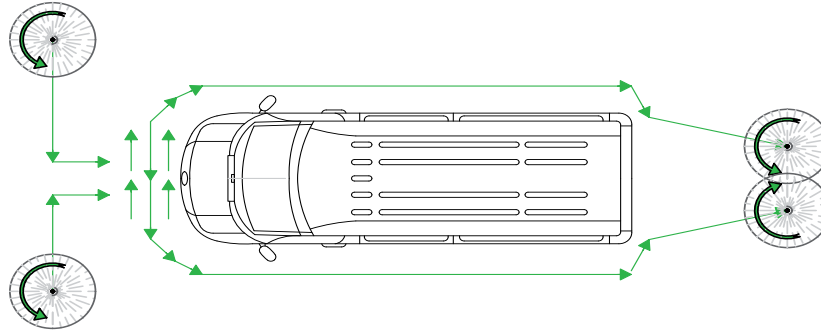
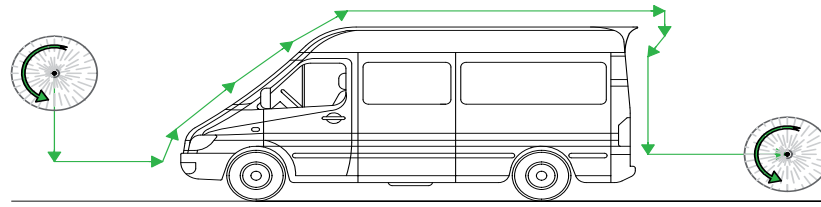


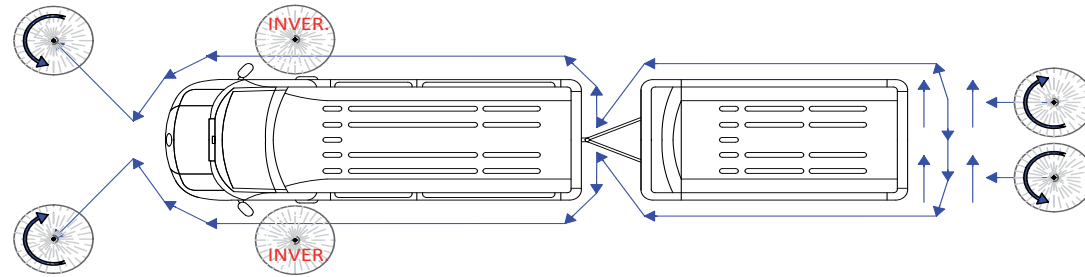
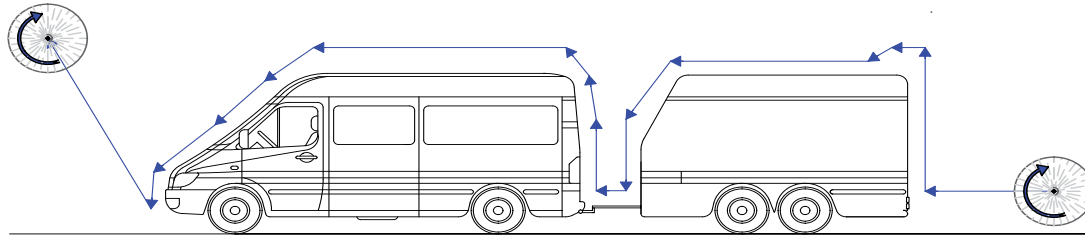
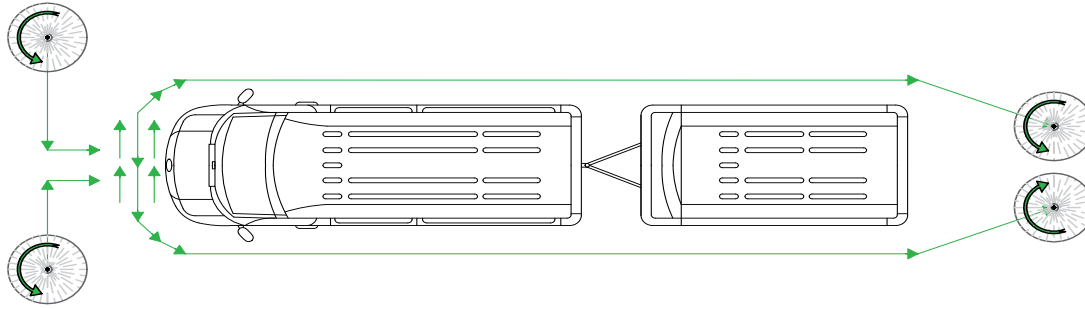
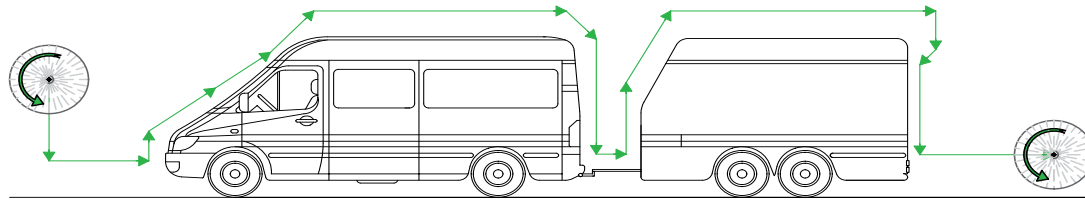
## MEDIUM PRESSURE ROTATING HEAD

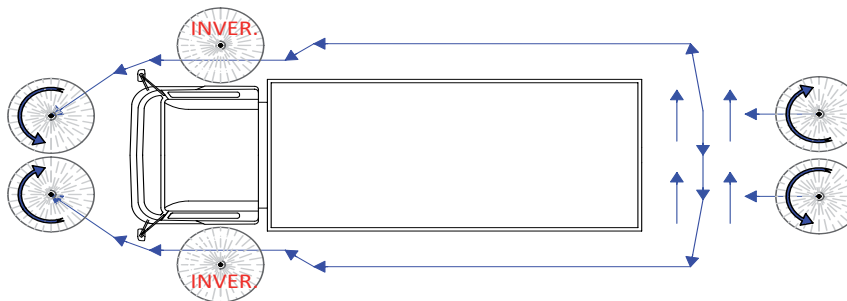
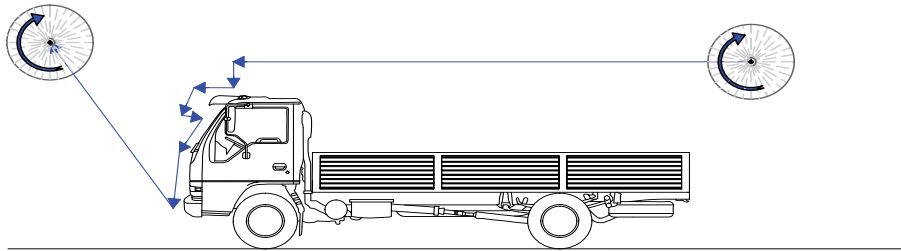
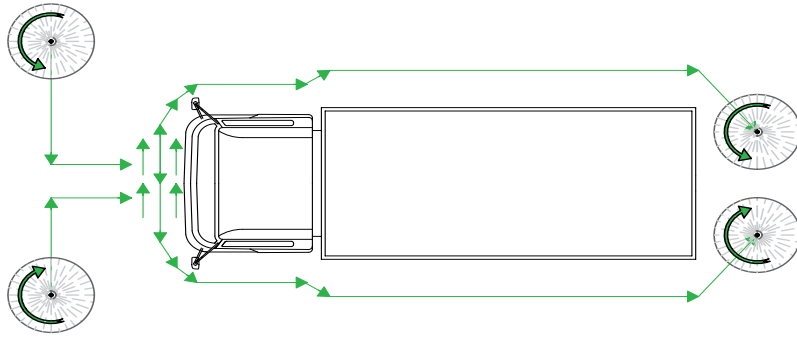
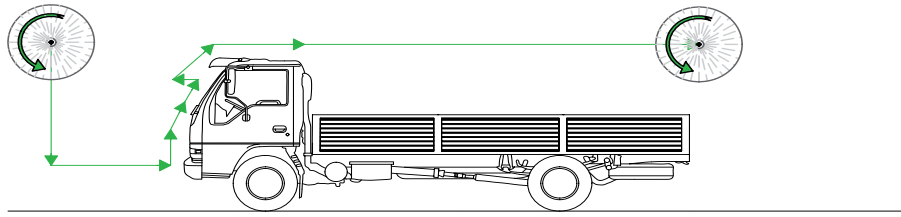
- Reaction rotating head with hydraulic brake
- Low pressure losses even at high flow rates
- 2 each side for side MP prewash
- 1 each side for intensive MP prewash, low part
- 2 each side for upper fixed MP prewash

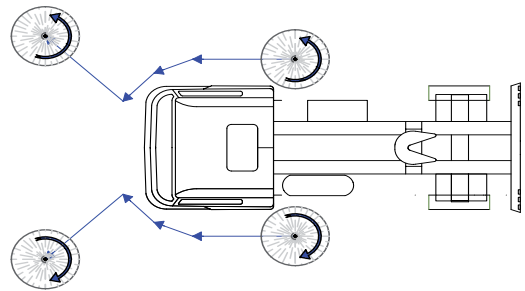
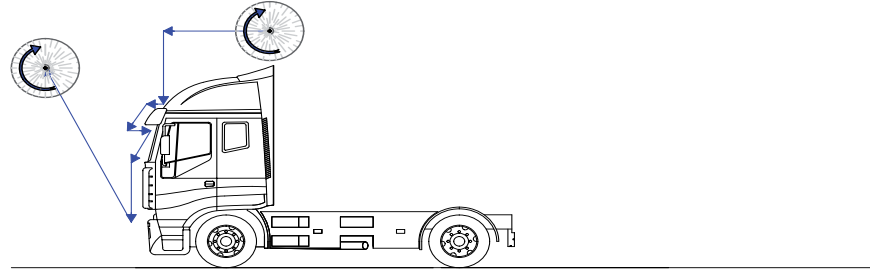
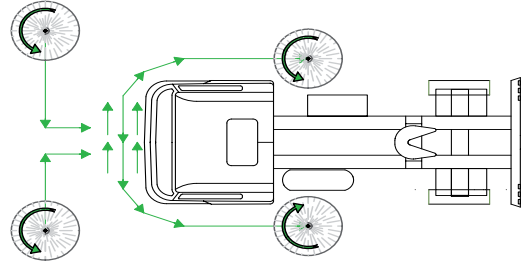
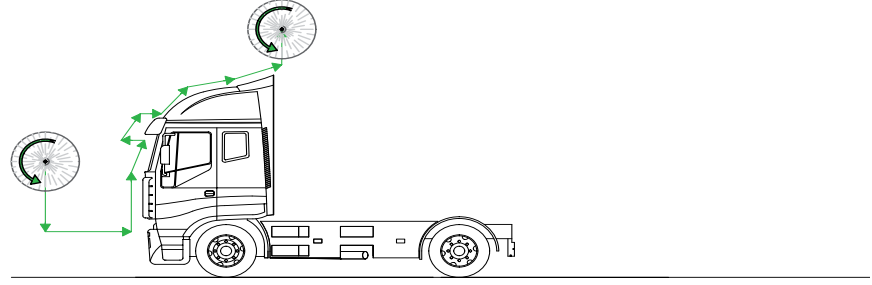


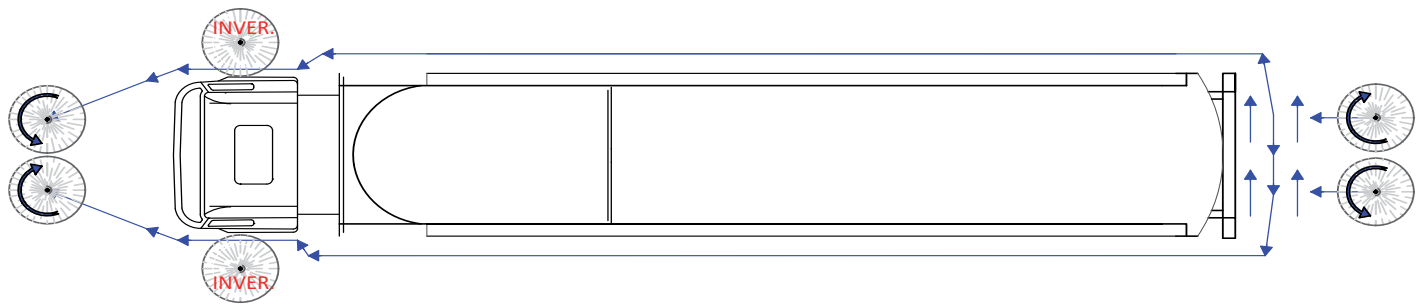
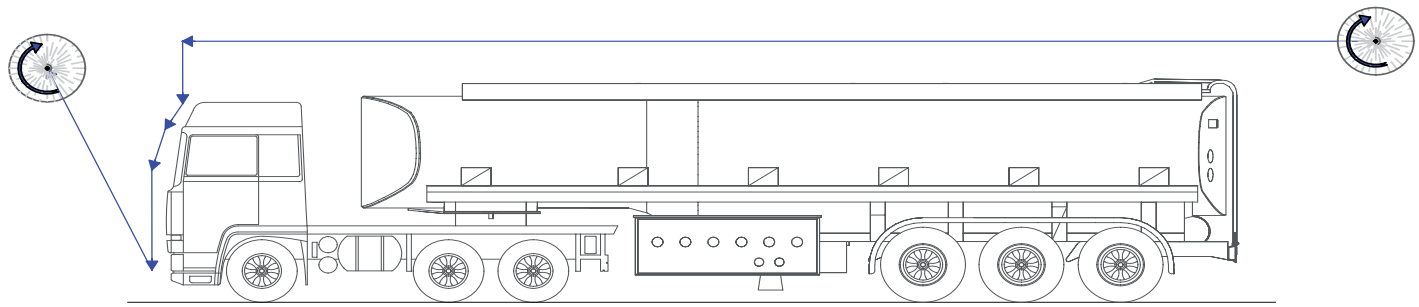
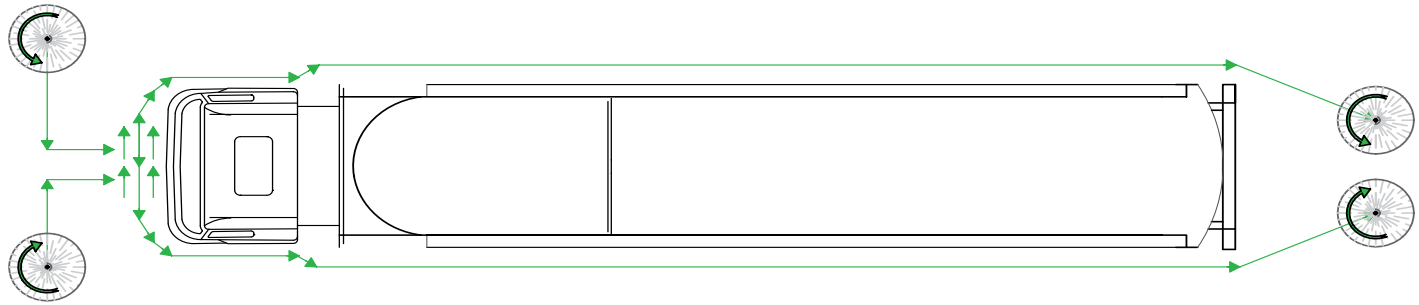
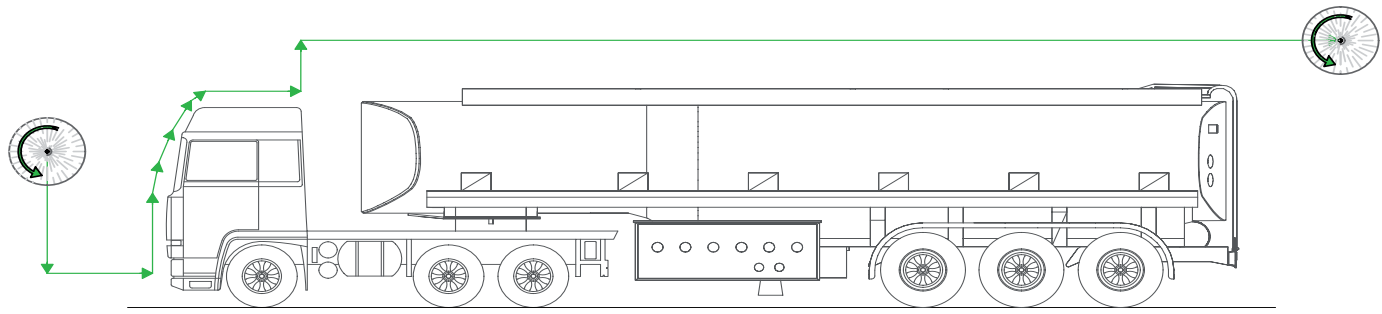




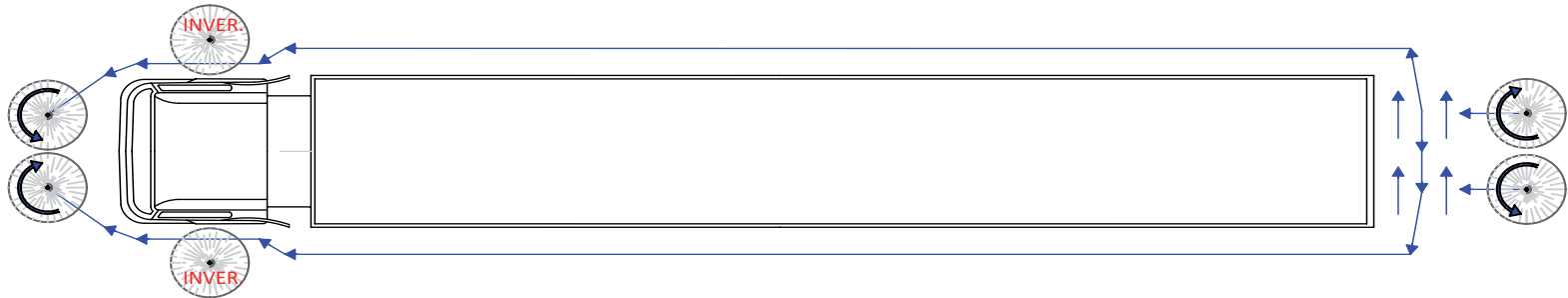
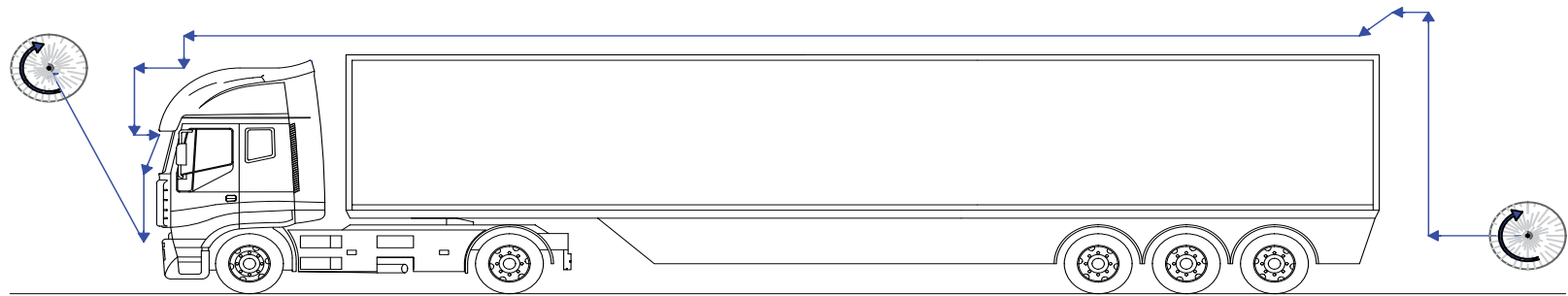
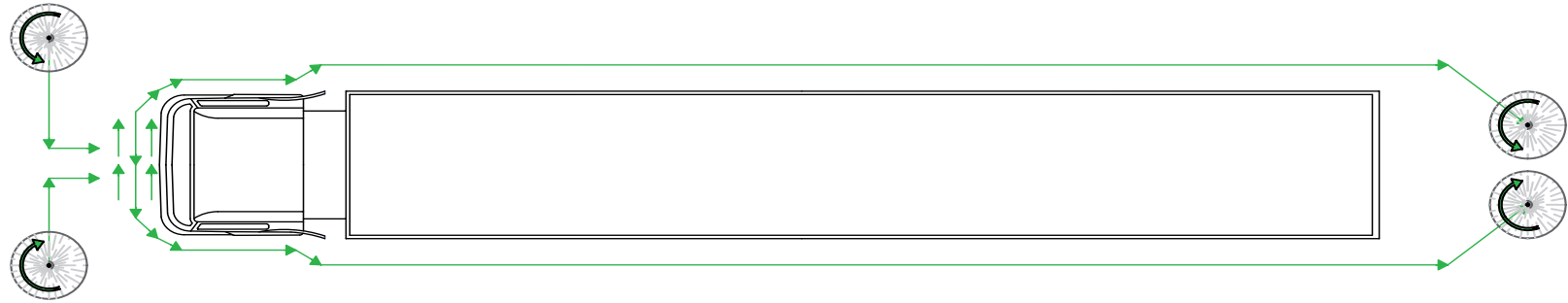
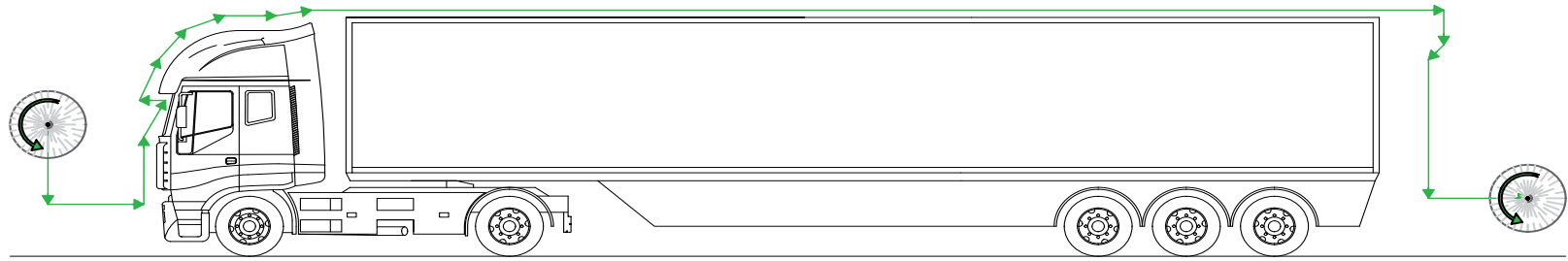


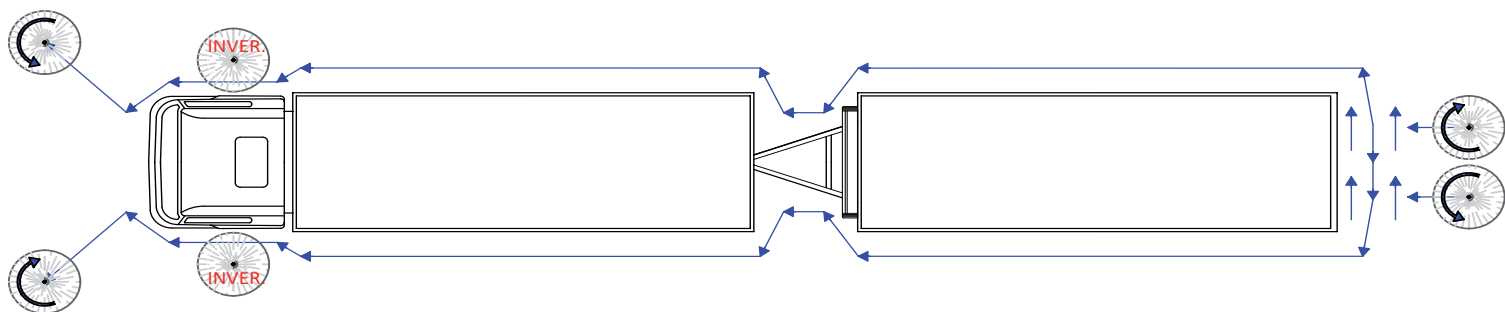
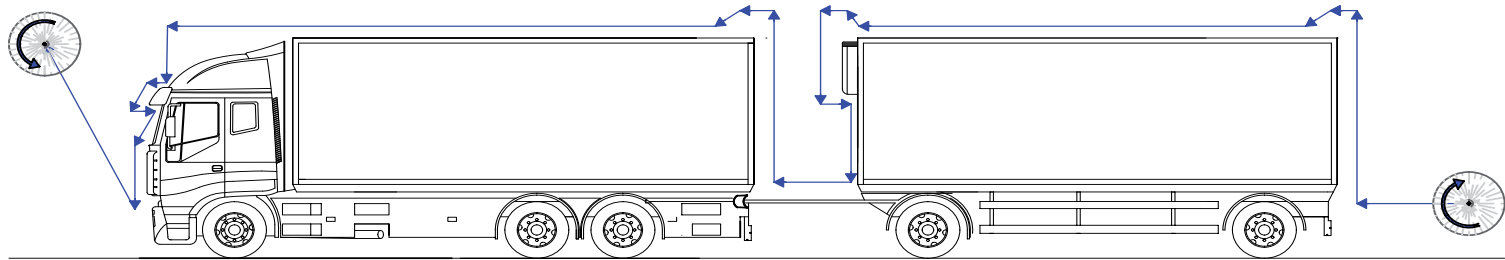
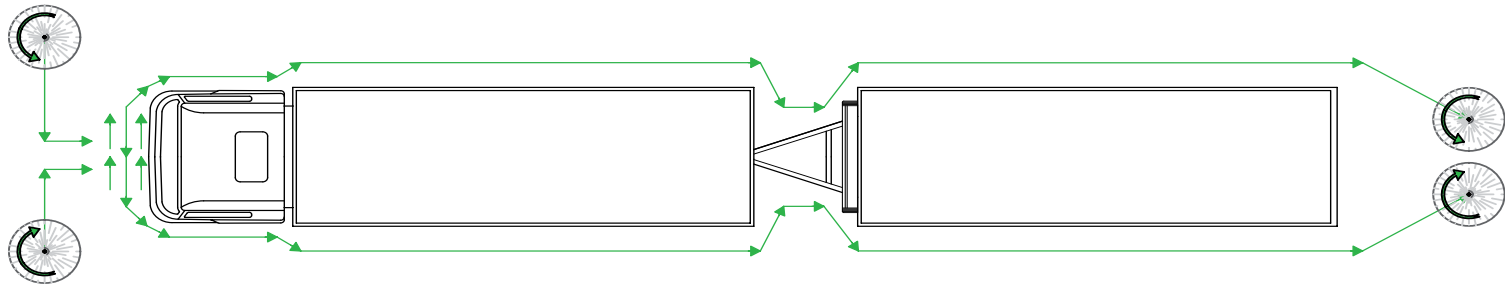
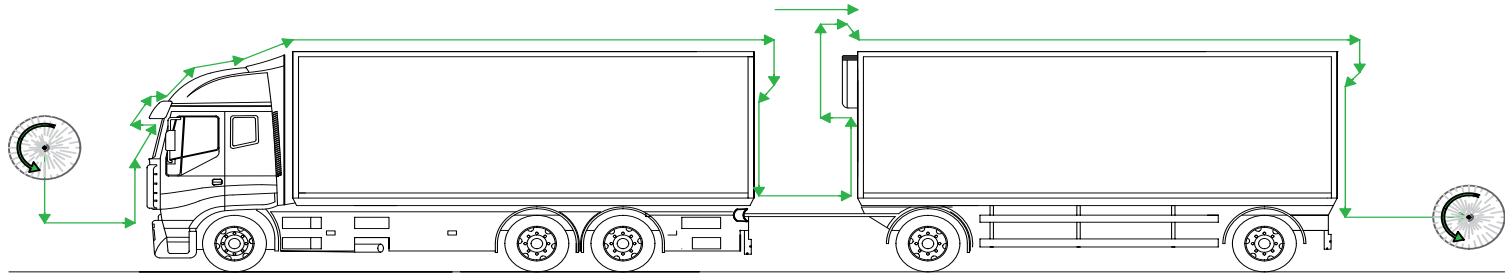


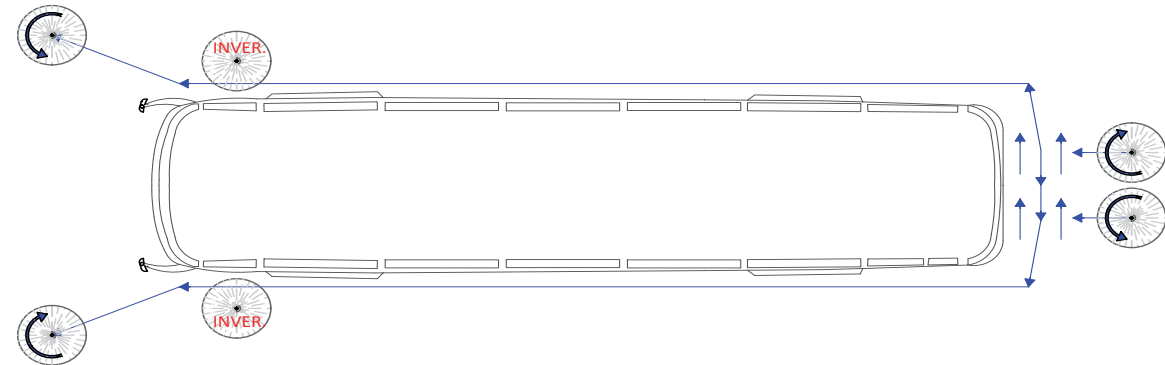
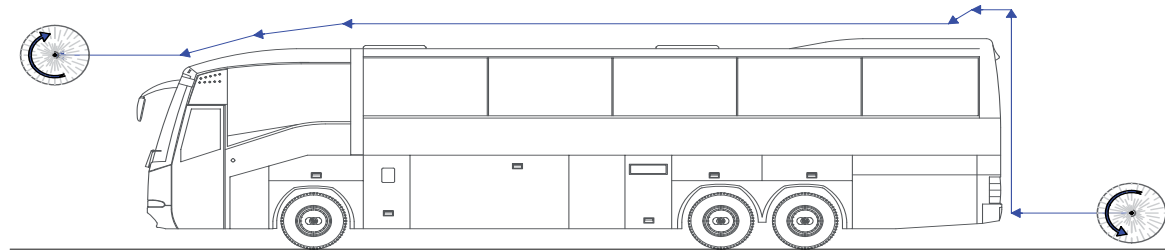
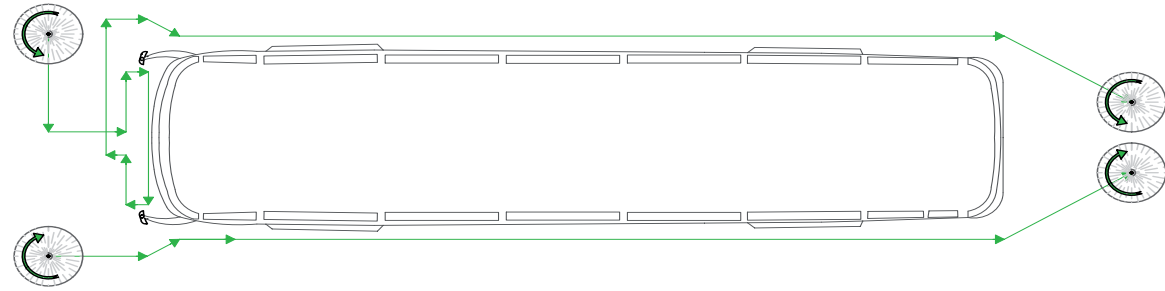
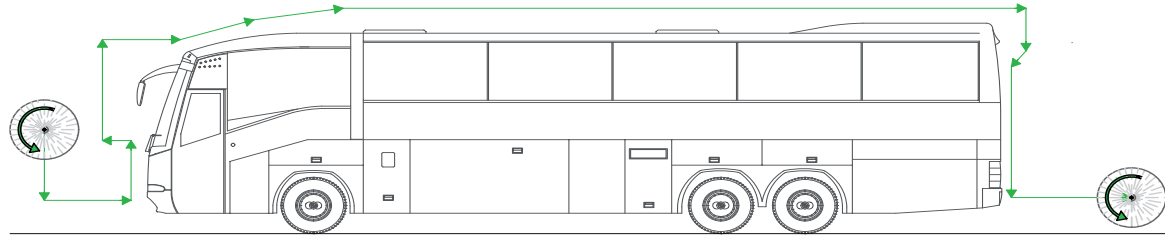


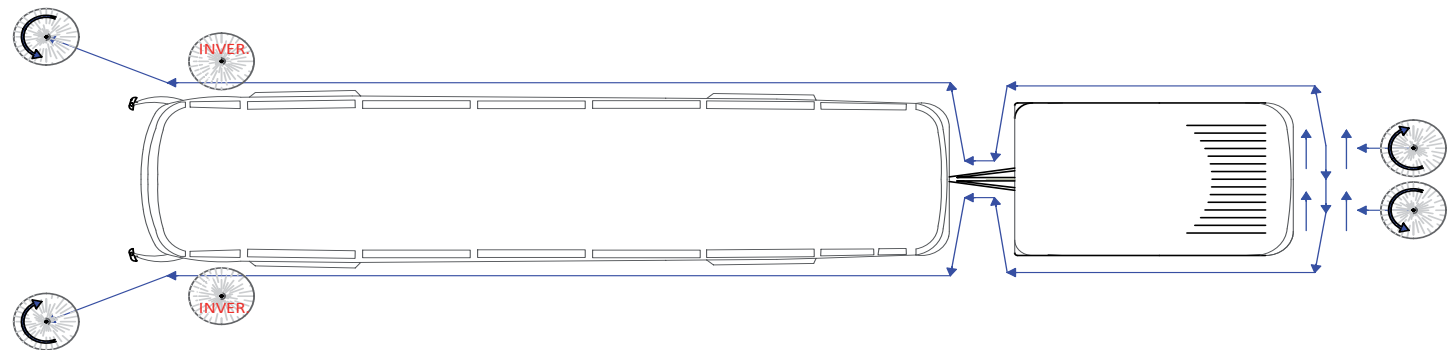
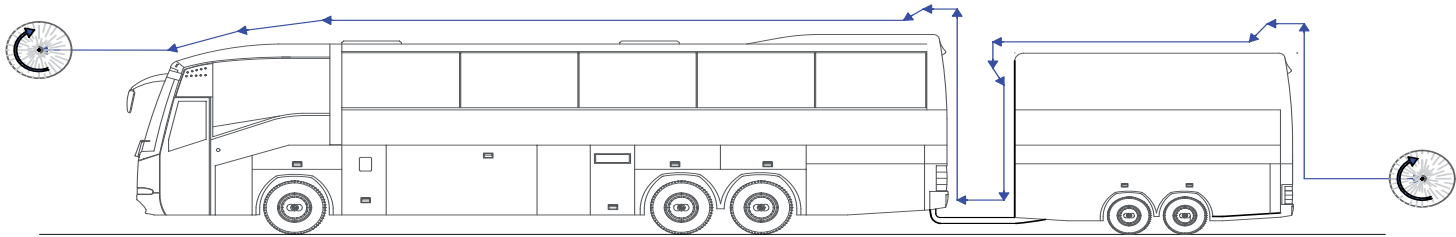
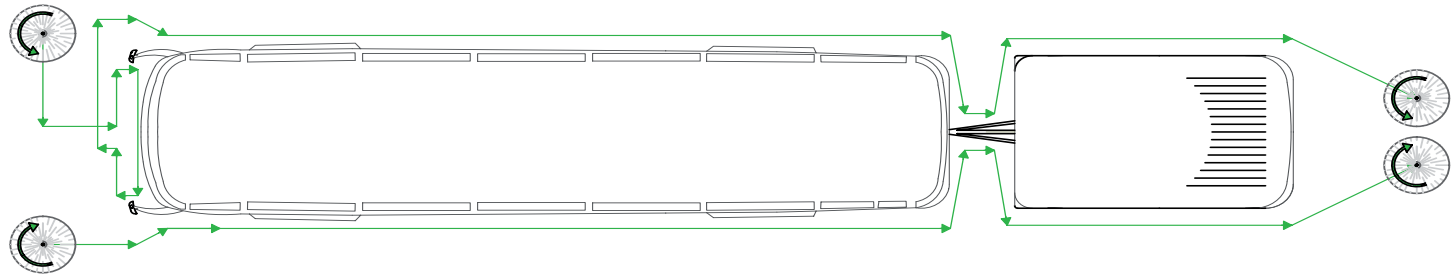
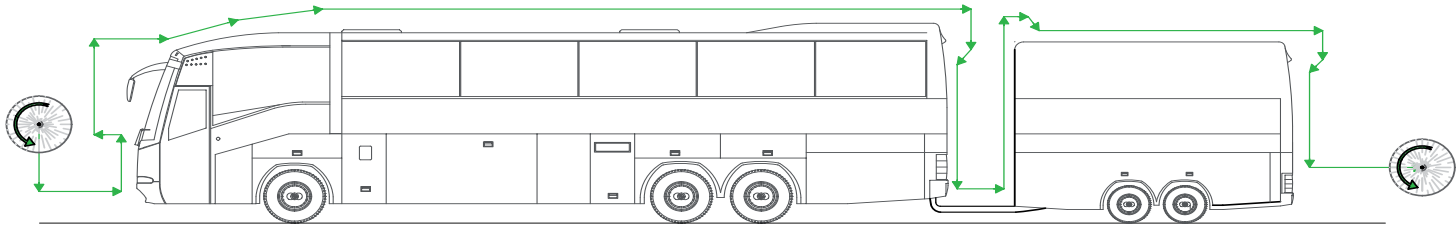










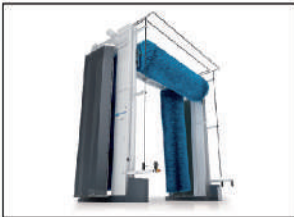



















# Competition comparison

	 <b>ceccato</b> live bright	 <b>DEGAMA</b>	 <b>WashTec</b>
			
<b>StarTruck</b>	<b>BALTIC</b>	<b>CMBUS AE.3</b>	<b>MAXIWASH VARIO</b>
	 <b>iteco</b> WASHING SYSTEMS	 <b>TAMMER-MATIC</b>	 <b>EQUIP</b> MAVAGGI SOLUTIONS
			
	<b>OMEGA WASH</b>	<b>ULTIMA</b>	
	 <b>ISTOBAL</b>	 <b>KARCHER</b>	 <b>Christ</b> WASH-SYSTEMS
			
	<b>HW'PROGRESS</b>	<b>TB 42, 46</b>	<b>MAGNUM</b>