ARIES

Machine description

The basic idea by the development of Aries was to achieve two goals:
- simplicity and reliability.
The result has been obtained thanks to specific technical features that assure the maximum of **functionality** and the minimum of **maintenance**.
The development was also focused on the search of an **attractive** design so that the unit could stand out inside the washing bay.
The **design** was taken care of by Isao Hosoe, a famous Japanese designer, and his touch is recognizable in the rounded-off shapes and soft lines of the unit.
Aries 240 was developed to satisfy the requirements of customers needing a system that is **simple** to use and to maintain and with reduced operating costs.
The unit recommended capacity is 6.000 – 7.000 washing cycles per annum and/or for sites where a low volume of washes is expected.
A large choice of accessories allows the customer to satisfy also the most sophisticated requirements and to upgrade the unit later on, making sure that the plant is always updated and capable to keep step with the changes in the market.
The Aries range is born by **innovating and continuing** the Oceanic series, an important and successful range of units that belongs to the history of Ceccato.

Main characteristics

The main characteristics of the ARIES model are the SWING system fro the Vertical Brushes and the Pneumatic System Movements of the 2 position Drying System.

The Aries gantry washing unit can be supplied in two versions:
Aries Mono Programme is a unit capable of carrying out one washing programme only, while **Aries Multi Programme** allows a customization of the washing cycles in function of the optional equipment installed. It is possible to store 8 programmes, each one including up to 10 gantry runs, and select them by means of the pushbutton panel or any other activation system linked to the machine.

Following versions of **Aries Mono Programme** are available:
• (8700) Aries Mono programme 240.
The main characteristics of this machine are its reliability and the low operation costs.
The unit design and the adopted technical solutions are “essential” and everything is directed to the achievement of a good washing result in the simplest possible way. Washing is carried out in two gantry runs with brushes and two drying runs.
There is also the possibility to include in the cycle the wheel wash operation and the foam shampoo.
• (87000001) Aries Mono programme 240 with feet and cross beam not painted.
This is a basic version intended for customers who do not have specific requirements about machine design, but are mainly looking for a very simple and reliable machine. The side frames are painted, while the finish of the frame feet and the upper cross beam surfaces is that of hot-dip galvanized parts.
• (87000002) Aries Mono programme 240 without drying.
In this version the two drying fans are not installed. During the washing cycle the machine carries out two runs with the brushes and the distribution of shampoo and wax.

Aries Multiprogramme is available in the following versions:
• (008720) Aries Multi programme 240
This version is based on a 20 years experience in the wash-market entry level and was developed with the aim to satisfy all requirements through the addition of optional devices like robowash, medium pressure system, pre-wash chemical, hot wax and many other.
The possibility to customize the 8 programs and the self-service operation with the banknotes acceptor, allows a very high operation flexibility.
Therefore, for an investment purpose, it represents one of the best possible choices for the quality-price ratio.
Multi-programme and single-programme versions with 400V/60 Hz electric supply are available as well. By fitting a 220-400V three phase 4 kVA auto transformer, cod. 000090, it is possible to connect the units also to mono phase 220V mains voltage.

Design

Specific attention has been given to the definition of Aries design. It was also decided to let the customers decide how to “dress” the unit, according to his taste.
Starting from a naked configuration, with the characteristic structure with painted main posts and visible cross beam, a set of cover elements can be added to obtain a completely cladded system with a remarkable visual impact.
The top claddings, the splash shields and wheel wash covers are made in shockproof and anti-UV thermoformed material and are available in three basic colours (plastic colour in blue, red or grey) or painted as requested, at extra price.

Doors

Several alternatives are available, allowing to build-up a system that is capable to match customer's requirements :
• (8702) Doors without traffic lights Basic system. There is no visual device for the positioning of the vehicle.
• (87020100) Doors with traffic lights at the left side.
Two lights are installed on the left post machine frame to help positioning the vehicle: the green light indicates to move forward, while the red one tells the driver to stop.
• (87020200) Doors with traffic lights at left and right side.
These lights configuration is very attractive for the customers. The device is recommended in countries with right-hand drive.

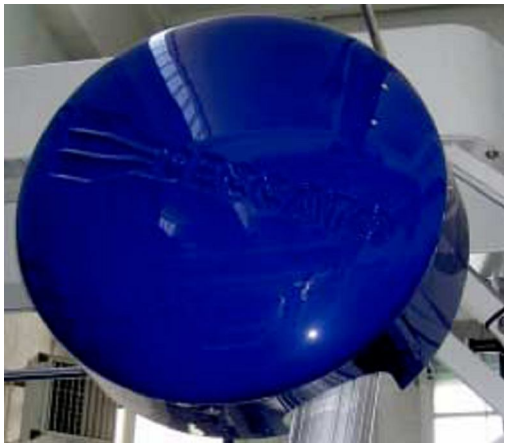
Rail gauges

The gauge is the distance between the two gantry sliding tracks.
• (87012800) Gauge 2800
This is the unit standard gauge.
• (87012500) Gauge 2500
This gauge can be delivered upon request when the unit is to be installed in an existing bay with 2500 mm rails distance.

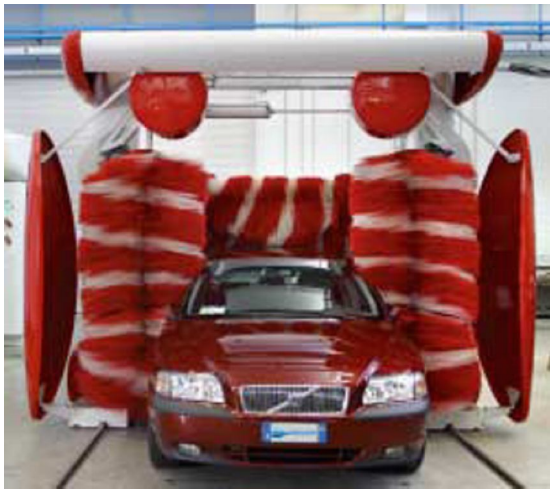
Claddings

• (8711) Covers of the vertical brushes supports.
The round covers placed on the vertical brushes supports have the task to hide and protect the articulation mechanical components.
• (8713) Side brushes supports rear covers.
They are placed opposite the front covers (8711) and are an aesthetical completion of the unit. Their function is to hide the motor gear group when looking at the machine from the entry side.
• (8726) Complete top cladding.
The Aries top cladding includes the two side elements and the bent steel plate on the vertical brushes side. It hides completely the cross beam and gives the unit a look that is similar to that of the "bigger brother" of the Orion range.
• (8709) Inner top cover on the horizontal brush side.
It is the curved steel plate that hides the piping and ropes above the horizontal brush. Beside the improved look, it is recommended because it has the function of reducing the fall of water drops.
• Pipes cover on the horizontal brush side
A more economic version of option (8709) that hides only the pipes placed inside the cross beam.

Aries without Top Claddings



8711-SB cover



8726- Complete top cladding

Options

To optimise the possibility to install different options, Aries Mono-Programme units are designed to accommodate two types of hydro pneumatic panels and the Multi-Programme units can be equipped with two different electrical panels.
The relevant codes are listed below:
• (8705) hydro pneumatic panel with Venturi dosing system.
• (87050100) hydro pneumatic panel with dosing pumps for shampoo and wax.
• (8725) Electrical panel for a low number of optional devices.
• (87250100) Full options electrical panel to be installed when the unit is fitted with one of following options: Robowash, hot wax, super wax, Pre wash chemicals, under chassis wash, tow bar safety device, card reader or banknote acceptor.

Aries Mono - Programme

• (8703) Start photocell
• (8718) Snow shampoo
• (8710) Wheel wash
• (9882) Under chassis wash
• (8714) Splash shields
• (8719) Automatic frost protection
• (8717) Manual centralized lubrication

Aries Multi - Programme

• (17910900) UNIOP + Control panel on post
• (98670001) 3-programmes token acceptor
•(9819) Banknote reader
• (87180100) Snow shampoo
• (8706) Super wax
• (8706+8707) Hot wax
• (8716+8721) Emollient and medium pressure arch
• (8710) Wheel wash
• (8708) Robowash
• (9882) Under chassis wash
• (8714) Splash shields
• (87190100) Automatic frost protection
• (8722) Tow bar safety device
• (8717) Manual centralized lubrication

9882- Under chassis wash

8710-Wheel wash

8708- Robowash 8710-Wheel wash

Technical Characteristics

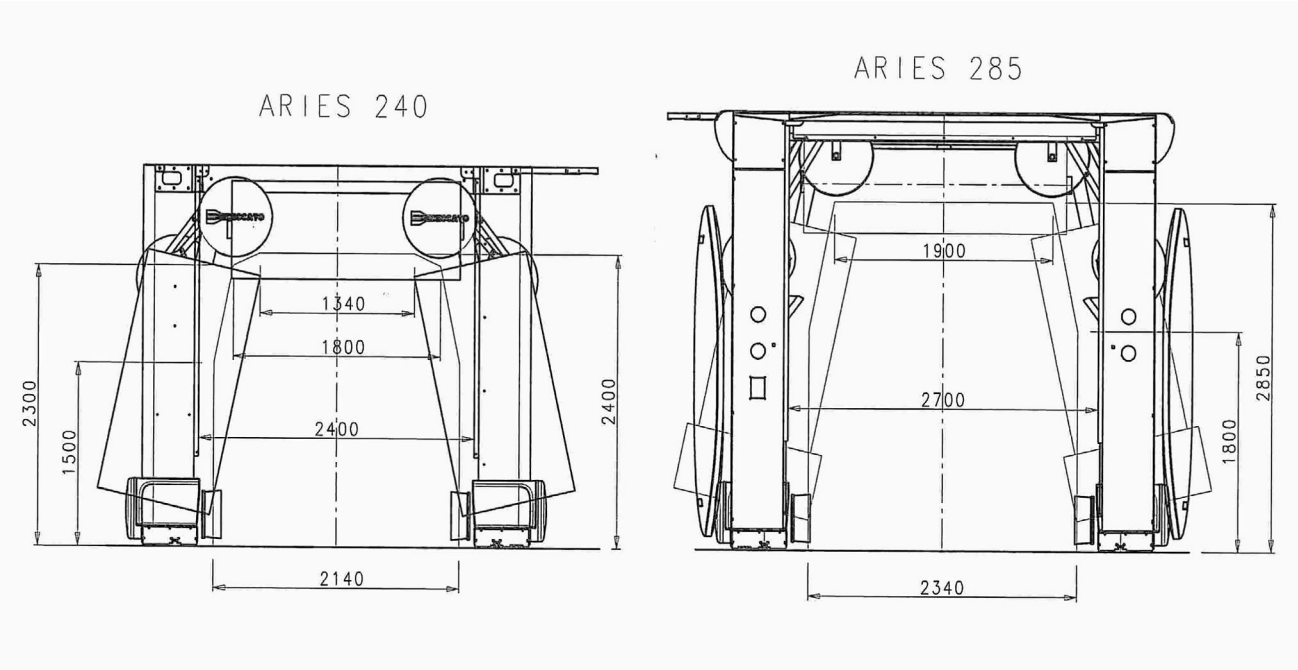
- Support frame with hot dip galvanized feet and cross beam, side columns in polyesters powder coated galvanized steel plate (not painted in the mono-programme version).
  Fully power painted structure is also available (single- and multi-programme versions).
- Inverter controlled gantry movement motors.
- Anti-tilting safety device.
- Horizontal brush with counterweight, equipped with double safety support rope.
- Top brush pneumatic raising, with clinometers switch control system. Stainless steel sliding guides.
- Swing system vertical brushes with pneumatic opening device.
- Delivery of the products with Venturi pipes or pneumatic pumps.
- Total of three water and chemical distribution arches (shampoo/shampoo foam, wax) fitted on: top brush side, inside the main frame posts and on the vertical brushes side.
- Drying with two 4 kW blowers, controlled by a pneumatic cylinder and a three positions (car roof, car sides, van sides) articulation system. Safety valve in order to prevent the involuntary closing of the fans (not installed on version Aries without drying).
- Manual pipes drainage device, or automatic frost protection (option).
- Start photoelectric cells (see the diff. versions).
- The hydraulic group in the connection pit is pre-set for the delivery of 50% fresh water and 50% recycled water.
- Aries Multi-Programme allows the free configuration of 8 washing programmes with a maximum of 10 gantry runs each

Technical data

	Aries 240	Aries 285
Power supply:	V 230±10% (400±10%)	
Max absorbed power:	8.6 kW	9,5 Kw
Frequency:	Hz 50 / 60	
Maximum absorbed current A	30 A	
Installed power (*)	kW 11	
No. of programmes:	(mono/multi) 1/8	
Washing capacity:	8 vehicles/hour	
Weight:	1.350 kg	1.450 Kg
Medium pressure pump power:	5.5 kW	
Robowash pump power:	5.5 kW	

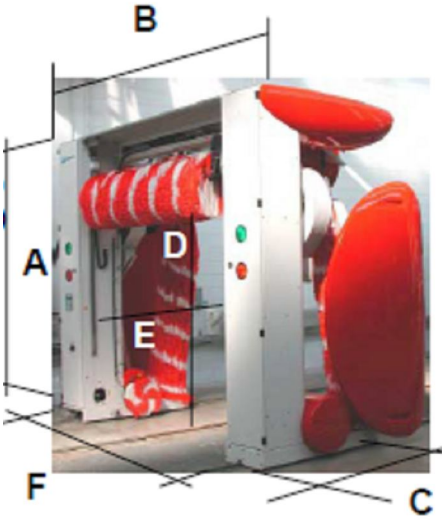
(*) Power absorbed by the pumps, water boiler (9kW) and wheel-wash (0.75kW) is not included.

Technical Specifications



Dimensions

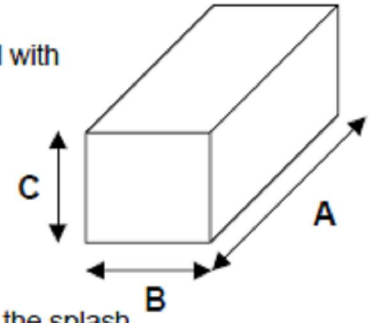
	ARIES 240	ARIES 285
Unit height (**A**):	3.127 mm	3.585 mm
Unit width (**B**):	3.380 mm (4.040 with splash shields)	3.680 mm
Unit length (**C**):	1.540 mm (2.220 with splash shields)	1.540 mm
Useful passage height (**D**):	2.400 mm	2.850 mm
Useful passage width (**E**):	2.400 mm (at mirrors height)	2.700 mm
Rails gauge (**F**):	2.500/2.800 mm	2.800/3.100 mm
Rails length:	9/10 m	10/11 m



Minimum hall dimension

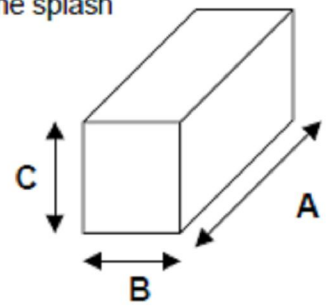
• Standard hall
(additional safety devices aree needed if the machine is equipped with splash shields)

Length – with railsi 9 mt (A)		9775 mm
Width	(B)	4600 mm
Height	(C)	3200 mm



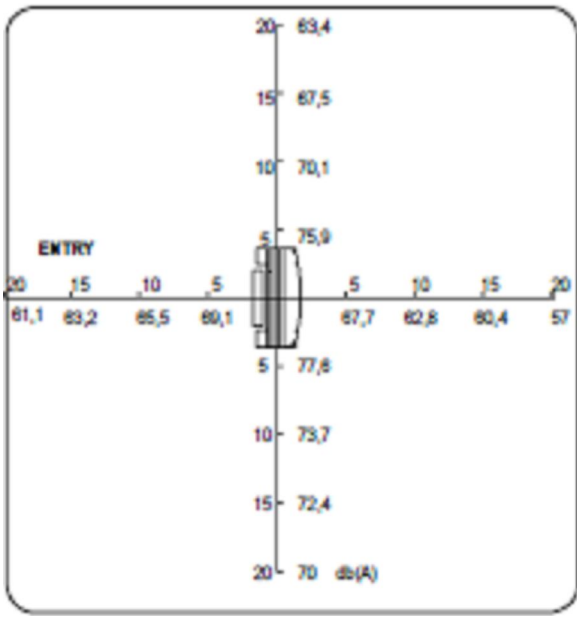
• Narrow hall
(additional safety devices aree needed; it is not possible to install the splash shields)

Length – with rails 9 mt (A)		9225 mm
Wiodth	(B)	4000 mm
Height	(C)	3200 mm



Noise level

The noise level (aerial noise) has been measured with started car in compliance with current regulations.
Readings of the noise pressure level in a free field on a reflective plane have been taken at 5, 10, 15 and 20 metres in line with the source. The levels obtained are as shown in Fig. 8 (values in dbA).



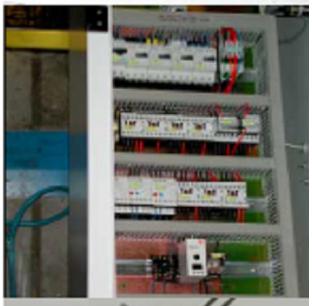
Main Components

Chemical products
High quality detergents and chemical products are used in order to achieve the best washing result: shampoo, snow-shampoo, wax, emollient (see beside).

Shampoo code 832152
Snow shampoo 832154
Wax code 832165
Emollient code 832150

Gantry translation group
It is fixed with 5 bolts for easy disassembling. Available with standard gauge 2800 mm; possible change to 2500 mm gauge.

Electrical panel
Is enclosed between one top and one bottom frame plates, with rubber packing all around the doors and cables entry from the side. The panel cabinet is fully insulated against infiltrations.



Ropes and counterweight
The system has been simplified for better efficiency and improved lifetime. The ropes always slide on the same level avoiding torsion problems. The pulleys are in nylon. A safety pin is installed.

Cylinder safety valve
Placed on the blowers articulation arms, to avoid the risk of accidental closing of the fans.

Chemicals cans
Thanks to optimisation of the frame posts inner space, the 25 liters product cans can be directly put in place, without need to fill specific containers.

Supports
The basic configuration is supplied with a wall connectioni box, but the unit can be completed, as an alternative, with cable support post, a cable chain on posts or a cable chain with wall brackets (see beside).

Box code 17960303
Cables post 8704
Chain on posts 8704010(
Wall chain 87040200

Uniop
The device is a direct connection with the electronic heart of the unit (PLC). It allows the customer the maximum freedom by the programming of the washing cycles, controls the cycles and the performances and carries out diagnostic functions.

Wheel wash
The wheel wash is fitted inside a cover made of thermoformed plastic material that is shaped to match the look of the other machine elements and protects the inner mechanisms from external agents or possible damages.

Splash guards
The splash guards design is actractive and and functional. Actractive because of its shape with soft profiles and without edges. Functional because its wide surface protects form the water jets, it is easy and quick to install with only two fixing points and very resistant thanks to the same thickness on the whole surface.

Cover of vertical brushes
The motorgear cover is also made of thermoformed plastic material. Together with the splash guards and the wheel wash claddings, they concur to make the unit particularly attractive. The practical function is to protect the motorgears.

Robowash
The device washes the wheels with high pressure, using rotating and mobile nozzles to concentrate the water jets on the low part of the vehicle and on the wheels. Ideal for cleaning the vehicle lower parts, the new system is integrated in the machine frame and thus protected from possible collisions with the vehicle wheels.

Multi-payment station
The station is designed for the full self-service operation of the washing unit. In the top configuration it can accept banknotes, electronic keys and coins/tokens. It can operate the washing unit in full self service around the clock, without need of operator and maximizing the profit.

Programs – Timing – Consumption

Program 2 (4 Runs)

Run	Program	Time	Fresh Water consumption	Recycled Water consumption	Kw consumption
		sec	lt	lt	Kw
1. Forward	Brush,Foam, Wheelwash	90	37		
2. Backward	Brush;, wax	60		32	
3. Forward	Drying	77			
4. Backward	Drying	76			
TOTAL		**303**	**37**	**32**	**0,5**

Program 6 (6 Runs)

Run	Program	Time	Fresh Water consumption	Recycled Water consumption	Kw consumption
		sec	lt	lt	Kw
1. Forward	Emollient	50	15		
2. Backward	Medium Pressure	58			
3. Forward	Brush,Foam, Wheelwash, Underchassis	87	37		
4. Backward	Brush;, wax	70		32	
5. Forward	Drying	76			
6. Backward	Drying	77			
TOTAL		**418**	**52**	**32**	**0,6**