

KRE

ISO 9001-2008 Company

Car Wash

The system consists of two portals. On the right is the automatic car wash and on the left is the drying unit. the under chassis wash system is fitted on the wash pad.

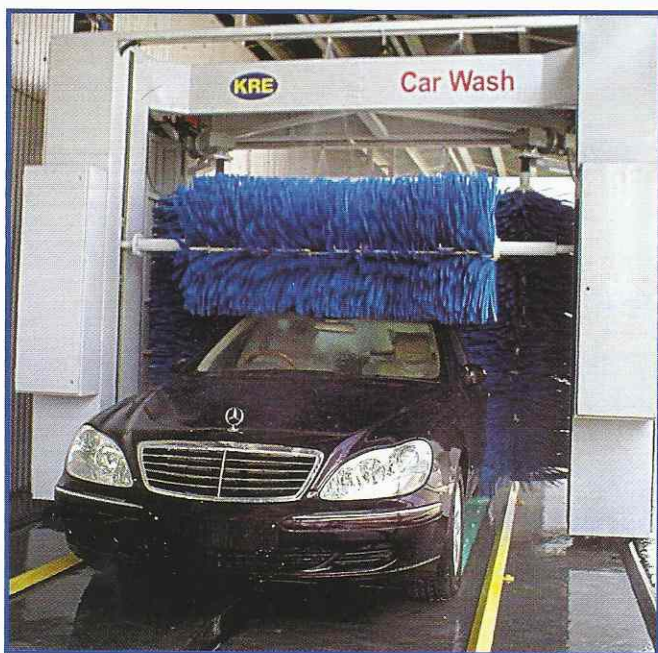
Modular Form

The 3 modules - Car Wash, Drying Unit & Under Chassis wash can be supplied individually or as a complete system



- Multi Programme System
- Adjustable Under Chassis Wash
- Electronic Pressure Sensing
- Safe Touch Free Drying Unit
- The system can wash & dry 80 or 140 cars per 8 hrs without extra cost

Car Wash



The machine is rigidly constructed from high quality materials, fully treated for corrosion prevention. The appearance is enhanced by PVC moulded coverings finished in soft colours. The new generation KRE Car Wash is automation with programmable logic controller (PLC) with built-in-memory. It controls all machine movements with absolute precision and safety. In case of any fault in the machine it can easily be read and diagnosed by LED display on the PLC.

The KRE Car Wash is a self contained 3 brush, roll over type of machine. In the PRESOAK cycle the vehicle is totally covered with soap flakes which are rinsed off in the return traverse after which the brush wash is started. In the first pass the vehicle is given a thorough cleaning with shampoo and gentle brushing action and in the return traverse liquid wax in predetermined quantity is sprayed over the vehicle surface. The horizontal brush keeps to the contour of the car body by electronic pressure sensing and its up/down movement is controlled by a geared motor system. Accurate ampere sensing by use of VARIABLE FREQUENCY DRIVE provides constant speed and pressure control of horizontal brush for safe and smooth cleaning operation by UP and DOWN movement of brush, thus maximizing the cleaning process.

Provision is given in the machine to adjust the pressure setting of the horizontal brush to "Mild", "Medium" and "Hard". To suit Indian Conditions it also incorporates a luggage carrier avoidance circuit. The vertical brushes wash the sides of the vehicle automatically adjusting to varying vehicle widths. The movement of the vertical brushes is controlled by specially designed Latching Units, which make the vertical brushes exert equal pressure on the vehicle sides for excellent cleaning of the sides.

The brushes are made of polyethylene material bristles mounted on PVC pads of 305mm length for easy replaceability. 2 to 3 electronic metering pumps monitor correct ratio of mix of detergent/wax.

Technical Data

Type of Machine	: 3 Brush roll over gantry type
Washing Height	: Upto 2400mm
Machine Height	: 3100mm
Machine Width	: 4000mm
Machine Length	: 2135mm
Electric Supply	: 415V, 3 phase 50 cycle with neutral
Power Required	: 7.5 kW.
Time of Wash cycle	: 2/3 minutes (Brush wash only)
Starting Method	: Push Button/ Vehicle activated
Shampoo/Wax	: Automatic by 2/3 electronic
Presoak	: Metering Pumps
Water Pressure	: 4 bar
Water Consumption	: 145 litres/wash cycle
Brushes	: 100mm DIA vertical brushes 900mm DIA horizontal brushes in 305mm long, 'X' section profile polyethylene brushes.

Foamed Brushes can be provided at extra cost.

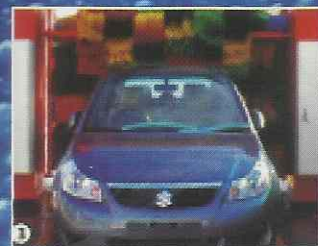
Washing Process



Under Chassis Wash



Presoak



Brush Wash



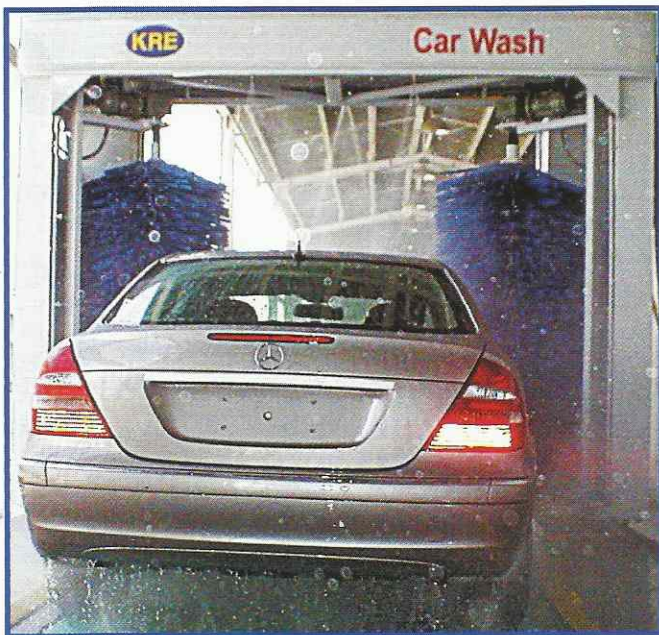
Waxing



Drying

Drying Arch

This is totally touch free gantry type of dryer having three fans fitted to the structure, 2 fans are of 3.75kW each for drying the sides and 1 fan of 7.5kW for top drying. When the brush wash is finished the drier is started after such delay as desired after the reverse cycle of car wash has started. The arch moves forward, the 3 blowers start one by one forcing air at high velocity through the delivery vents. The side blowers are fixed while the top blowers oscillates. The arch stops automatically at the end of the vehicle and the return traverse begins repeating the above operation. This is a totally foolproof system of drying of vehicle.



Oscillating Type Drying Unit

Maximum vehicle Height	: 2000mm
Machine Height	: 3100mm
Machine Width	: 4000mm
Machine Length	: 1300mm
Electric Supply	: 415V, 3 phase 50 cycle with neutral
Power Required	: 16kW
2 Motor fan sides (each)	: 3.75kW
1 Motor fantop	: 7.5kW
2 Gentry Motor (each)	: 0.375kW
1 Top nozzle Oscillation	: 0.375kW
Gear box Time of Drying cycle:	2/3 minutes
Starting Method	: Manual/Automatic

Drying arch with optically controlled horizontal nozzle is also available.

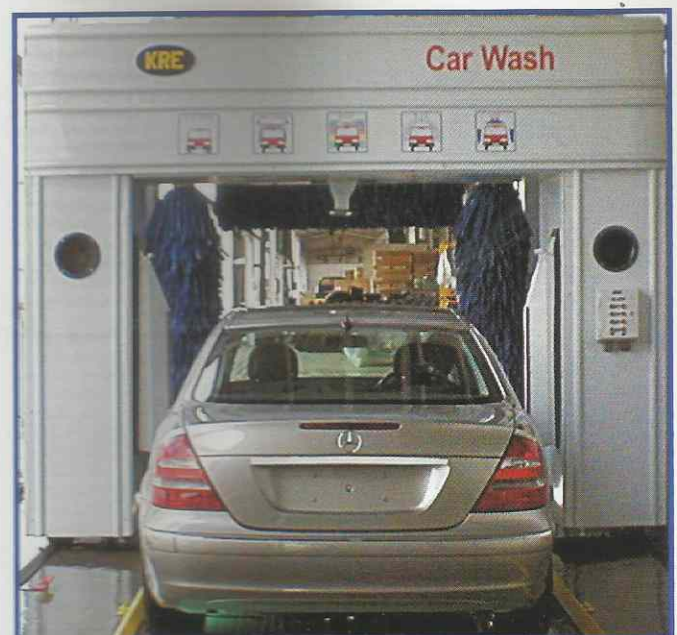
A fixed Drying Arch is also available through which car can be passed after manual washing.

Under Chassis Wash

The jet stream under chassis wash system is an underside type of machine for washing and removing dirt from beneath the car body. The unit is made of a series of galvanized steel pipes with nozzles that gives a fierce spray of water in fan/jet shape. The assembly is fixed on the floor of the wash pad or is given in a frame requiring minimal Civil works. It is an assembly of 80 nozzles spread to cover the whole underside of a big car. Provision is made to work only 60 nozzles, by means of a selector valve, in case of a small car. It uses a 5.5kW pump, as standard equipment that delivers water at 5 bar and 180 Lt./Min. The water pump will stop automatically after operation as per pre-selected time which can be set from 0-6 minutes. Auto/Manual operation can be selected as per selector switch. Normally it takes 15 seconds to wash Under chassis.

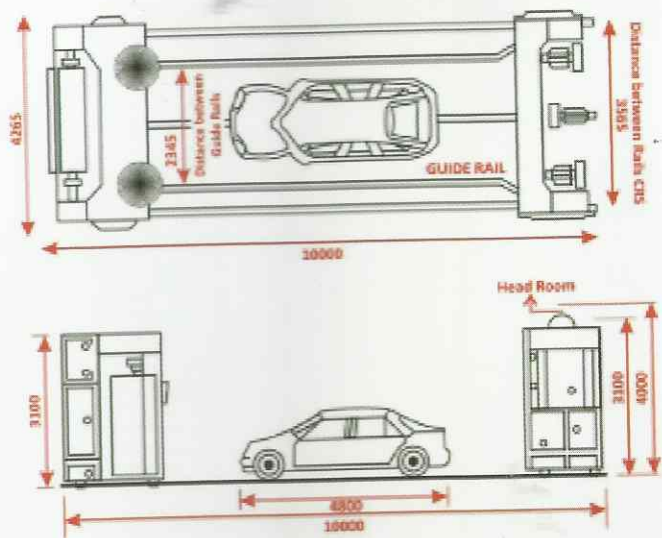
Oscillating type of under chassis and higher rated pumps can be provided at extra cost.

Under Chassis for SUV's/LCV's with 140 nozzles can be supplied on demand.



DETAILS / GENERAL LAYOUT OF KRE CAR WASH WITH DRYING UNIT

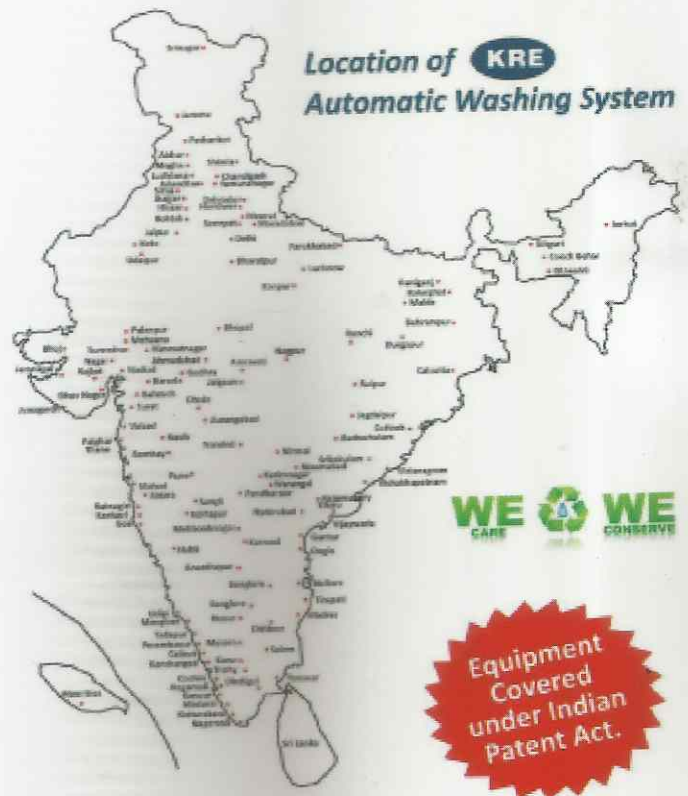
Power	Electric Supply	: 415V, 3 Phase 50
		: Cycle with neutral
	Car Wash	: 7.5kW
Maximum Power	Drying Unit	: 16kW
	Under Chassis Wash	: 5.5kW
	Required (at one time)	: 16kW
Water (approx.)	Presoak & Car Wash	: 145 ltrs.
	Under Chassis Wash	: 60 ltrs.
	1/2" Airline	: 100-120psi
Approx. Consumption	Shampoo	: 65ml/Car Wash
	Wax	: 20ml/Car Wash
	Wash cycle time	: 2/3 Minutes
	Drying cycle time	: 2/3 Minutes
Wash bay dimension	Length	: 10,000mm
	Width	: 4,600mm



GENERAL LAYOUT

- KRE machines are installed throughout the length and breadth of INDIA.
- We are approved suppliers of Car Wash Machine to MARUTI, TML and Hyundai for their Dealerships.
- We have supplied Automatic Bus Washing Machine to 27 State Road Transport Corporations against ASRTU Rate Contract.
- We are exporting our machines.
- KRE Car Wash Systems are approved and installed at factories of Indian Car Manufacturers like TML, Mercedes Benz and dealership of HMIL, M&M, MSIL & TML.
- KRE Car Wash Systems are increasingly being installed as stand alone car wash stations by private owners.

The **KRE** policy is one of constant product development. The company therefore reserves the right to amend the design of equipment whenever necessary without notice.



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