

# 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 system can wash & dry 80 cars or 140 cars/ 8 hrs without extra cost

**Multi Programme System**

**Adjustable Under Chassis Wash**

**Electronic Pressure Sensing**

**Safe Touch Free Drying Unit**

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 of 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 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 and "back tracking" system to circumvent projections Like bumper guards etc. 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.

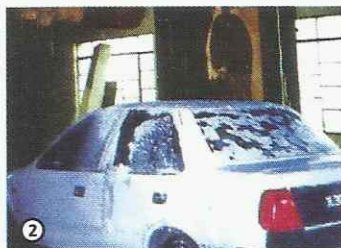
**Foamed Brushes can be provided at extra cost.**



## Washing Process



① Under Chassis Wash



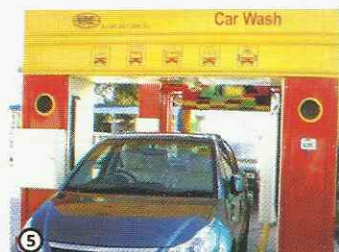
② Presoak



③ Brush Wash



④ Waxing

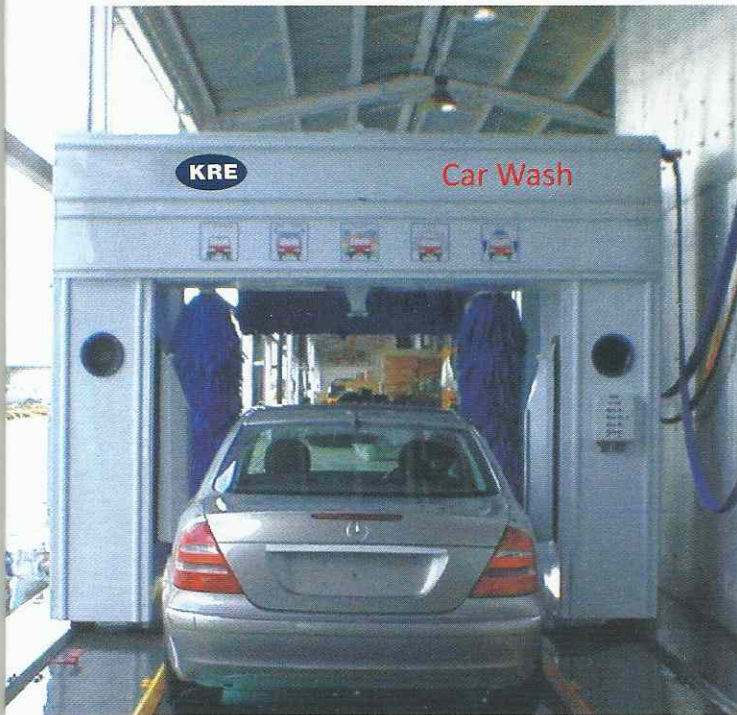


⑤ Drying

## Technical Data

|                     |  |
|---------------------|--|
| Type of machine     | 3 Brush roll over gantry type  |
| Washing height      | Upto 2440 mm   |
| Machine height      | 3100 mm  |
| Machine width       | 4000 mm  |
| Machine length      | 2135 mm  |
| 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/Presoak | Automatic by 2/3 electronic metering pumps   |
| Water pressure      | 4 bar  |
| Water consumption   | 145 litres/wash cycle  |
| Brushes             | 1000 mm DIA vertical brushes<br>900 mm DIA horizontal brushes<br>in 305 mm long, 'X' section profile polyethylene brushes. |

## Drying Arch



This is totally touch free gantry type of dryer having three fans fitted to the structure, 2 fans are of 3.75 kW each for drying the sides and 1 fan of 7.5 kW 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 blower are fixed while the tops blower oscillates. The arc 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 vehicles.

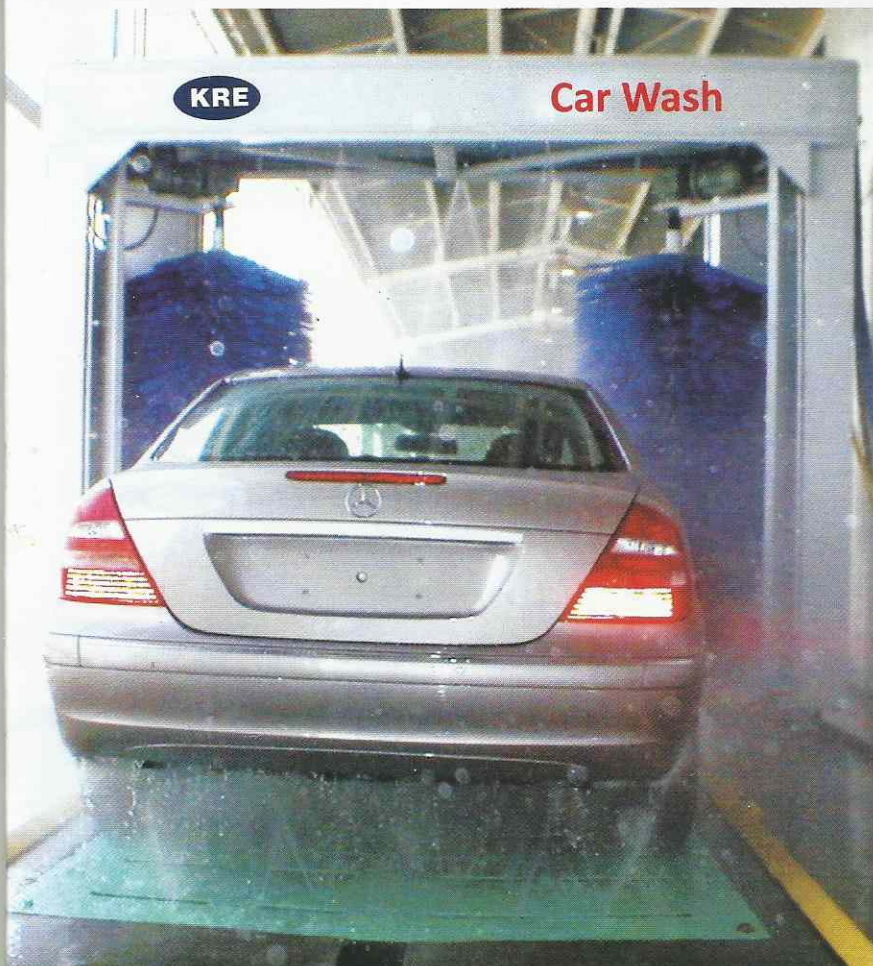
**Drying arch with optically controlled horizontal nozzle is also available.**

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

## Oscillating Type Drying Unit

|                                 |                       |
|---------------------------------|-----------------------|
| <b>Maximum vehicle Height</b>   | 2000 mm               |
| <b>Machine height</b>           | 3100 mm               |
| <b>Machine width</b>            | 4000 mm               |
| <b>Machine length</b>           | 1300 mm               |
| <b>Electric supply</b>          | 415V, 3 Phase         |
|                                 | 50 cycle with neutral |
| <b>Power required</b>           | 16 kW                 |
| <b>2 Motor fan sides (each)</b> | 3.75 kW               |
| <b>1 Motor fan top</b>          | 7.5 kW                |
| <b>2 Gantry motor (each)</b>    | 0.375 kW              |
| <b>1 Top nozzle Oscillation</b> | 0.375 kW              |
| <b>Gear box</b>                 |                       |
| <b>Time of drying cycle</b>     | 2/3 minutes           |
| <b>Stating method</b>           | Manual/<br>Automatic  |

## Under Chassis Wash



The jet stream under classes 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 so as to cover the whole underside of a big bar. Provision is made to work only 60 nozzles, by means of a selector valve, in case of a small car. It uses a 5.5 kW pump, as standard equipment that delivers water at 5 bar and 180 lt/min. The water pump will stop automatically after the 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 the 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.**



ISO 9001-2008 Company

Electric supply 415V, 3 Phase  
50 Cycle with neutral

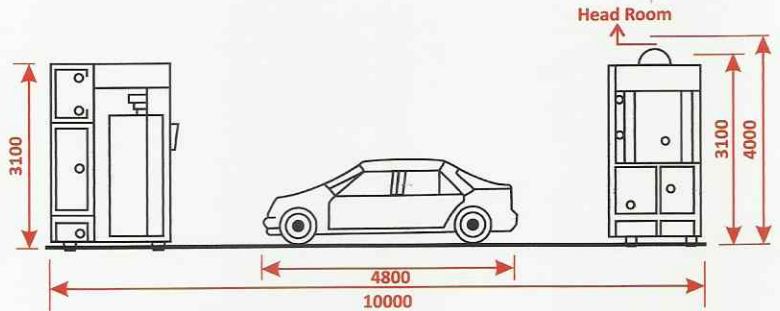
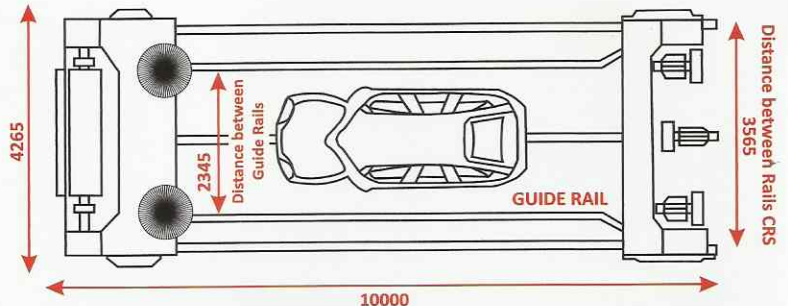
**Power**  
Car wash 7.5 kW  
Drying unit 16 kW  
Under Chassis Wash 5.5 kW

**Maximum Power**  
Required (at one time) 16 kW

**Water (approx)**  
Presoak & Car wash 145 ltrs.  
Under chassis wash 60 ltrs.  
½" Airline 100-120 psi

**Approx. Consumption**  
Shampoo 65 ml/ Car wash  
Wax 20 ml/ Car wash  
Wash cycle time 2/3 Minutes  
Drying cycle time 2/3 Minutes

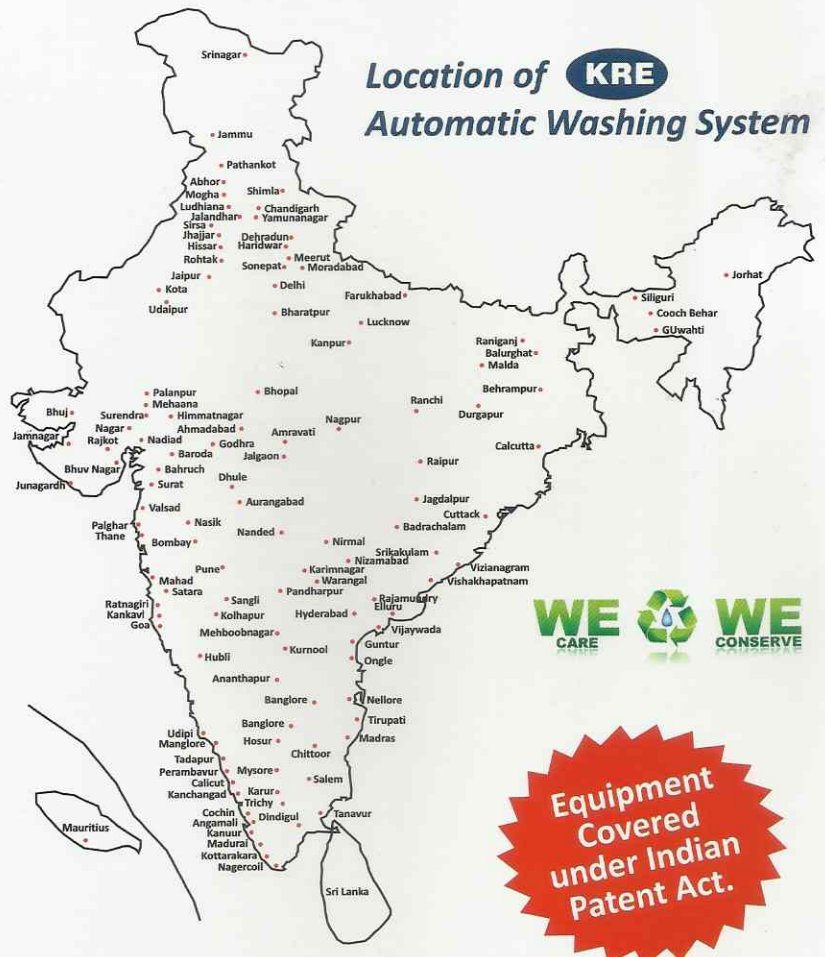
**Wash bay dimension**  
Length 10,000 mm  
Width 4,600 mm



**GENERAL LAYOUT OF KRE CAR WASH WITH DRYING UNIT**

- 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.



**Location of KRE Automatic Washing System**

**WE CARE WE CONSERVE**

**Equipment Covered under Indian Patent Act.**



ISO 9001-2008 Company

**K.R. Equipments Pvt. Ltd.**  
Unit I - 42/33, Site-IV, Industrial Estate, Sahibabad (U.P.).  
Phones : +91-120-4562432, 9310632079, 9313034321  
Unit II - C-43, Hoisery Complex, Phase - II, Extn., Noida(U.P.).  
E-mail : krepl1@gmail.com, raghavankrepl@gmail.com  
[www.vehicle-washing-machine.com](http://www.vehicle-washing-machine.com)  
[www.krepl.com](http://www.krepl.com)

