



NISSAN CLEAN INDIA PVT. LTD.

FAQ - TECHNICAL DETAILS

MagicWash 360 – Automatic
Touchless Car Wash System



NISSAN
CLEAN INDIA
Innovative Wash Systems

Fully-Automatic Touchless Car Wash System

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Vehicle Washing Video: https://www.youtube.com/watch?v=CAd_tR8FiU

Standard Washing Process:

Wheel and Chassis Wash

Pre-wash

Foam Wash

High Pressure Wash

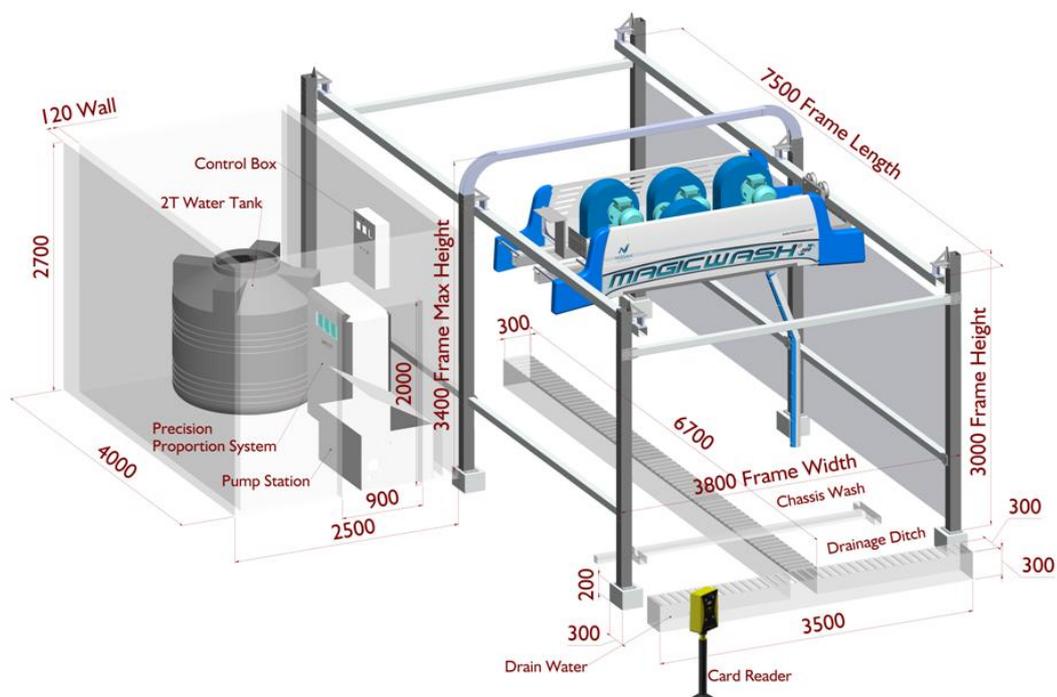
Wax Application

Automatic Blow Drying

Customers can set different wash packages on touch screen.

Customers can set 1time, 2times, 3times or other drying times on touch screen. Washing Speed and washing pressure are adjustable.

Dimensions: (in mm)



PRODUCT APPLICATION

80Bar High Pressure Washing



Magic Tri Color / Thick Foam Spraying System



U9 Shampoo Spray



100-160 Bar High Pressure Under Body and Side Wash



Magic Crystal Wax Coating



High Efficiency Built-in Dryers. Total 4pieces blowers, 3pieces 5.5KW and 1piece 4KW motors.



High Pressure Water Pump with Rotomotive Motors.



Automatic Dosing System-control wax, shampoo and color foam.



The newest MagicWash360 in-bay automatic car wash raises the standard for touchless car wash equipment. With Revenue Enhancement and Total Cost of Ownership improvements being the main focus, this vehicle wash system delivers the industry's best Return on Investment. Magic 360 Technology enables the car wash system to be responsive to the dynamic conditions in the wash bay and allows it to "think for itself", increasing up-time and optimizing the wash process.

Substantially faster wash speeds lead to increases in vehicle throughput and shorter lines that will make your customers happy. Simplified machine design and lower energy and utility usages reduce operating costs leading to a more profitable car wash operation.

Key Features

- Staple Open Wash Bay - overhead design with no floor steel
- Built-in flash dryer with high efficiency
- Virtual Treadle bay loading
- Magic 360 Technology
- Slip-Free Belt Drive, no grease points
- More Services – U9 shampoo, wax, magic color or customized liquids
- Internal Bridge Rollers
- E-Chain Utility Routing
- Built-in Web Interface for Updating, Reporting & Monitoring
- Card Reader
- Remote Control Operation
- Virtual Treadle
- Zero Manpower Required
- Magic Tri-Color Foam
- Bright LED displays
- Hot-Dip Galvanized Structure
- Dual HP & LP arch
- No arch purge
- Optimal Vehicle measuring
- Unique internal Air Drying System
- Lesser Water Consumption
- No Floor Civil Work Required
- Integrated 3D detection system
- Less Maintenance
- Digital Collision Avoidance System
- Applies 3x foam, protectants
- Spot-free rinse in a single pass
- Maximized Coverage area
- Increased Revenue
- Lower Cost of Ownership
- Quick Return On Investment
- More Services

Magic 360 Technology

Fully-automatic Computer Control Mode: MagicWash360 is equipped with advanced intelligent detection system: Built-in central processing unit. Without operator, this system washes cars automatically according to the selected wash packages.



The system reminds customers automatically to leave the wash bay after finishing washing and guide the next customer to the wash bay. The whole wash process is controlled by computer to save labor cost and improve work efficiency.

Self-service Mode: Automatic Card Reader System makes self-service car wash possible. Customers can choose different single item and adjust the price of each item.



The cleaning power of the Nissan's MagicWash 360 is raised to a new level with the addition of better vehicle chemical coverage with rounded arch corners, smart chemical timing and tilting arch functions. Combined with your ability to customize services and speeds in infinite combinations and to store favorite or seasonal packages - the cleaning system is a major step forward.



The MagicWash 360 Arch Control System allows for quicker throughput and creates customer confidence and comfort through the entire wash process. The arch is able to rotate 360 degrees while simultaneously moving around the vehicle. Three axis motions provide rounded corner profiling to produce consistent coverage by keeping the nozzles always focused on the vehicle. No more spraying on the floor! Arch control makes every second productive in the wash process - each corner time is reduced from 4 seconds to 1.5. The Magic 360 Arch Control also intelligently operates around the complete vehicle perimeter; monitoring and adjusting to conditions to keep attendant interaction low.

Arch Materials: 304 Stainless Steel

The spray arm can adjust the washing distance automatically according to the size of car.

When vehicles enter the wash bay, LED sign and Voice System will guide customers to park vehicles in the right position. The system works out the best washing distance according to the detected date from the ultrasonic sensors.

USA Brand Spray Nozzle: The spray nozzles are designed according to the complicated hydrodynamics and produced by high precision CNC lathe. High hardness materials make sure that spray nozzles does not become deformed under high pressure.

Special Water Knife Design: During high pressure rinse, spray nozzles can concentrate water flow to produce water knife. The upper and lower ectopic water knife structure makes sure that there is no offset pressure between the upper knife and side knife. 80 Bar high pressure water can wash every dirty car.

High Efficiency Shampoo Consumption: Multi-function spray nozzles can atomize all liquids to cover and clean every corner of vehicles.

Automatic dosing system is equipped with different wash packages, including U9 shampoo, wax, magic color and so on. No manual operation and automatic proportional control according to the degree of dirt on car surface.

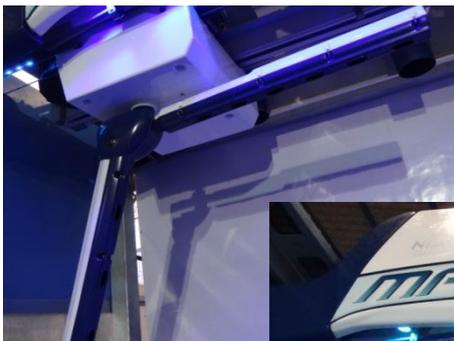
100% Accurate Measurement: By using accurate matching technology, the dosing system only supplies 20-50ml shampoo for each car to save the cost.

Fully-automatic Computer Control: Computer controls the mixing and atomization of all chemicals to produce micro particles for uniform covering vehicle surface and clean every corner of vehicles.

User-friendly Operation and Digital Liquids Matching Setting: Customers can adjust the liquid proportion according to the degree of dirt on vehicles.

High Efficiency: Fully-automatic micro control spray can save 1/5 chemicals than traditional spray.

Micro Resistance Sliding Rail



Combined with variable frequency speed control and digital step driver, the micro resistance sliding rail makes the arm move more steady and fast, only 28seconds one circle for a 5meter length car.





Simplified engineering and high quality materials provide the optimal balance between initial investment and long-term profitability. Substantially faster wash speeds increase vehicle throughput, resulting in shorter wash lines that will delight your customers and keep them coming back again and again. Smart 360 technology enables PE-T360 to be highly responsive to dynamic conditions in the wash bay, minimizing downtime and optimizing the wash process, resulting in higher customer satisfaction and repeat business.

E Chain

Left or right mounted energy chain for easy and low-cost installation.



Slip-free Belt Drive

Bridge and trolley movements are controlled using slip-free drive belts for improved performance and wash accuracy. Less moving parts provide a much simpler drive system.



Rollers Inside: Bridge and trolley movements are smooth and effortless using internally mounted dual-axis rollers. The hanging design enhances self-centering and improved roller life by protecting the rollers from the harsh wash environment.

Built-in Dryers

MagicWash 360 is equipped with 3pieces 5.5KW fans and 1piece 4KW fan. It takes only 50seconds to dry every corner of all vehicles. The enhanced feature improves dryer performance while still using less energy than most conventional dryers. This new system incorporates motion in the center two producers to help sweep water off of the vehicle's top surface, allowing two outside producers to focus on pushing water down and off the sides of the vehicle.



Intelligent Three Dimensional Detection System



The system is equipped with advanced position sensor, ultrasonic sensor and closed loop controller to detect location and size of vehicles. The detected digit signal is sent to central control unit to adjust the washing size automatically.



LED sign and voice system guide customers to park vehicle in the right position. When the vehicle is out of washing area, the system will remind customer to park vehicle in the right position to continue washing.



Alarm System

During washing, the alarm system will sound the alarm and stop working when vehicle is out of washing area or there is something wrong with machine.

Fault Self Checking System: The system will start self checking and sound the alarm when there is something wrong with machine. The system can identify and record all errors to help operator solve problems.

TECHNICAL SPECIFICATIONS	
Min. Installation Size Machine	L*W*H = 7500*3800*3400 mm
Max. Car Wash Size	L*W*H = 5900*3000*2100 mm
Washing Speed	2minutes-6minutes/car according to wash process, customers can set different wash packages on touch screen.
Machine Size	L*W*H=3500*1200*900mm
Pump Station Size	L*W*H=1250*800*600mm
Chemical System Size	L*W*H=800*450*1400mm
Steel Track Length	6800-7500mm
Machine Net Weight	2200KGS
Packing Size and Gross Weight	10.5CBM, 2700KGS
Installation Size	
Wall Installation Length	6600-7500mm
Steel Frame Installation Length	6800-7500mm
Wall Installation Width	≥3600mm
Steel Frame Installation Width	≥3800mm
Installation Height	≥3350mm
Power Supply	
Standard Input Voltage	3phase, 4wires, AC440V 22KW 50Hz
Air Switch	100A air switch
Water Pump Motor Power	18.5KW/100KGS working pressure, energy efficiency motor
Fan Motor Power	20.5KW/Pressure 11000Pa/Air Flow 23000CBM/H, saving 10% energy
Length Motor Power	370W step less speed regulation
Cross Motor Power	400W digital step motor
Rotation Motor Power	400W digital step motor
Chemical System	0.75KW
Central Processing Unit	Built-in central processing unit factory control PLC binuclear system
Drive System	variable frequency speed control digital step driver
Checking System	intelligent three-dimensional detection system
Sensor	Ultrasonic+the absolute value digital encoder

Machine Operation Speed	
Standard Speed	Length Speed 450mm/s, Width Speed 450mm/s, Car Length=5m
Fast Speed	Length Speed 600mm/s, Width Speed 600mm/s, Car Length=5m
Rinse Speed	Standard 45s/car, Fast 30s/car
U0 Shampoo	Standard 40s/car, Fast 25s/car
U9 Shampoo	Standard 40s/car, Fast 25s/car
Wax	Standard 30s/car, Fast 29s/car
Magic Color	Standard 35s/car, Fast 25s/car
Drying	Standard 59s/car, Fast 50s/car
Energy Consumption	
Water Consumption of Chassis Washing	Standard 30liter/car, Fast 30liters/Car
Water Consumption of Car Body Washing	Standard 100-150liter/car, Fast 70-100Liters/Car
U0 Shampoo Consumption	Standard 10ml-60ml/car, Fast 10ml-50ml/car
U9 Shampoo Consumption	Standard 10ml-60ml/car, Fast 10ml-50ml/car
Wax Consumption	Standard 5ml-30ml/car, Fast 5ml-30ml/car
Magic Color	Standard 10ml-40ml/car, Fast 10ml-30ml/car
Electric Consumption	Standard 0.9KWH/car, Fast 0.6KWH/car
Washing Mode	
Standard Washing Mode	One Key Operation
Fine Washing Mode	One Key Operation
Fully-automatic Operation	Card Reader
Computer Operation	No Operator
Machine Functions	
One Key Operation	Yes
Card Reader	Yes
Computer Control, No Operator	Yes
Automatic Dosing System	Yes, controlling U0, U9 shampoo, wax and white thick foam.
Chassis and Car Wheel Automatic Checking	Yes
Vehicle Body Checking	Yes
Self Parking Guide System	Yes
Digital Collision Avoidance System	Yes
Vehicle Body Washing	Yes
Chassis Washing	Yes
Wheel Washing	Yes
Wash Packages	Yes
Magic Color	Yes
Built-in Dryer	Yes, 3pieces 5.5KW blowers and 1piece 4KW blower.
Soft Water Spraying System	Yes
LED Sign	Yes
Voice System	Yes
Car Wash Counting	Yes
Operation Authority	Yes
Errors Checking System	Yes

Alarm System	Yes
One Key Freeze-proofing Function	Yes
Oil Free Lubrication	Yes
Indoor Steel Frame	Yes
Micro Resistance Sliding Rail	Yes
Washing Reflector	Yes
Automatic Standby Mode	Yes
Anti Clogging Nozzle	Yes

FOR MORE QUERIES CONTACT OUR SALES REPRESENTATIVES AT:

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