SoftWash DF®

7 SOFT-TOUCH ROLLOVER FOR AUTO DEALERS AND FLEET OPERATORS





VDA approved for safe vehicle washing.

Verband der Automobilindustrie (VDA), the Association of the German Automotive Industry, publishes a list of strict requirements for safe vehicle washing by automatic carwash equipment. Only systems that meet those standards are allowed to display the VDA seal of approval, and Mark VII's SoftWash line of rollovers are the only systems designed, manufactured and sold in North America that carry the VDA seal.

The core group of auto manufacturers that developed the VDA specification included:









To earn the certification, VDA vehicle safety requirements in a variety of areas must be satisfied, including:

- 7 Washing chemicals
- 7 Minimum dimensions/clearances
- 7 Protruding parts of the vehicle (spoilers, spare tires, etc.)
- 7 Hydrodynamic loads
- → Water usage & pressure
- 7 Mechanical loads
- Buckling resistance of vehicle body
- → Convertible & coupe washing



High performance washing boosts CSI and customer loyalty.

PROVEN TECHNOLOGY



Built on the SoftWash XT^{\otimes} platform that washes thousands of cars each day at gas stations and independent carwashes throughout North America.

ALL-ELECTRIC



Electric rotation and drive motors eliminate risk of messy hydraulic leaks found in other systems that can disrupt operations and impact customer service.

7 KI00 CONTROLLER



Provides unparalleled flexibility to create wash programs and control speed to ensure optimal cleaning results and maximize choices for the customer.

7 SOFTECS® FOAM



Our patented soft foam material gently cleans and polishes while minimizing water and chemicals required to thoroughly clean the vehicle. SofTecs is safe for new cars and recently painted vehicles, and leaves no residue even on dark finishes.

DRYER OPTIONS





20hp and 30hp on-board dryers can be selected for shorter bays. For longer bays, 30hp and 40hp freestanding dryers can increase throughput by enabling the next car to load while the previous car is being dried.

7 ON-BOARD CHEMICALS



Chemicals are positioned inside the frame to eliminate the need for an equipment room or locating messy barrels inside the wash bay. Uses standard 5 gallon containers for easy handling.

Optimized for maximum throughput and simple operation.

7 FINALLY — CLEAN WHEELS



Our optional HubScrub® wheel cleaning system eliminates the number one complaint from carwash customers: dirty wheels.

7 DIFFERENT SPEEDS FOR DIFFERENT NEEDS



The controller gives you complete flexibility to customize wash packages for the different requirements you encounter. Cars needing only a quick touch-up can be cleaned quickly while cars that are dirtier receive extra treatment. Examples of typical wash programs are shown on the following page.

7 EASY TO OPERATE



Several activation methods are available that require only minimal employee training. Options include a simple push button box, adding a card reader to the security system, and code or card-based entry systems that allow you to track usage by department or employee.

7 SELF-ADJUSTING SIDE WASHERS CLEAN BETTER



Side washers angle out on the first pass and in on the second pass, ensuring that curved surfaces at the top and bottom are thoroughly scrubbed.

Z CONTOURING SPRAY ARMS FOR GREATER EFFICIENCY



Contour-following spray arms stay close to the car, achieving excellent coverage while consuming less water and chemicals.

7 VARIABLE FREQUENCY DRIVES FOR SPEED CONTROL AND SAFETY



Drive motors are frequency controlled for smooth starting and stopping, less stress on components and enhanced safety for vehicles.

Technology to clean better and lower operating costs.

Mark VII continues its legacy of engineering highly efficient rollover systems that protect the environment and your bottom line. The wash packages shown below are pre-programmed into the SoftWash DF controller. They can be modified and new programs can be easily added to match your specific needs.

		CONSUMPTION				ESTIMATED COST PER CAR				
Typical Wash Packages	Time	Shampoo (oz)	Wax (oz)	Water (gal)	Electricity (kW)	Shampoo	Wax	Water	Electricity	Total
EXTREMELY DIRTY VEHICLES rinse, rinse, brush, brush, wax, spot free rinse, dry, dry	04:36	1.000	0.406	14.157	0.406	\$0.113	\$0.087	\$0.146	\$0.041	\$0.388
MODERATELY DIRTY VEHICLES brush, brush, rinse, wax+spot free rinse, dry, dry	04:01	1.000	0.406	11.860	0.399	\$0.113	\$0.087	\$0.123	\$0.041	\$0.363
MINIMALLY DIRTY VEHICLES brush, wax+spot free rinse, dry, dry	02:58	0.500	0.406	6.367	0.347	\$0.056	\$0.087	\$0.066	\$0.035	\$0.245

Data shown for 15.8' SUV using the following assumptions:

Shampoo cost per ounce = \$0.113

Wax cost per ounce = \$0.214

DIMENSIONS:

Machine Height without on-board static dryer: 123" / 313cm

Machine Height with on-board static dryer: 142" / 360cm

7 Machine Width: 150" / 381cm

Machine Depth at top: 72" / 183cm

7 Machine Depth at bottom: 59" / I50cm

71 Machine Weight: 3,000 lbs / 1,361 kg

VEHICLE CLEARANCE:

7 Height without on-board static dryer: 89" / 226cm

Width at mirrors: 105" / 267cmWidth at wheel brushes: 85" / 216cm

US average combined water+sewer rate = \$10.34 per thousand gallons (source: American Water Intelligence September 2012)

US average price of commercial electricity = \$0.1021 per kilowatt hour (source: US Energy Information Administration May 2013)

尽 BAY SIZE:

- Minimum Height without dryer: 125" / 318cm for standard energy chain, 155" / 394cm for narrow bay energy chain option, not including shims
- 7 Minimum Height for on-board static dryer: 144" / 366cm, not including shims
- Minimum Width: 168" (14') / 427cm with standard energy chain, 154" (12' 10") / 391cm for narrow bay energy chain option, 175" (14' 7") / 445cm with standard energy chain to wash dual wheeled pickup trucks
- Minimum Length for triple-brushing in front and back: maximum vehicle length + 144" (12') / 366cm
- Minimum Length for double-brushing in front and triple-brushing in back: maximum vehicle length + 120" (10") / 305cm

7 UTILITIES

- Electrical: 208-230 VAC 60Hz 3Φ, 25 amp without dryer
- $\ensuremath{\,^{7}\!\!\!/}$ Electrical: 208-230 VAC 60Hz 3 Φ , 75 amp with 20 HP on-board dryer
- Л Electrical: 208-230 VAC 60Hz 3Ф, I25 amp with 30 HP on-board dryer
- 7 Minimum Water Pressure: 50 PSI / 3.5 bar
- Maximum Water Pressure: 80 PSI / 5.5 bar
- 7 Minimum Water Demand: 20 GPM / 76 LPM
- 7 Minimum Air Supply: ½" line with 80 PSI / 5.5 bar
- Maximum Air Supply: 150 PSI / 10.3 bar
- $\begin{tabular}{ll} \end{tabular} \begin{tabular}{ll} \end{tabular} Air Consumption Demand: Constant I CFM / 28 LPM \\ \end{tabular}$

Intermittent 3 CFM / 85 LPM

Everything you need to

run an efficient wash operation.











Mark VII is the North American subsidiary of WashTec AG of Germany, the world's leading manufacturer of vehicle washing equipment. Each day we wash over 2 million vehicles in over 35,000 locations and over 60 countries worldwide.

MARK VII'S PRODUCTS AND SERVICES INCLUDE:

- 7 AquaJet XT® touch-free rollover
- → SoftWash XT® and SoftWash LT® soft-touch rollovers
- SoftWash DF® soft-touch car dealer/fleet rollover
- ChoiceWash XT® hybrid rollover
- 7 Turbolet XT® touch-free overhead
- ∇ SoftLine® tunnel
- 7 Premium and value line chemicals
- Ancillary products (entry systems, water treatment systems, etc.)
- → Site selection assistance
- 7 Custom site and bay layouts
- → Service contracts
- → Technical support
- Wash bay refurbishment

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