

# The BR 13/1 Family of Compact Automatic Scrubbers



Low-Moisture, Multi-Purpose Scrubbers for Hard and Soft Floors — Available with Innovative Lithium-Iron Batteries

## **BR 13/1 Low-Moisture Floor Scrubbers** For a Healthy and Safe Indoor Environment

The Family of BR 13/1 Scrubbers are easier on the indoor environment and make cleaning so simple, it is actually enjoyable. In-house facility managers, building engineers, housekeepers and BSCs will appreciate the BR 13/1 Scrubber's superior flexibility, advanced productivity and reduced environmental impact. Where high quality floor cleaning performance, ease of use and durability are called for, the BR 13/1 Family of Scrubbers are the most versatile and effective answer for any hard or soft floor surface.

## Low-Moisture Cleaning with Cylindrical Brush

Environmentally preferred, the BR 13/1 Scrubbers offer the latest cleaning innovation — cylindrical brush technology. The use of cylindrical brush technology uses 30% less water, delivering lowmoisture cleaning design and deep scrubbing through concentrated brush speeds of 650 RPMs — over three times higher than the speed of comparable rotary brush automatic scrubbers. Cylindrical brushes provide 4-6 times more contact pressure than rotary brush scrubbing, handling any flat floor surface with ease, as well as uneven surfaces such as quarry tile, paver bricks, and raised rubber disc flooring. The BR 13/1 Family of Scrubbers can also be used for cleaning escalators and moving walkways. For even greater flexibility, the units can be used on commercial-grade carpeting and entrance matting in conjunction with low-moisture, carpet mill approved encapsulation carpet cleaning. Producing minimal impact to the environment, waste is reduced as cylindrical brushes far outlast rotary pads, using on average one set of brushes for every 100 floor pads.

## Ergonomic, Whisper-Quiet, Daytime Cleaning

Recovering solution without a vacuum motor, the BR 13/1 Scrubbers run at a decibel rating less than 70 dB, perfect for day time cleaning in environments including hospitals, nursing homes, schools and hotels. The units not only excel at maintaining floors, they deliver superior operator comfort with an ergonomic handle and simple control levers making operation and maneuverability a breeze.

## Sealed, Maintenance Free Battery Option

The BR 13/1 BAT runs on sealed, maintenance free, Lithium-Iron Phosphate (LifePO4) batteries. There are many types of Lithium-Iron (cobalt, magnesium, polymer, etc.) batteries on the market. The BR 13/1 BAT uses the latest, most advanced, lithium technology on the market today.

These batteries not only meet LEED EB Green Building Standards, Lithium-Iron Phosphate batteries also:

- Deliver up to 2,000 charging cycles to boost productivity
- Stay cooler than other battery technology on the market
- Can be rapidly recharged
- · Have an extremely low self discharge rate
- Provide a virtually flat discharge curve, which means maximum power is available until fully discharged (no "voltage sag" as with lead acid batteries)
- Do not suffer from "thermal runaway"



## Capabilities:

- Lifts dirt from virtually every kind of floor surface
- Leaves floors clean, dry and ready to walk on in minutes
- Now available with lithium-iron batteries to clean longer and recharge faster
- 13 in. wide cleaning path, perfect for small, medium or hard-to-reach spaces
- Environmentally preferred encapsulation carpet cleaning minimizes moisture and microbial activity on carpeted surfaces
- Minimize chemical buildup left on carpets through use of encapsulation carpet cleaning



Simple to Use Removable water tanks are easily emptied, rinsed and refilled.



Professional Performance

Height adjustable transport wheels allow variable contact pressure with the floor surface.



**Solution Atomization** Cleaning solution is atomized into a fine mist and dispersed through the cylindrical brushes, so less moisture is consumed during the hard floor or carpet cleaning process.



#### **Transport Easily**

For fast and simple transport, an optional trolley is available.



#### Compact

The BR 13/1 MW takes automatic scrubbing into confined, small-areas where bigger units can not go.



#### **Optional Side Brush**

Providing superior edge-cleaning capability, optional side-brushes are available to widen your cleaning path even further, delivering access to tight-corners and hard-to-reach spaces.



#### **Cylindrical Brushes**

The BR 13/1 MW comes standard with black brushes for daily cleaning operations. A variety of brushes are available for high performance on structured flooring.

## Benefits of Cylindrical Brush:

- Cleans 3,775 sq. ft. per hour
- 30% less water consumption
- Self-cleaning brushes no messy disc pads
- Higher RPM 650 for deep-cleaning power
- Three times greater contact pressure than rotary auto scrubbers

## Key Features:

- Increased savings on chemical costs and water
- BR 13/1 BAT offers cordless operation with sealed, maintenance free Lithium-Iron Phosphate batteries.
- Multi-purpose machine used for both hard and soft floors
- Excellent maneuverability, no heavy pushing, pulling or lifting
- Accessible and removable tanks for fast solution changes and emptying
- Whisper-quiet operation, perfect for daytime cleaning in noise-sensitive environments
- Better carpet cleaning method than Bonnet cleaning

## **Dual-Cleaning Applications:**

- Excellent results on hard floor coverings including vinyl tile, brick, slate, mosaic, granite, marble and rubber floors.
- Can be used on escalators, commercial-grade carpeting and entrance matting.
- Particularly effective for tile and grout cleaning and non-slip safety floors.
- Perfect for eco-friendly encapsulation carpet cleaning for commercial grade carpets and entrance mats.
- Choice of brushes for normal maintenance or intensive scrubbing. Cylindrical brushes "lift" and revitalize carpet fibers while low-moisture solution atomization minimizes moisture, allergens and bacteria in carpets.
- Side brushes are available and facilitate edge-cleaning right into hard-to-reach corners.
- Perfect for hotels, hospitals, restaurants, restrooms, schools, airports, and retail sales floors.

## Soft Floors

### **Hard Floors**





BROAD RANGE FLOOR CARE APPLICATIONS												
BRUSH / PAD TYPE	DAILY CLEANING	DEEP SCRUB	SPORTS FLOOR	TEXTURED		WOOD FLOORS	GROUT	ESCALATOR	CONCRETE	COMMERCIAL CARPET	MARBLE OR GRANITE	VINYL
Standard	Х		х	Х	х	х	Х		Х			Х
Hard		Х			х				Х			
Soft	Х		х	Х	х	х	Х			Х	Х	Х
Escalator								Х				
Side	х	х	х	х	х	X	Х		Х	Х	Х	х

PRODUCT SPECIFICATIONS									
MODEL	BR 13/1 MW	BR 13/1 BAT							
CATALOG NUMBER	99410	99412							
MACHINE DIMENSIONS (LXWXH)	15 x 17 x 44 in / 38 x 44 x 111 cm	15 x 17 x 44 in / 38 x 44 x 111 cm							
NET WEIGHT	55 lbs. / 25 kg.	49 lbs. / 22 kg.							
SOLUTION / RECOVERY TANK	1 gal./ 4 liters	1 gal./ 4 liters							
DESIGN CHARACTERISTICS									
TANK CONSTRUCTION	Polyethylene	Polyethylene							
BRUSH TYPE	2, counter-rotating cylindrical	2, counter-rotating cylindrical							
BRUSH WIDTH	12 in / 30 cm	12 in / 30 cm							
BRUSH RPM	650 rpm	400 rpm							
CLEANING PATH	13 in / 33 cm	13 in / 33 cm							
CLEANING RATE	3,775 sq. ft./hr. 351 sq. m/hr.	3,775 sq. ft./hr. 351 sq. m/hr.							
SOUND LEVEL	69 db (A)	66 db (A)							
CORD LENGTH	40 ft. / 12 m	N/A							
BRUSH MOTOR	1 hp / 600 W	.4 hp / 300 W							
CHARGER	N/A	On-Board							
BATTERY VOLTAGE	N/A	24 V							
WARRANTY									
PARTS	2 years*	2 years*							
LABOR	1 year*	1 year*							
BATTERIES	N/A	1 year (prorated)*							
TANKS	10 years*	10 years*							
ACCESSORIES									
STANDARD BRUSH	33855	33855							
SOFT BRUSH	33856	33856							
HARD BRUSH	33857	33857							
ESCALATOR BRUSH	33859	33859							
CARPET BRUSH	33926	33926							
SIDE BRUSH	33858	33858							
TRANSPORT TROLLEY	05-3395-0000	05-3395-0000							



\* See full warranty for details

\*\* Performance statistics or claims contained in this brochure are estimates. Actual results may vary based upon conditions of the application and surface being cleaned.



www.tornadovac.com • Toll free: 1-800-VACUUMS Phone: 630.818.1300 • Fax: 630.818.1301 Low-moisture cleaning systems meet requirements of 2009 U.S. Green Building Council LEED EB Operations and Maintenance.

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