

BATTERY WASH EQUIPMENT

**BATTERY WASH CABINETS, WASH STATIONS,
RECIRCULATION/NEUTRALIZATION SYSTEM**

Complete Product Line

- *A cost-effective solution for extending the life of batteries and reducing lift truck electrical problems*
- *Helps address and comply with a variety of environmental issues*
- *Designed and built for long-lasting operation under the toughest conditions*



BATTERY HANDLING SYSTEMS



BATTERY WASH EQUIPMENT

BATTERY WASH CABINETS

FEATURES & BENEFITS

- *Adjustable wash for efficient cleaning*
- *Stainless steel construction offers rugged durability*
- *Low operating cost combines with labor-saving cleaning process to help save time and money*
- *Adjustable legs to accommodate uneven floors*
- *Set water nozzles to accommodate various battery sizes*
- *Adjustable wash-times to meet your specific application*
- *Heavy duty door for industrial applications*



BWC-1

- *Manual door*
- *Gravity feed rollers*
- *Battery drip dry*



BWC-2

- *Air operated automatic door*
- *Powered rollers*
- *Automatic air blow-off to remove excess water*
- *Separate air / water delivery manifolds for optimum efficiency*



BWC-3

- *Infeed conveyor for overhead downloading*
- *Automatic blowoff and indexing at end of cycle*
- *Separate air / water delivery manifolds for optimum efficiency*

OPTIONS

Electrolyte Neutralizing - Neutralizing agent injected during wash cycle to neutralize acid residue on battery.

Scrub Brush - Power scrub brush cleans underside of battery during entry and exit.

Product Specifications - Imperial / Metric

	BWC-1	BWC-2	BWC-3
Frame Construction	304/316 Stainless Steel	304/316 Stainless Steel	304/316 Stainless Steel
Air Inlet Size	N/A	3/4" NPTF	3/4" NPTF
Air Supply Required	N/A	90-110 PSI @ 200 CFM Intermittent 6.2 - 7.6 Bar @ 5660 LPM Intermittent	90-110 PSI @ 200 CFM Intermittent 6.2 - 7.6 Bar @ 5660 LPM Intermittent
Air Compressor Required (Minimum Dedicated Use)	N/A	10 HP / 80 Gallon Tank / 32 CFM Recovery 7.5 KW / 300 Liter Tank / 900 LPM Recovery	10 HP / 80 Gallon Tank / 32 CFM Recovery 7.5 KW / 300 Liter Tank / 900 LPM Recovery
Air Blow Off Cycle Time	N/A	20 Seconds	20 Seconds
Air Nozzle Adjustment	N/A	Angular / Multiaxis	Angular / Multiaxis
No. Air Nozzles	N/A	11	11
Water Inlet Size	3/4" NPTF	3/4" NPTF	3/4" NPTF
Water Supply Type Required	50-80 PSI @ 10 GPM Delivery 3.5 - 5.5 Bar @ 38 LPM Delivery	50-80 PSI @ 10 GPM Delivery 3.5 - 5.5 Bar @ 38 LPM Delivery	50-80 PSI @ 10 GPM Delivery 3.5 - 5.5 Bar @ 38 LPM Delivery
Water Nozzle Adjustment	Angle & Height	Angle & Height	Angle & Height
No. Water Jets	8	8	8
Air Blow Off & Water Line	CPVC Sch 80 Pipe	CPVC Sch 80 Pipe	CPVC Sch 80 Pipe
Sump Outlet Size	1" NPTF	1" NPTF	1" NPTF
Drain Plug Size	1" NPTF	1" NPTF	1" NPTF
Drain Base Capacity	36 Gallons / 136 Liters	36 Gallons / 136 Liters	36 Gallons / 136 Liters
Conveyor Drain Base Capacity	N/A	N/A	19 Gallons / 72 Liters
Input Voltage Required	120V / 1Ph / 60Hz	240 / 480V / 3Ph / 60Hz	240 / 480V / 3Ph / 60Hz
System AMP Draw	<1 Amp	1.5 / 3.0 Amp	2 / 4 Amp
Control Voltage	24 Vac	24 Vac	24 Vac
Door Raise / Lower Mechanism	Manual - Hand Operated	Dual Air Cylinders	Dual Air Cylinders
Wash Cycle Length (Variable Timer)	10 Sec - 99 Hrs	10 Sec - 99 Hrs	10 Sec - 99 Hrs
No. Rollers Inside Wash Cabinet	6 Non-Powered Gravity	6 Power Driven	6 Power Driven
Roller Frame Type	Rock Maple Laminate w/ Sealant	Rock Maple Laminate w/ Sealant	Rock Maple Laminate w/ Sealant
No. Conveyor Rollers	N/A	N/A	6 Power Driven
Max. Weight Capacity	4,000 lbs / 1810 kg	4,000 lbs / 1810 kg	4,000 lbs / 1810 kg
Overall Depth	62.5" / 1588 mm	63.75" / 1619 mm	123.75" / 3143 mm
Overall Width	58.25" / 1480 mm	62.375" / 1584 mm	70.5" / 1791 mm
Overall Height	80.125" / 2035 mm Door Lowered 123.75" / 3143 mm Door Raised	80.125" / 2035 mm Door Lowered 108.5" / 2756 mm Door Raised	80.125" / 2035 mm Door Lowered 108.5" / 2756 mm Door Raised
Height from Floor to Top of Roller Bed	14.75 ± .75" / 375 mm ± 19 mm	14.75 ± .75" / 375 mm ± 19 mm	14.75 ± .75" / 375 mm ± 19 mm
Battery Length	24" Min / 42" Max 610 mm Min / 1067 mm Max	24" Min / 42" Max 610 mm Min / 1067 mm Max	24" Min / 42" Max 610 mm Min / 1067 mm Max
Battery Width	6" Min / 39" Max 152 mm Min / 991 mm Max	6" Min / 39" Max 152 mm Min / 991 mm Max	6" Min / 39" Max 152 mm Min / 991 mm Max
Battery Height	16" Min / 36" Max 406 mm Min / 914 mm Max	16" Min / 36" Max 406 mm Min / 914 mm Max	16" Min / 36" Max 406 mm Min / 914 mm Max

BATTERY WASH EQUIPMENT

Roller Wash Station **Hardwood Wash Station**



RWS-3



HWS-3



MWS-72

FEATURES & BENEFITS

RWS & HWS Models

- **Designed as stand alone or for use with recirculation/neutralization system**
- **RWS-3 has corrosion resistant coated rollers extend the life of your equipment**
- **HWS-3 available with wood or plastic decking (plastic is standard)**

MWS Model

- **Fork pockets for easy transportability**
- **Anchor points secure equipment during transportation**
- **Non-skid steps and 15" walkway around wash deck allow full access to battery**
- **Removable stainless steel drip pan for easy cleaning**
- **Drip pan baffles reduce splashing**
- **Standard 3/4" brass hose connection**

Product Specifications - Imperial / Metric

	RWS-3	HWS-3	MWS-72
Frame Construction	Mild Steel	Mild Steel	Mild Steel
Drain Port Size	1" NPT	1" NPT	Standard MGHT
Drain Tray Capacity	23 Gal / 87 L (Approximate)	23 Gal / 87 L (Approximate)	70 Gal / 265 L
No. Rollers Inside Wash Cabinet	16	N/A	N/A
Max. Weight Capacity	4,000 lbs / 1800 kg	4,000 lbs / 1800 kg	5,000 lbs / 2268 kg
Overall Depth	48" / 1220 mm	48" / 1220 mm	81" / 2057 mm
Overall Width	48" / 1220 mm	48" / 1220 mm	72" / 1829 mm
Overall Height	60" / 1525 mm	60" / 1525 mm	78" / 1981 mm
Height from Floor to Top of Roller Bed / Deck	12" / 305 mm	12" / 305 mm	19" / 488 mm
Wash Deck Area	N/A	N/A	41" x 56" / 1041 mm x 1422 mm
Shipping Weight	600 lbs / 273 kg	500 lbs / 228 kg	1,570 lbs / 712 kg

BATTERY WASH EQUIPMENT

RECIRCULATION/NEUTRALIZATION SYSTEM

The BHS Battery Wash Cabinet, coupled with the BHS Recirculation / Neutralization System, creates a closed loop system that contains and controls the water used for cleaning industrial batteries.



FEATURES & BENEFITS

	<i>RNS-1</i>	<i>RNS-3-SS</i>	<i>RNS-4-SS</i>
<i>Filters down to 5 microns</i>	X	X	X
<i>Easy filter replacement</i>	X	X	X
<i>Rotary gear pump features stainless steel internal parts for extended component life</i>	X	X	X
<i>Easy access removable front panels for convenient maintenance</i>	X	X	X
<i>Closed loop system that eliminates water supply and floor drains</i>	X	X	X
<i>50 psi at 12 gpm for high flood battery wash down</i>	X		
<i>70 psi at 12 gpm for high flood battery wash down</i>		X	X
<i>Standard fork pockets make it easy to move when clean-out is required</i>	X		
<i>Includes a separate hand-held pH meter to assist in monitoring pH levels</i>	X	X	
<i>Auto-Circuit interface for use with BWC units</i>	X	X	X
<i>Fewest number of components in the industry lowers operating costs</i>	X		
<i>In-line pH monitoring system aides in keeping proper pH level</i>			X
<i>Works best with manual or automatic wash cabinets</i>		X	X
<i>On demand auto start system</i>		X	X
<i>100-micron bag filter insert captures larger particles</i>		X	X
<i>Auto Shut-off for pH out of safe operating range and low water level</i>			X
<i>Adjustable timed recirculation mode for pH adjusting</i>		X	X
<i>Built-in ozone purification system</i>			X

BATTERY WASH EQUIPMENT**RECIRCULATION/NEUTRALIZATION SYSTEM**

Product Specifications - Imperial / Metric

	RNS-1	RNS-3-SS	RNS-4-SS
Input Voltage	120 / 240V / 1Ph / 60Hz 240 / 480V / 3Ph / 60Hz	120 / 1Ph / 60Hz	120 / 1Ph / 60Hz
AC Current Draw	15 / 7.5 Amps 1Ph 4 / 2 Amps 3Ph	15 Amps	15 Amps
Water Pump Capacity	12 GPM @ 50 PSI 45 LPM @ 3.5 Bar	12 GPM @ 50 PSI 45 LPM @ 3.8 - 4.8 Bar	12 GPM @ 50 PSI 45 LPM @ 3.8 - 4.8 Bar
Water Pump Motor	1.5 HP / 1.12 KW	1.5 HP / 1.12 KW	1.5 HP / 1.12 KW
Sump Pump Capacity	24 GPM / 91 LPM	24 GPM / 91 LPM	24 GPM / 91 LPM
Reservoir Capacity	110 Gallons / 416 Liters	200 Gallons / 757 Liters	200 Gallons / 757 Liters
Water Outlet	3/4" NPT	3/4" NPT	3/4" NPT
Return Inlet	1" NPT	1" NPT	1" NPT
Filter Capacity (Main/Return)	5 Micron / N/A	5 Micron / 100 Micron	5 Micron / 100 Micron
Overall Width	49" / 1245 mm	42.4" / 1076 mm	42.4" / 1076 mm
Overall Length	52" / 1321 mm	48" / 1219 mm	48" / 1219 mm
Overall Height	53" / 1346 mm	48.6" / 1233 mm	48.6" / 1233 mm
Weight	500 lbs / 230 kg	600 lbs / 275 kg	600 lbs / 275 kg
pH Metering Type	Manual - Hand Held Meter	Manual - Hand Held Meter	Automatic - Inline System
pH "Out of Limit" Cutout	-	-	Automatic
Add Water Indicator	-	-	Light
Low Water Cutout	-	-	Automatic
Recirculation Mode	Manual - On/Off	Timed - Adjustable	Timed - Adjustable
Neutralizing System	-	-	Manual
Ozone Purification	-	-	Automatic
High Water Level Indicator	-	-	Light



P.O. Box 28990
St. Louis, MO 63132 USA
1.800.BHS.9500
Fax: 314.423.6444
E-mail: sales@bhs1.com
Web: www.bhs1.com

Specifications are subject to change without notice. ©2010, Battery Handling Systems Inc. St. Louis, MO
Data Sheet: SF-1300 02/20