

SPILL PROTECTOR				
Battery Model	# Cells	Amp Hours	kWh	Tray Dimensions L x W x H
12-90SD-05	12	180	4.19	25.25 X 7.81 X 22.63
12-90SD-07	12	270	6.29	25.36 X 8.61 X 23.13
12-90SD-11	12	450	10.48	32.60 X 10.75 X 22.62
12-125SD-09	12	500	11.64	24.50 X 13.50 X 30.50
12-90SD-13	12	540	12.57	30.61 X 12.71 X 23.02
12-125SD-13	12	750	17.46	30.61 X 12.68 X 30.63
12-125SD-15	12	875	20.37	35.25 X 14.00 X 30.50
12-90SD-21	12	900	20.95	32.63 X 19.19 X 22.63
12-125SD-17	12	1000	23.28	38.11 X 13.42 X 30.50
18-125SD-11	18	625	21.83	38.27 X 13.28 X 30.50
18-90SD-17	18	720	25.14	38.21 X 19.82 X 22.04
18-125SD-13	18	750	26.19	37.89 X 15.60 X 30.50
18-90SD-19	18	810	28.29	35.15 X 25.78 X 22.63
18-125SD-15	18	875	30.56	38.31 X 17.86 X 30.50
18-90SD-21	18	900	31.43	38.21 X 24.30 X 22.63
18-90SD-23	18	990	34.57	38.21 X 26.85 X 22.04
18-125SD-17	18	1000	34.92	38.27 X 20.10 X 30.50
18-90SD-25	18	1080	37.71	38.21 X 29.21 X 22.63
18-125SD-19	18	1125	39.29	38.31 X 22.38 X 30.50
18-90SD-27	18	1170	40.86	38.21 X 31.35 X 22.63
18-90SD-29	18	1260	44.00	38.33 X 33.79 X 22.63
24-90SD-07	24	270	12.57	32.00 X 15.50 X 23.00
24-90SD-09	24	360	16.76	32.56 X 20.38 X 23.38
24-125SD-07	24	375	17.46	47.56 X 10.72 X 30.50
24-90SD-11	24	450	20.95	32.00 X 24.38 X 22.62
24-125SD-09	24	500	23.28	32.75 X 17.13 X 30.50
24-90SD-13	24	540	25.14	38.00 X 20.50 X 22.75
24-125SD-11	24	625	29.10	47.25 X 16.25 X 30.50
24-90SD-15	24	630	29.33	40.00 X 23.50 X 22.63
24-90SD-17	24	720	33.52	38.22 X 26.61 X 22.04
24-125SD-13	24	750	34.92	47.25 X 19.16 X 30.50
24-90SD-19	24	810	37.71	38.28 X 29.43 X 22.04
24-90SD-21	24	900	41.91	38.22 X 32.61 X 22.04
40-90SD-11	40	450	34.92	40.40 X 33.50 X 22.63
40-125SD-09	40	500	38.80	40.56 X 23.58 X 30.50
40-125SD-11	40	625	48.50	41.25 X 27.75 X 30.28
40-125SD-13	40	750	58.20	40.34 X 39.21 X 30.28
40-125SD-15	40	875	67.90	41.00 X 39.38 X 30.50

Hundreds of additional battery configurations available upon request



PROTECTOR

NEXT GENERATION BATTERIES

www.ProtectorBatteries.com



- Protecting Your MHE Fleet
- Protecting Your Warehouse Floors
- Protecting Your Vehicle Operators
- Protecting Your Bottom Line

The Protection You Need

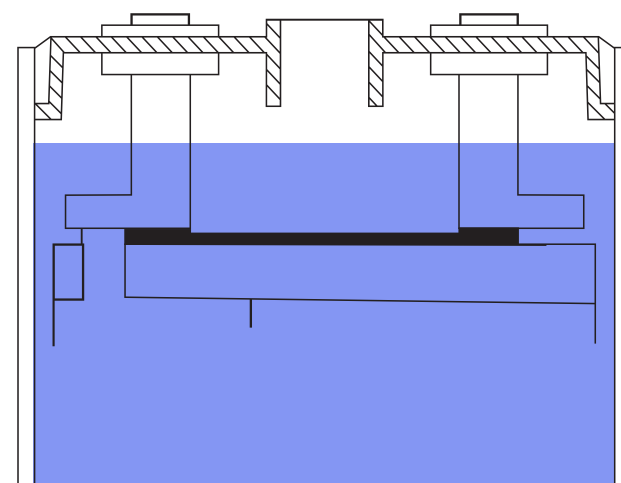
Flooded lead acid batteries in motive power applications require watering to maintain an electrolyte level which keeps the active plate material submerged. As a battery is cycled water is lost from its electrolyte solution through evaporation and electrolysis. This loss of water from the solution necessitates regular watering maintenance schedules to maintain an adequate level for plates to remain submerged.

Single point watering systems have become the norm in flooded applications thanks to reducing maintenance time spent watering batteries dramatically. Although they have reduced the time required to water batteries, they have done little to prevent batteries from being watered in a discharged state. This leads to overflow of electrolyte during subsequent recharge.

Electrolyte overflows result in numerous difficulties for an operation. There is loss of acid from the battery itself, leading to reduced battery capacity. It also results in damage to the battery tray caused by the corrosive electrolyte. In many cases it can even lead to corrosive damage to the vehicle or warehouse floor, and exposes vehicle operators to greater risk of exposure to acid themselves.

Protector batteries unique overflow resistant watering configuration dramatically reduces the risk of battery overflow. The added electrolyte growth reservoirs provides room within the cell for the volume increase that occurs during a charging event to avoid overflowing the battery, even if water is added at the wrong time. With Protector batteries you defend the battery, the vehicle, the floor, and your vehicle operators from corrosive battery electrolyte.

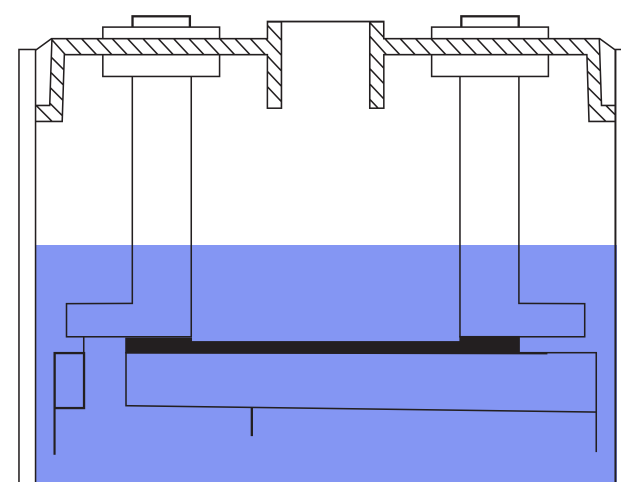
Traditional Battery with Single Point Watering



With limited air reservoir above the watering system shutoff height, traditional flooded lead acid batteries provide no margin for error in the battery state of charge at which water is added.

PROTECTOR

Battery and Watering System



Protector batteries provide an increase in air reservoir within battery cells above the watering system shutoff height. This added room results in a safeguard against acid overflows caused by watering before the battery reaches 100% state of charge.



PROTECTOR Easy Water Technology

- ✓ Custom single point watering system
- ✓ Increased head space reservoir
- ✓ Charge state flexible watering
- ✓ Increased electrolyte space
- ✓ Reduced watering intervals
- ✓ Raised tray edge protection
- ✓ No more acid overflows



PROTECTOR Bolted Cell Connections

- ✓ Fully insulated bolt heads
- ✓ Fully insulated copper conductors
- ✓ No exposed lead connectors
- ✓ Easy cable replacement
- ✓ No welded intercell connections
- ✓ Epoxy thread lock bolts
- ✓ Cable anchor protection
- ✓ No acetylene hot work, ever!

PROTECTOR Tubular Lead Acid Design

- ✓ Improved cycle life
- ✓ Advanced separator design
- ✓ Reduced water consumption
- ✓ Meets IEC 60254-2

For Video Demonstrations Visit
www.PROTECTORBATTERIES.com