



# The Power Behind Performance





# Power. Boat.





THE POWER TO PERFORM

Application. Demands.

## Present-Day Marine Equipment Applications Subject Batteries to Brutal Treatment...

- ▶ Demanding OEM starting power requirements
- ▶ Extreme operating temperatures
- ▶ Boat pounding vibration
- ▶ High amp accessory loads result in severe "Cycling" of the battery bank — in many cases, deep cycling of batteries that are not designed for cyclic service

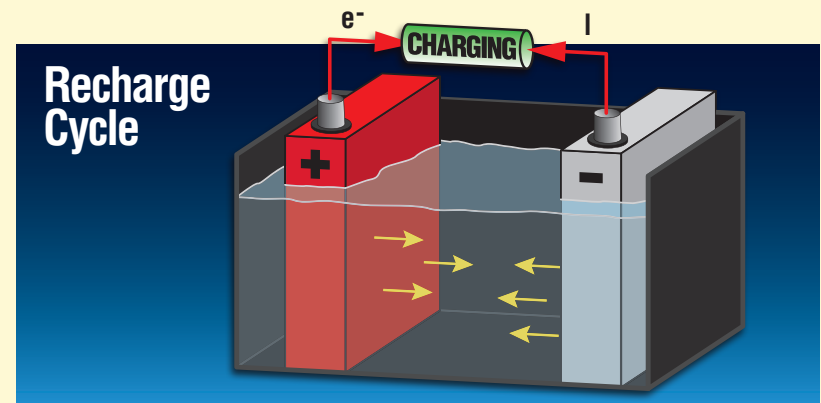
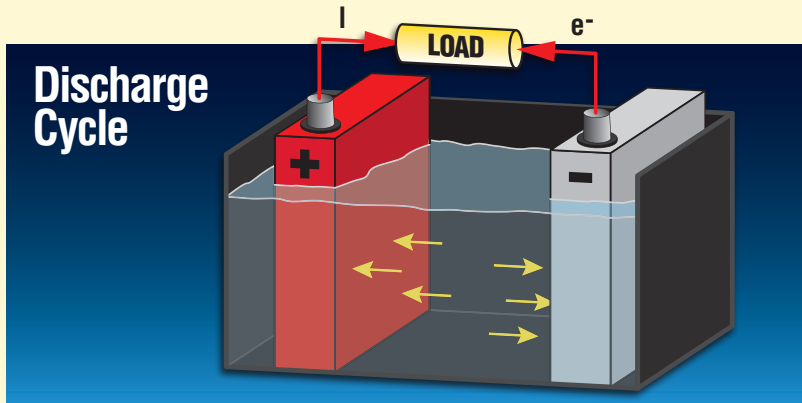


***What happens to the internal components of the battery during cycling?***



THE POWER TO PERFORM

# Application. Demands.



- ▶ Sulfuric acid is absorbed into the plate during the discharge cycle
- ▶ Battery plates expand as acid transfers to the plate during discharge
- ▶ Increased discharge levels cause a corresponding expansion of battery plates
- ▶ Electrical current travels through the plate, to the top lead connectors – and then through the terminal post

- ▶ Charging current applied to the battery forces sulfuric acid from the battery plates – transferring the material back to liquid form
- ▶ Battery plates contract or “shrink” as acid is transferred back to liquid form
- ▶ Cyclic charging service creates heat within the battery which – over time – accelerates internal degradation of battery plates

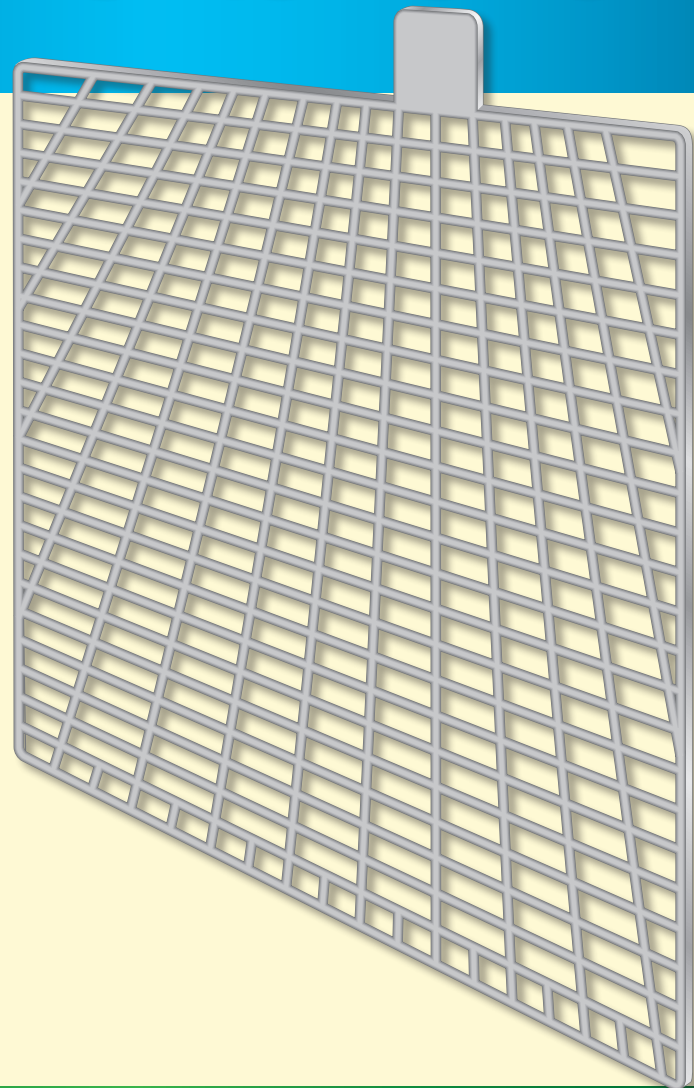
***Battery design and internal construction directly affects the battery's ability to tolerate these operating demands.***

THE POWER BEHIND PERFORMANCE



# The Power to Perform

The durability and power of Crown batteries start with full frame, SolidCast™ grids that are heavier and thicker to tolerate the demands of marine equipment applications.

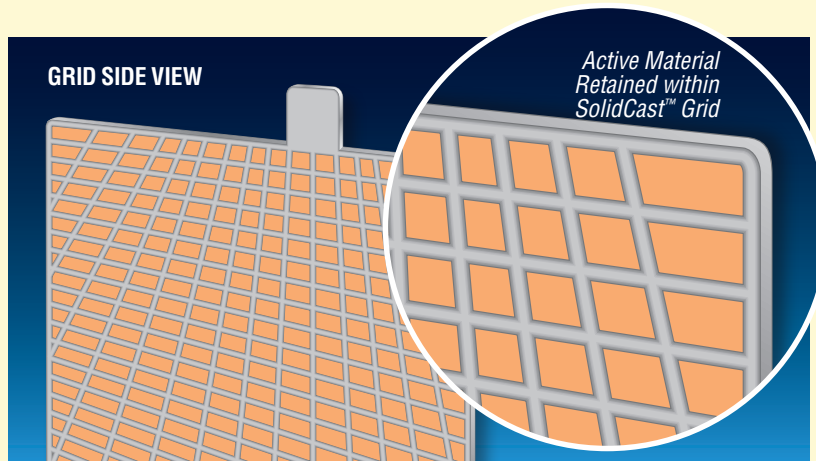




THE POWER BEHIND PERFORMANCE

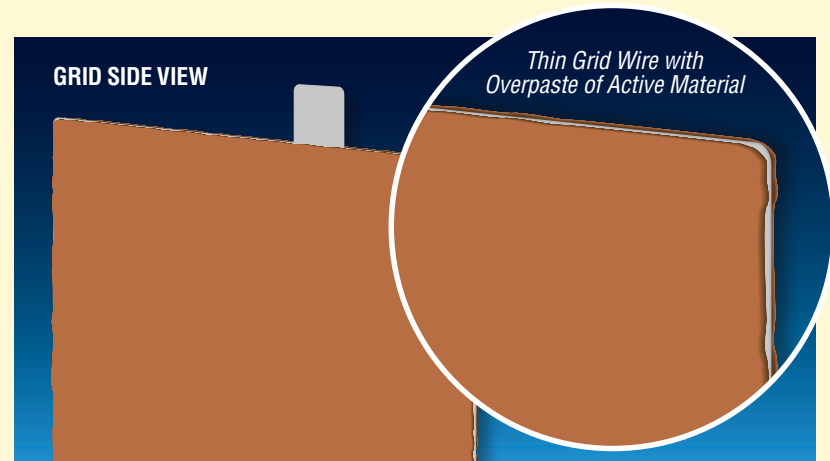
# The Power to Perform

## Crown Battery



Crown's full frame SolidCast™ grids utilize uniform wire thickness across the grid structure to hold and retain active materials for longer life and better reliability of power.

## Competitor Battery

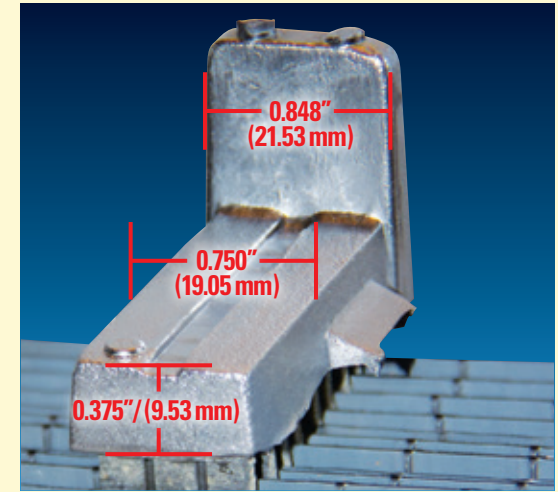
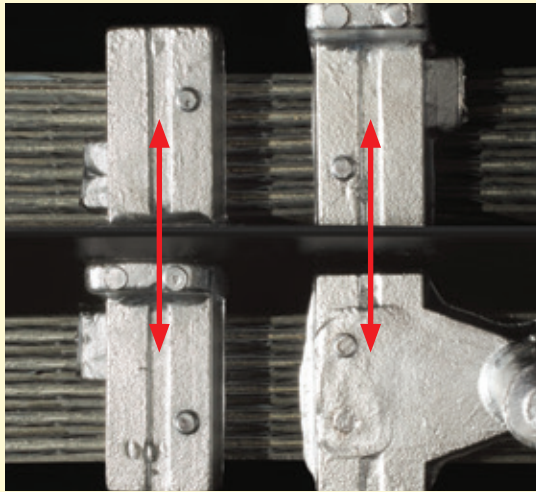


Compare that to competitors' use of stamped, thin-wire grids that are overpasted to deliver lower manufacturing costs — but which are prone to shortened life as a result of accelerated plate shedding.



ATTENTION TO DETAIL

Power. Engineered.



Crown Battery's modern solid-cast design, with heavier and more efficient current carrying structures delivers more powerful starting and cycling capacity for demanding applications.



ATTENTION TO DETAIL

# The Power to Perform



Crown Battery's oversized in-line, SolidCast™ construction with precision automated welds delivers **'Best-in-Class'** performance and longevity. Heavier plates with stronger top-lead strap connections deliver the toughest, most reliable batteries available.



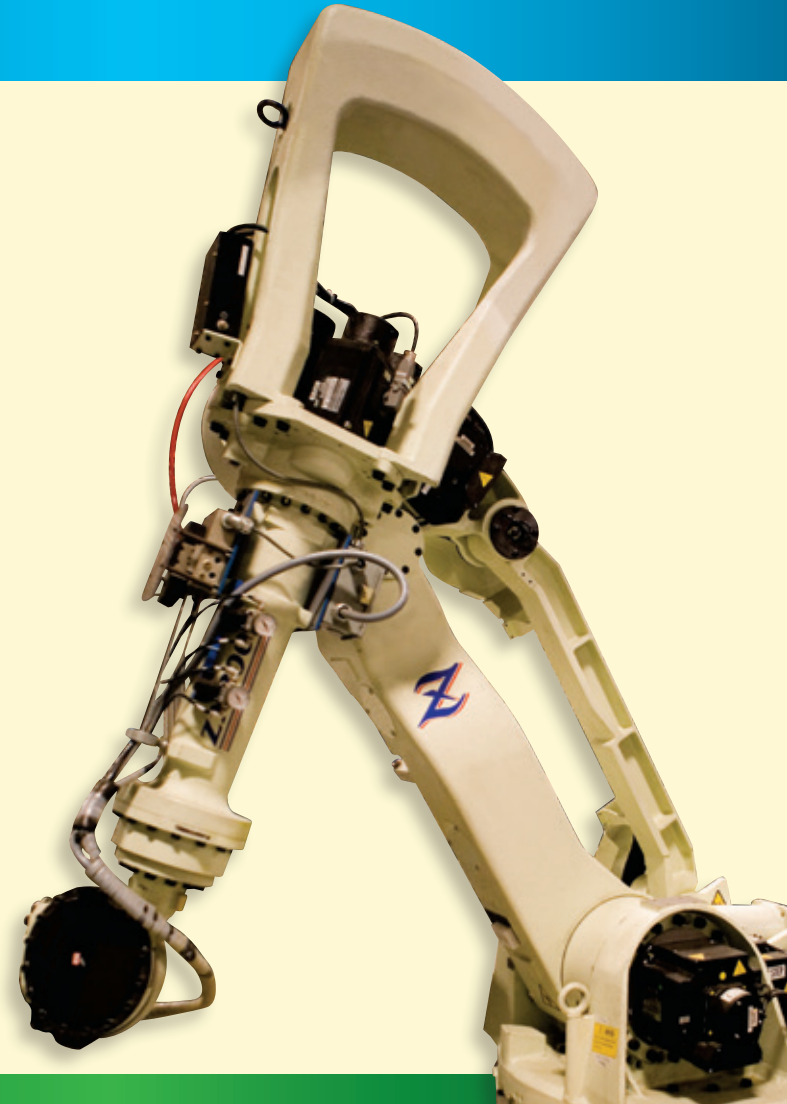


THE POWER TO PERFORM

Manufacturing. Excellence.



Crown's batteries are manufactured on automated process lines featuring computer-controlled Cast-On Strap welding, assembly and formation charging.





THE POWER TO PERFORM

Quality. Assurance.

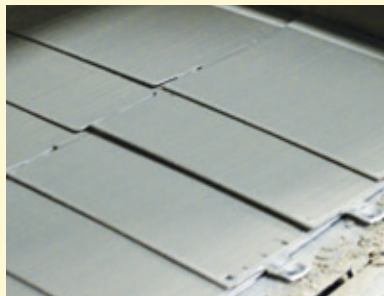


The quality delivered by Crown's batteries is guaranteed by an ISO-9001 Certified Quality System and is in full conformance with OEM expectations for reliability and performance. Every detail of our batteries' design, construction and assembly is delivered according to Crown's specifications and assures superior performance and reliability.



ATTENTION TO DETAIL

# The Power to Perform



The manufacturing process for Crown's batteries includes temperature-controlled oven plate curing of both positive and negative plates – a **“Best in Industry”** manufacturing process that ensures optimal battery performance and life.

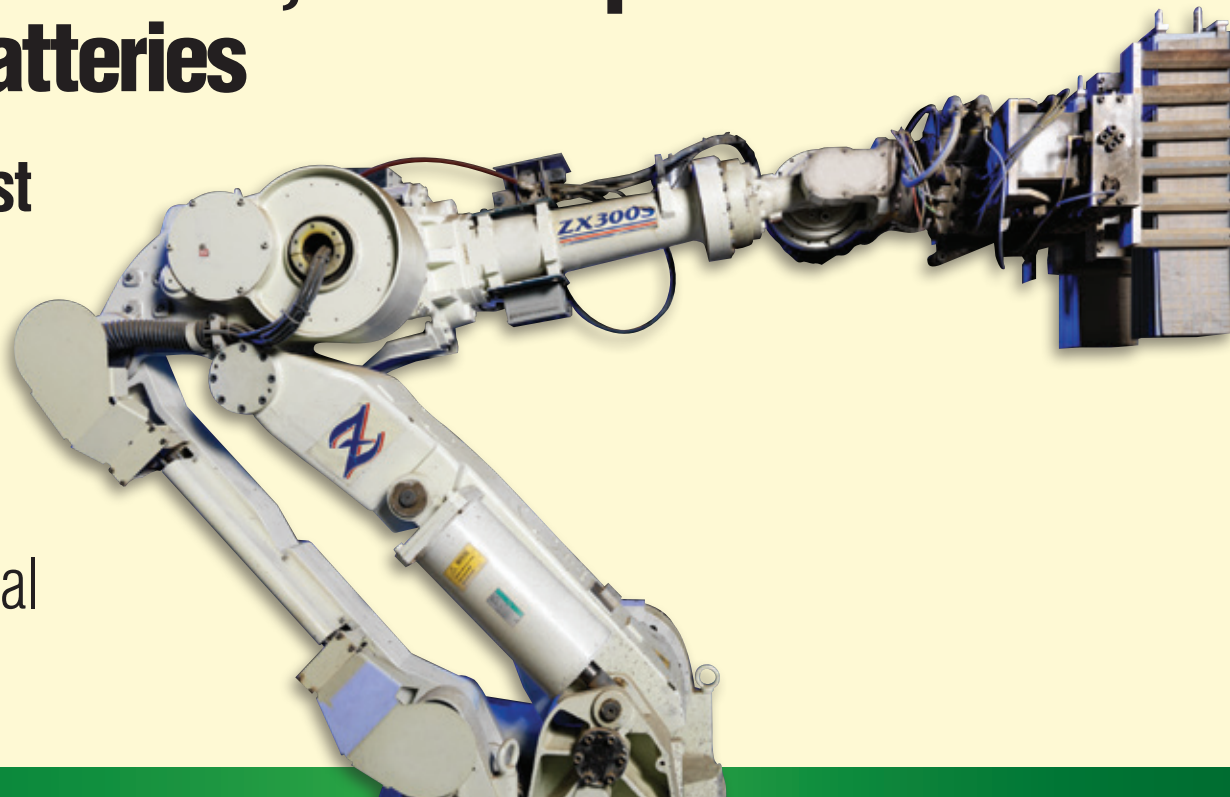


MARINE & RV BATTERIES

# The Power to Perform

## Crown Battery's Complete Array of Heavy Duty Marine Starter, Dual Purpose and Deep Cycle Batteries

- ▶ Built with a **Quality First** Production Process
- ▶ Constructed with **State-of-the-Art** Manufacturing
- ▶ **No Shortcuts** in Material or Product Integrity





# MARINE STARTER BATTERIES

## The Power to Perform

### What You Want In A Heavy Duty Battery



MAR-800



MAR-500



MAR-600



MAR-1000X

- **CleanFit™ Maintenance Free Cover**

The CleanFit™ cover design affords clean, maintenance-free operation, ease of fitment – and a durable recessed handle for safe handling and installation. The cover's manifold vent can be easily removed and refitted for routine battery inspection.

- **Innovative Terminals**

Heavy duty marine dual terminals resist corrosion and allow for efficient and safe cable installation.

- **Tough Connectors**

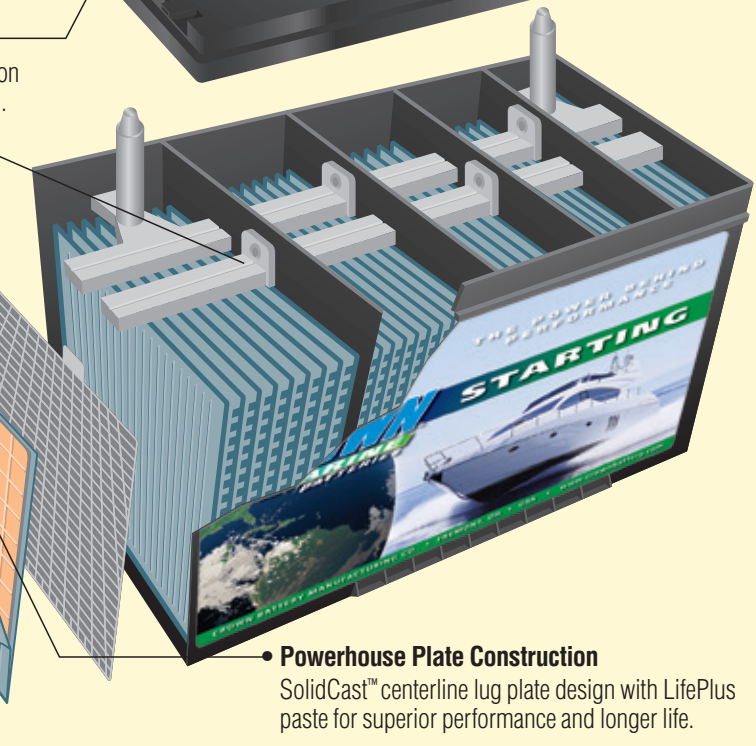
Thicker SolidCast™ COS, TTP and Terminal Post connectors for premium performance and reliability.

- **PosiWrap™ Envelope Separators**

PosiWrap™ separators reduce maintenance and prevent failure due to short-circuiting and plate shedding, ensuring reliability and durability.

- **Powerhouse Plate Construction**

SolidCast™ centerline lug plate design with LifePlus paste for superior performance and longer life.





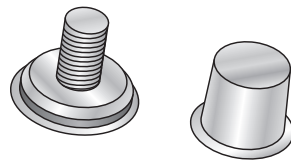
# MARINE STARTER BATTERIES

## The Power to Perform

- ▶ Full-framed thick SolidCast™ grid with more metal and minimal over-pasting provides reliable cold cranking power, resists vibrations and deep discharge – durable, long life.
- ▶ Heavy duty marine dual terminals resist corrosion and allow for efficient and safe cable installation.
- ▶ The innovative CleanFit™ cover design affords clean, maintenance-free operation, ease of fitment – and a durable recessed handle for safe handling and installation.
- ▶ Calcium lead plate content enables maintenance-free reliability with minimal gassing.
- ▶ Tough polypropylene plastic container and cover components are heat-sealed and withstand rugged applications.

BCI Group	Model Description	Item Number	20 Hr Amp Hour	Electrical Capacity			Inches			Millimeters			Product Footnotes
				MCA	CCA	RC Minutes	L	W	H	L	W	H	
<b>12 VOLT MARINE STARTER BATTERIES</b>													
24	MAR-1000	SM24800	—	1000	800	120 / 25A	10.19	6.81	9.50	259	173	241	DHJM
	MAR-800	SM24650	—	810	650	105 / 25A	10.19	6.81	9.50	259	173	241	DHJM
	MAR-600	SM24500	—	625	500	75 / 25A	10.19	6.81	9.50	259	173	241	DHJM
	MAR-500	SM24440	—	550	440	65 / 25A	10.19	6.81	9.50	259	173	241	DHJM
27	MAR-1000X	SM27800	—	1000	800	125 / 25A	12.94	6.81	9.38	329	172	238	DIJM

### Standard Type



### Available with Standard Terminal Style

(BCI Type M Type with Dual SAE / Stainless Threaded Terminals)

### Key

**D** = Standard Terminal  
(Dual Automotive / Stainless Threaded Terminal)

**H** = CleanFit™ Maintenance Free Cover Design

**I** = Cover with POD Vent

**J** = Battery Fitted with Handle or Lifting Lug

**L** = Antimony Alloy Construction: Low Maintenance Service

**M** = Calcium Alloy Construction: Maintenance Free Service

**T** = TightPack Cell Construction



# MARINE DUAL PURPOSE BATTERIES

# The Power to Perform



24DP550



27DP700



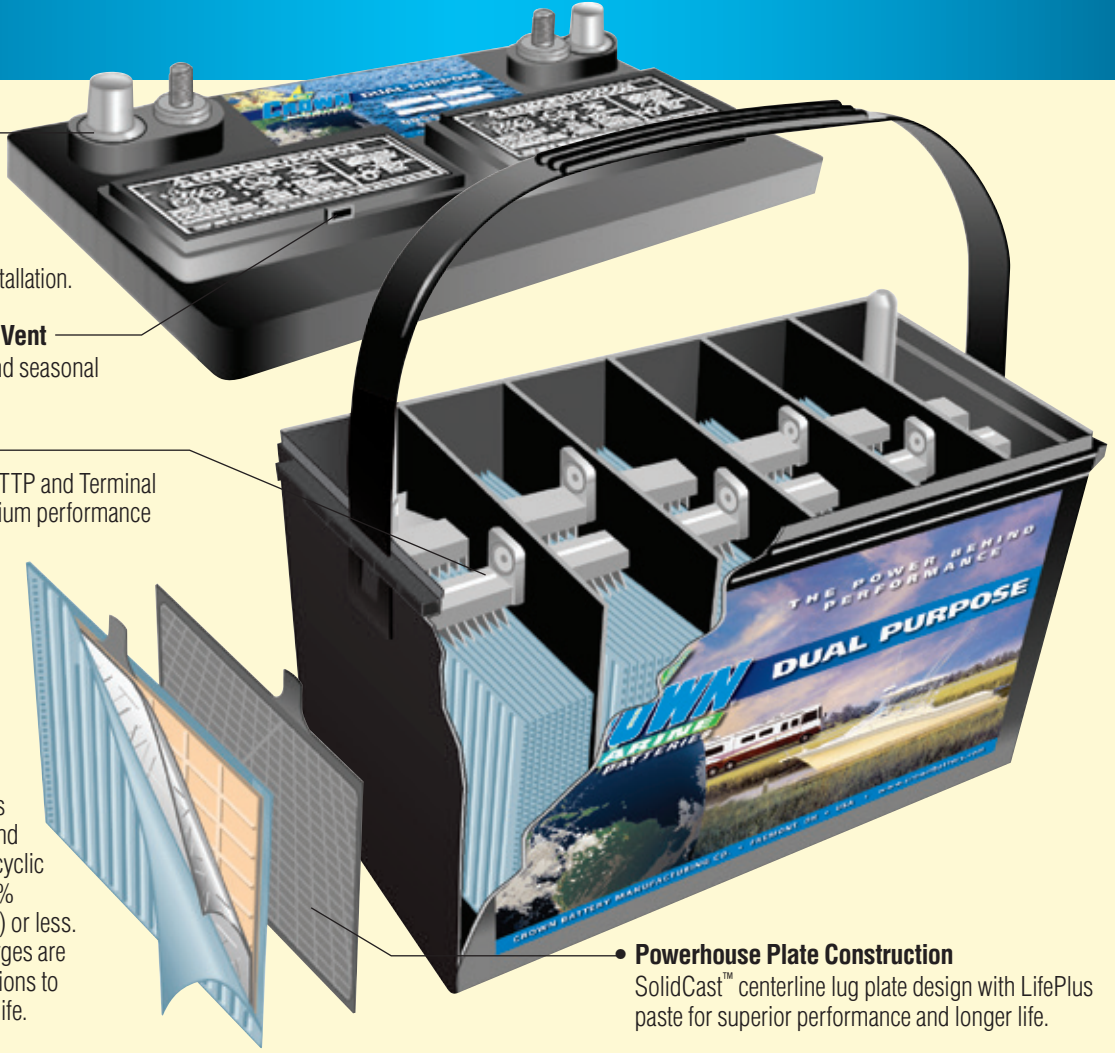
31DP800

• **Innovative Terminals**  
Heavy duty marine dual terminals resist corrosion and allow for efficient and safe cable installation.

• **Low Maintenance Pod Vent**  
For periodic evaluation and seasonal maintenance.

• **Tough Connectors**  
Thicker SolidCast™ COS, TTP and Terminal Post connectors for premium performance and reliability.

**Dual Purpose Batteries**  
Proprietary "tightpack" design with PosiWrap™ plate construction enables maximum performance and durability in starting and cyclic applications involving 50% depth-of-discharge (DOD) or less. Periodic equalization charges are required in cyclic applications to achieve expected battery life.



• **Powerhouse Plate Construction**  
SolidCast™ centerline lug plate design with LifePlus paste for superior performance and longer life.



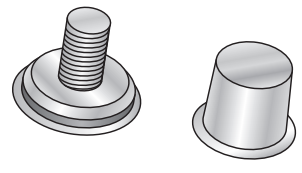
# MARINE DUAL PURPOSE BATTERIES

# The Power to Perform

- ▶ Thick, SolidCast™ grid design with more metal and no overpasting provides highly reliable engine cranking and reserve capacity power, resistance to deep discharge – and superb durability and long life.
- ▶ Heavy-duty standard terminal posts provide maximum durability and resistance to terminal corrosion.
- ▶ Calcium lead plate content enables maintenance-free reliability with minimal gassing.
- ▶ Tightpack cell design with PosiWrap™ separators protect against short-circuiting and provide superior plate compression to deliver stronger cycling performance.
- ▶ Tough polypropylene plastic container and cover components are heat-sealed and withstand rugged applications.

BCI Group	Model Description	Item Number	20 Hr Amp Hour	Electrical Capacity			Inches			Millimeters			Product Footnotes
				MCA	CCA	RC Minutes	L	W	H	L	W	H	
<b>12 VOLT MARINE DUAL PURPOSE BATTERIES</b>													
24	24DP550	SM24550	75 Ah	690	550	105 / 25A	11.06	6.81	9.38	281	173	238	DIJMT
27	27DP700	SM27700	100 Ah	875	700	125 / 25A	12.94	6.81	9.38	329	173	238	DIJMT
	27DP600	SM27600	90 Ah	750	600	110 / 25A	12.94	6.81	9.38	329	173	238	DIJMT
31	31DP800	SM31800	105 Ah	1000	800	180 / 25A	13.00	6.75	9.38	330	171	238	DIJMT

### Standard Type



**Available with Standard Terminal Style**  
*(BCI Type M Type with Dual SAE / Stainless Threaded Terminals)*

### Key

- D** = Standard Terminal (Dual Automotive / Stainless Threaded Terminal)
- H** = CleanFit™ Maintenance Free Cover Design
- I** = Cover with POD Vent
- J** = Battery Fitted with Handle or Lifting Lug
- L** = Antimony Alloy Construction: Low Maintenance Service
- M** = Calcium Alloy Construction: Maintenance Free Service
- T** = TightPack Cell Construction





# MARINE DEEP CYCLE BATTERIES

# The Power to Perform



24T-1000



24T-800



27T-1000



31T-1000

- **Innovative Terminals**

Heavy duty marine dual terminals resist corrosion and allow for efficient and safe cable installation.

- **Low Maintenance Pod Vent**

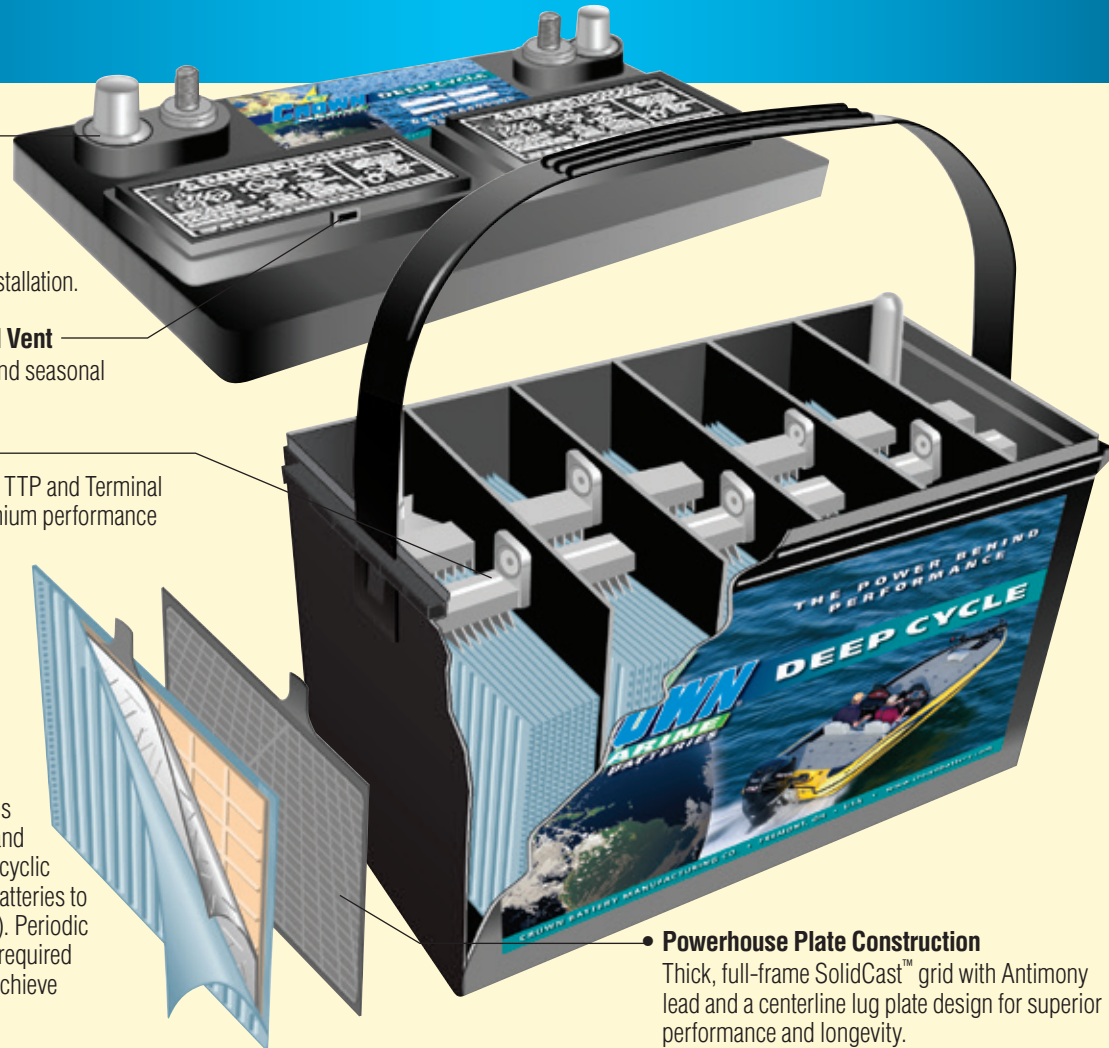
For periodic evaluation and seasonal maintenance.

- **Tough Connectors**

Thicker SolidCast™ COS, TTP and Terminal Post connectors for premium performance and reliability.

- **Deep Cycle Batteries**

Proprietary "tightpack" design with PosiWrap™ plate construction enables maximum performance and durability in starting and cyclic applications subjecting batteries to full discharge (10.5 Volts). Periodic equalization charges are required in cyclic applications to achieve expected battery life.



- **Powerhouse Plate Construction**

Thick, full-frame SolidCast™ grid with Antimony lead and a centerline lug plate design for superior performance and longevity.



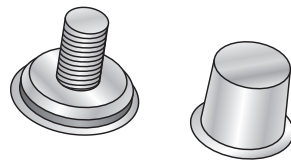
# MARINE DEEP CYCLE BATTERIES

## The Power to Perform

- ▶ Thick, SolidCast™ grid design with more metal and no overpasting provides highly reliable discharge power, exceptional cycle life – and resistance to vibration and extreme temperatures
- ▶ Heavy-duty standard terminal posts provide maximum durability and resistance to terminal corrosion.
- ▶ Antimony lead plate content enables low-maintenance reliability with superb durability.
- ▶ Tightpack cell design with PosiWrap™ separators protect against short-circuiting and provide superior plate compression to deliver stronger cycling performance.
- ▶ Tough polypropylene plastic container and cover components are heat-sealed and withstand rugged applications.

BCI Group	Model Description	Item Number	20 Hr Amp Hour	Electrical Capacity			Inches			Millimeters			Product Footnotes
				MCA	CCA	RC Minutes	L	W	H	L	W	H	
<b>12 VOLT MARINE DEEP CYCLE BATTERIES</b>													
24	24T-1000	SM24085	85 Ah	625	500	135 / 25A	11.06	6.81	9.38	281	173	238	DIJL
	24T-800	SM24075	75 Ah	550	440	105 / 25A	11.06	6.81	9.38	281	173	238	DIJL
27	27T-1000	SM27095	95 Ah	845	650	170 / 25A	12.94	6.81	9.38	329	173	238	DIJL
	27T-800	SM27090	90 Ah	625	500	160 / 25A	12.94	6.81	9.38	329	173	238	DIJL
31	31T-1000	SM31105	105 Ah	1000	750	185 / 25A	13.00	6.75	9.38	330	171	238	DIJL

### Standard Type



### Available with Standard Terminal Style

*(BCI Type M Type with Dual SAE / Stainless Threaded Terminals)*

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ATTENTION TO DETAIL

# Power. Boat.

## Where World Class Starts



**Why Crown?** Crown Batteries are the heavyweight in marine applications. Batteries with more active lead material delivering the power to not only take you out...but bring you back...with power to spare.

**Need Proof of Performance:** In head-to-head tests, Crown delivered more power, more choices, a better fit with more safety features than leading competitors. Truly, the best value is Crown.