



INDUSTRIAL BATTERY LINE

ONLY THE BEST...



...ALL THE TIME

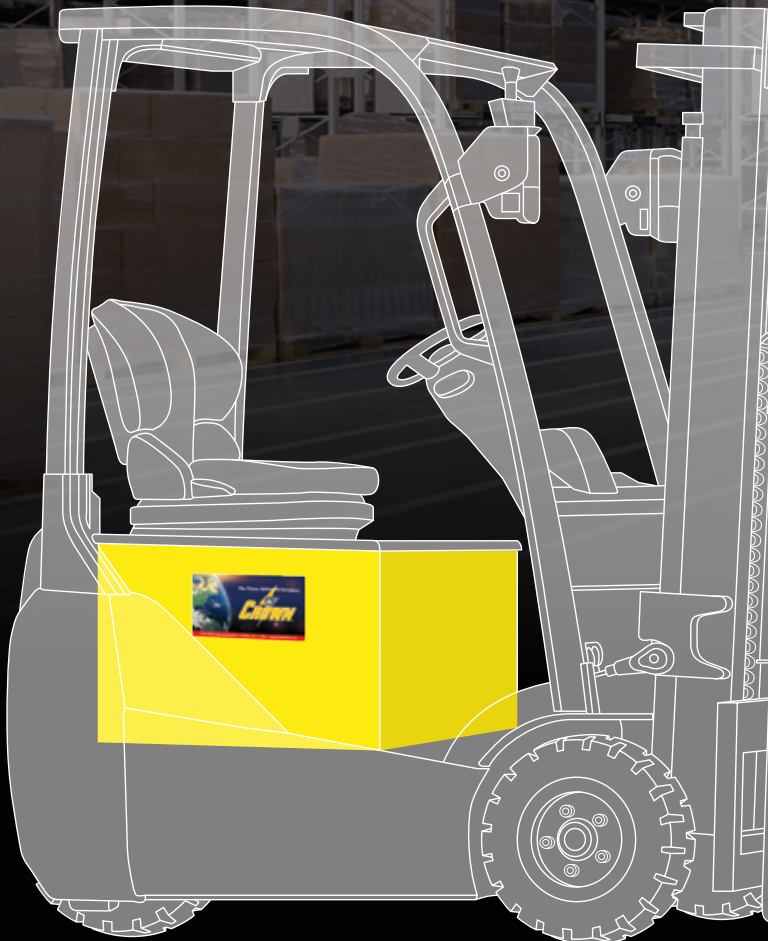


# POWERING ON

# IT'S WHAT'S INSIDE THAT

# SINCE 1926

## BEAUTY ISN'T ONLY SKIN DEEP.



## POWER THAT MOVES YOU.

### ADVANCED ROBOTICS ENGINEERING

### CUTTING-EDGE TECHNOLOGY

Robotics are part of our commitment to developing the "best available" products. Our state-of-the-art manufacturing process gives us the capability to deliver the best-available consistency of cell assembly, with unmatched quality controls and the highest top-lead cell construction.

### CAST ON STRAP (COS)

- ▶ The COS system is the optimal way to efficiently cast industrial size cells – the inverted process prevents lead run downs which reduces the possibility of an internal short circuit within the cell.
- ▶ The process enables automatic cell insertion and hang tests to ensure all plates are completely connected.
- ▶ With COS the cells do not have individual weld points from the strap to the post, rather the cells have a fully formed solid lead connection point.
- ▶ Utilizes the thickest strap in the industry.



## 130M

LEAD ACID BATTERIES ARE RECYCLED EVERY YEAR AND KEPT FROM LANDFILLS



## 95%

MOTIVE POWER BATTERIES, IN APPLICATIONS LIKE FORKLIFTS, ARE LEAD BATTERIES IN NORTH AMERICA



#### Rugged Cell Construction

Signature heavy-duty cast-on strap and terminal post structures manufactured in a highly automated production process deliver unmatched electrical efficiency and durability.

#### Posi-Wrap™ Plate Protection

- A** Vertical Double Mat Slyver Wrap becomes embedded into the plate surface to ensure complete active material retention for longevity.
- B** Horizontal Glass Mat Wrap provides a secondary layer of active material retention.
- C** The Koroseal Retainer is a perforated wrap tightly binds the two glass mat wraps to the plate while providing a third layer of insulation against mousing and short-circuits.
- D** The Sleeve Separator is a high-porosity sleeved separator that delivers a final layer of insulation from direct plate-to-plate contact and mousing.

- 1926** Founded by William Koenig, a German immigrant
- 1930s** Name changed to Crown Battery Manufacturing, reflecting translation of German "Koenig" to English "Crown"
- 1940s** New plant opened, subsequently expands 5 times in the next 30 years
- 1950s** Ownership transferred to Lee Koenig, son of founder
- 1970s** New state-of-the-art headquarters/plant opens, and expanded 6 times to date
- 1990s** Acquired Dynamo Battery to start Crown Battery Canada
- 2000s** Acquired Midwest Battery Service in Chicago for railroad market
- 2000s** Acquired CBC Battery of Montreal
- 2000s** Acquired Reaco Battery in Southern Illinois
- 2000s** Acquired C&D Technologies assets – Motive Power and moved factory from Mexico to USA
- 2010s** Installed 69,000 volt sub-station and acquired 3 businesses in CT, OH, and CA
- 2026** Celebrating 100 years in business



# INDUSTRIAL BATTERY LINE



# IT'S WHAT'S INSIDE THAT COUNTS.



## STANDARD INDUSTRIAL BATTERY

- ▶ Custom designs available
- ▶ Heavy weight
- ▶ Cost effective
- ▶ Dependable, long life-span



## MAX

- ▶ Innovative 3P design
- ▶ Delivers benefits of flat-plate and tubular designs
- ▶ Two power choices to maximize your uptime
- ▶ More flexibility



## OPPORTUNITY CHARGE OPPORTUNITY FAST CHARGE

- ▶ Charge during any downtime
- ▶ Only one battery required per truck
- ▶ Increased productivity
- ▶ Decreased total cost of ownership

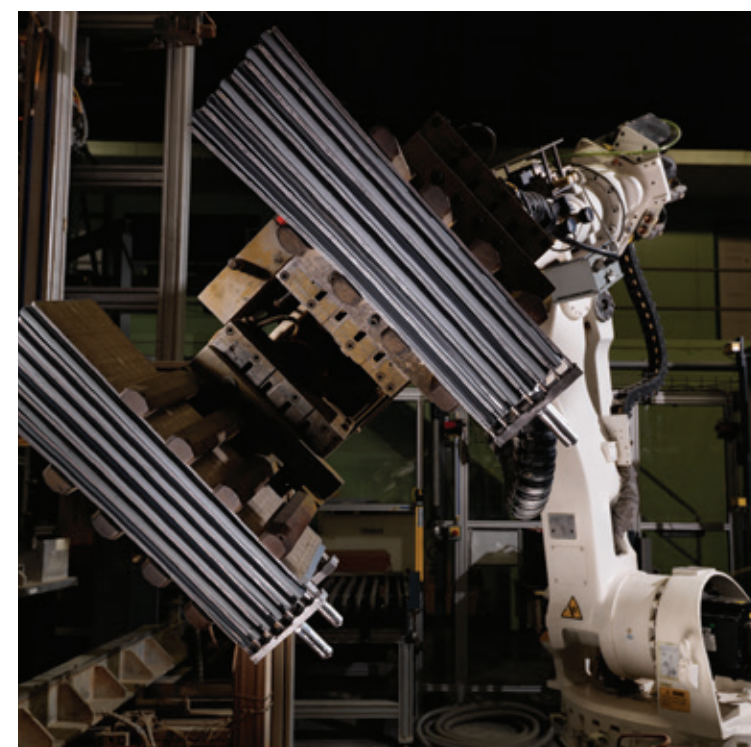
## H2GO

- ▶ Less maintenance and reduced costs
- ▶ Watering intervals of 9-12 weeks
- ▶ More uptime



## SPECIALTY BATTERIES: MINING, RAILROAD STARTER & STATIONARY

- ▶ Long-lasting
- ▶ Durable
- ▶ Heavy weight
- ▶ Increase productivity



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## ACID RECIRCULATION SYSTEM (ARS) FOR CELL FORMULATION

ARS technology was introduced into Crown Battery's manufacturing process in 2010. The ARS Process enables us to use a highly efficient two-step formation process that optimizes target capacities via optimized formation charging – while minimizing waste.

- ▶ The defined process control optimizes acid density and temperature progressions at all times during the formation process.
- ▶ The process enables Crown Battery to use a two-step formation process with minimal waste.
- ▶ It also provides the ability to run capacity tests on new cells.



# #1

LEAD BATTERIES ARE THE MOST RECYCLED CONSUMER PRODUCT IN THE U.S.



# 99%

RECYCLE RATE OF SHIPMENTS ANNUALLY IN NORTH AMERICA



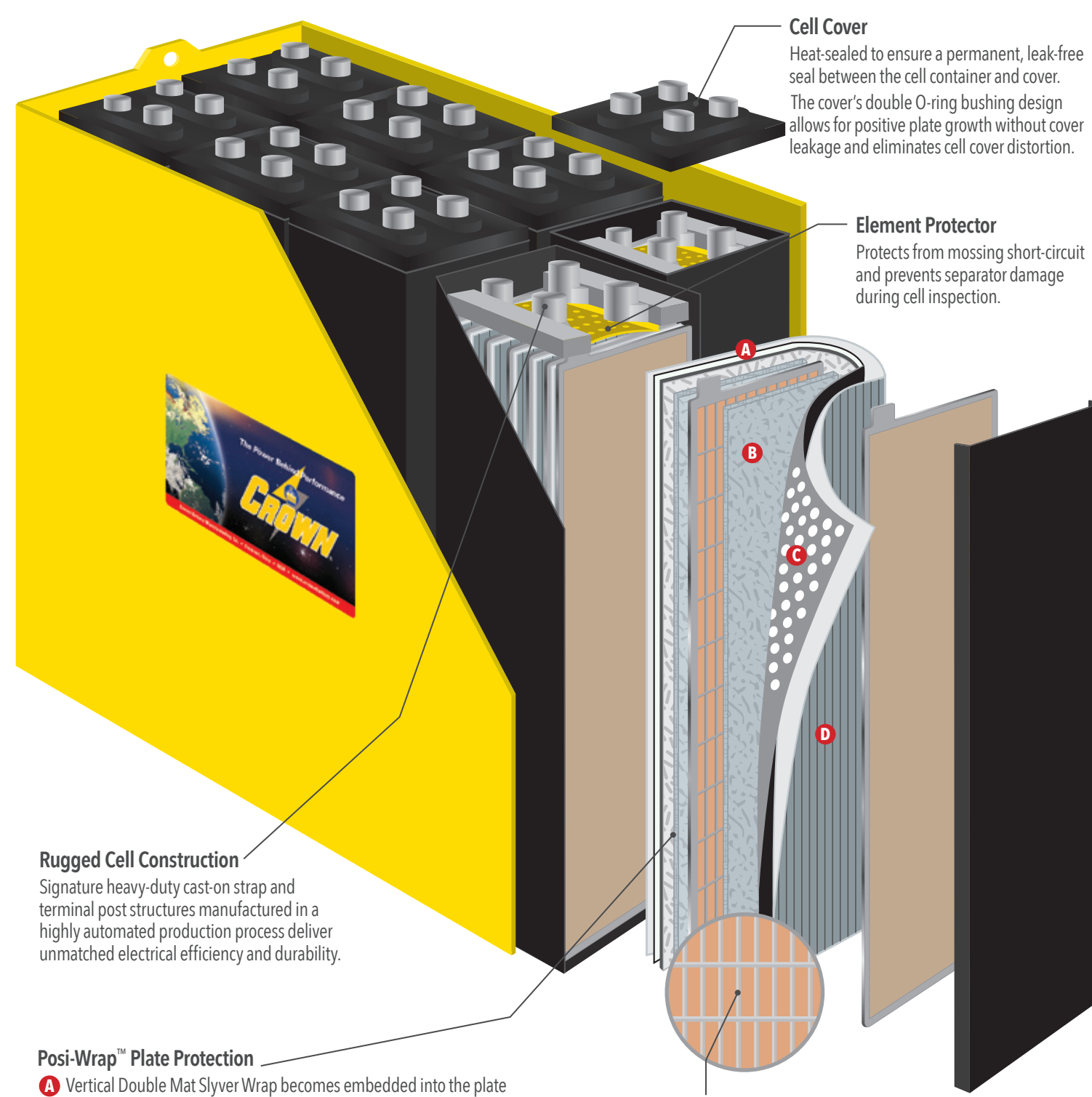
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# 95%

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### Cell Cover

Heat-sealed to ensure a permanent, leak-free seal between the cell container and cover. The cover's double O-ring bushing design allows for positive plate growth without cover leakage and eliminates cell cover distortion.

### Element Protector

Protects from mousing short-circuit and prevents separator damage during cell inspection.

### Rugged Cell Construction

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### Plate Construction

13 staggered vertical plate wires that withstand the rigors of deep cycling service and high-rate discharge. Positive Grid with a thickness of .270" and designed for maximum active material retention to deliver premium battery life. Crown Battery's active material is manufactured with premium lead oxide applied uniformly and temperature cured in computer-controlled curing ovens that assure optimum product performance and life.



## ACCESS SERIES

- ▶ Microcomputer Smart Charger
- ▶ Peak efficiency 92%
- ▶ Power factor 95%
- ▶ Low weight and small footprint
- ▶ Advanced precision control for best battery life and performance
- ▶ Wireless communication with BMU Pro
- ▶ California Energy Commission (CEC) Approved

## FLEXMOD

- ▶ Small, Lightweight, modular design
- ▶ Multi-voltage/DC capable
- ▶ Multi-AH capable
- ▶ Peak efficiency 94%
- ▶ Power factor 95%
- ▶ Wireless communication with TOBI WI-Z Battery Monitor
- ▶ California Energy Commission (CEC) Approved



## EP SERIES

- ▶ Full featured, light to medium duty
- ▶ ECO – 250 microprocessor control
- ▶ Standard 208/240/480 input voltages
- ▶ 600 VAC input available
- ▶ UL and cUL listed

## EL

- ▶ Ferroresonant charger
- ▶ 100% battery AH return in 10 hours or less
- ▶ Peak efficiency 87%
- ▶ Power factor 92%
- ▶ Low maintenance

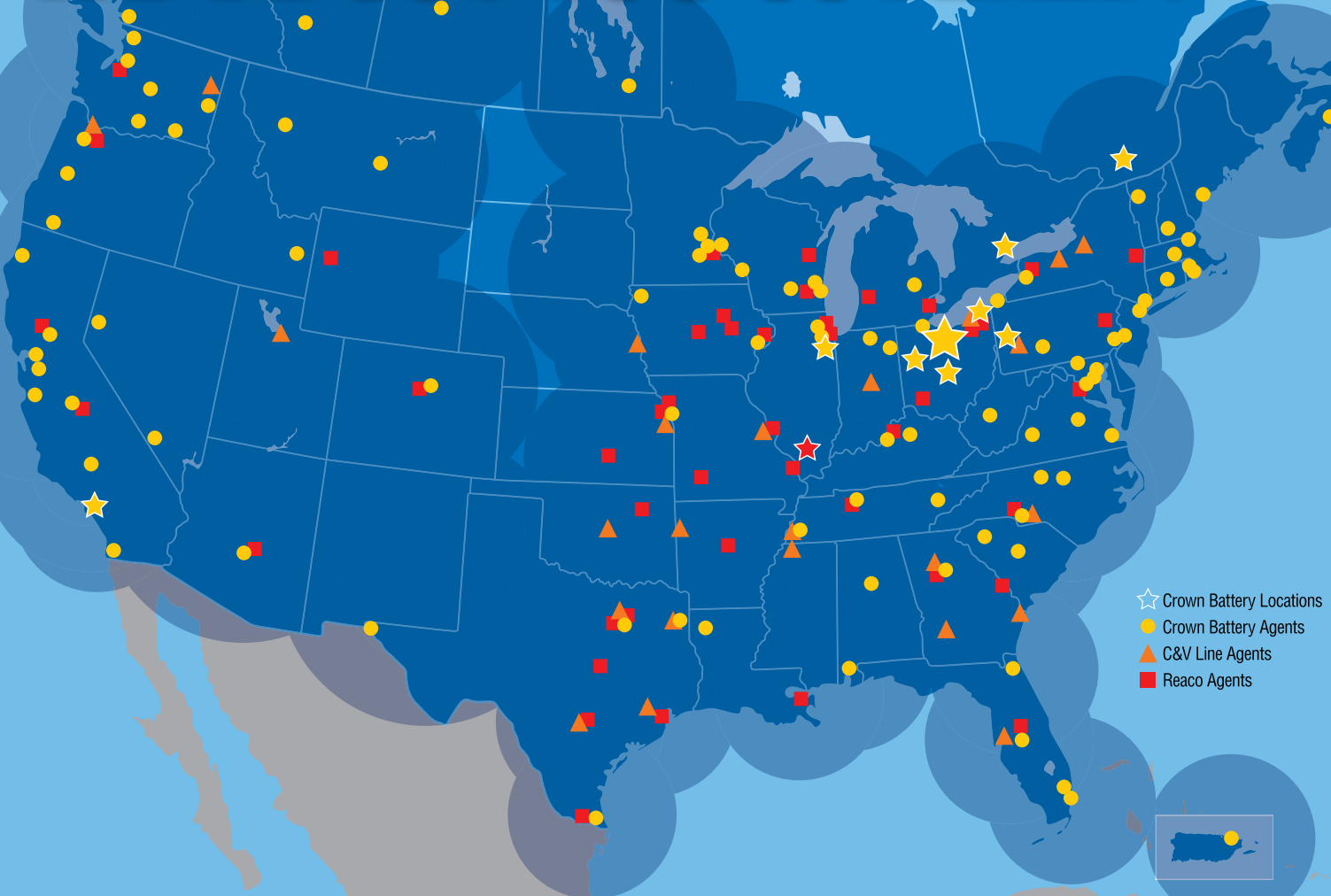


## PHP SERIES

- ▶ Three-transformer ferroresonant design
- ▶ Standard or premium controls available
- ▶ LED/LCD display test at startup
- ▶ Lift-off front door
- ▶ AC Input Taps for quick voltage changeover



# WE'VE GOT YOU COVERED.



## ONLY THE BEST

From the raw materials we use, to the highest quality manufacturing processes, to our innovative product-development engineering, to the people that build, sell and provide the one-on-one technical support... at Crown, you'll find there's a total dedication to serving the customers who rely on our products and trust in the reliability of our company.

*The Power Behind Performance*



*The Power Behind Performance*



Crown Battery Mfg Company | Made in USA

### CONTACT US FOR MORE INFORMATION

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