# CM® BatteryStar™ FAQ
## Battery-Powered Chain Hoist
## Frequently Asked Questions

## Introduction

The first battery hoist on the market from a U.S hoist manufacturer, the CM® BatteryStar™ provides the lifting strength and speed of an electric chain hoist paired with cord-free operation and portability of a manual hoist. Built with industry-leading technology from Columbus McKinnon and Milwaukee Tool®, the BatteryStar is designed for heavy-duty lifting, portability, and easy installation. The hoist is powered by an industry-leading M18™ Red Lithium Battery from Milwaukee Tool® – the same M18™ battery many end users already have on their job site – for added convenience. Built for safety and ease of use, the BatteryStar is controlled by a wireless, push-button remote to keep the operator out of the load path. The remote also features built-in intelligence, alerting the operator of an overload situation, required hoist inspection, and more.

## General Questions

1. **What are some applications the BatteryStar is well suited for?**
   The BatteryStar is ideal in applications where the lifting speed and strength of a powered chain hoist are needed, but power is not readily available. They are also ideal where the portability of a manual hoist is needed but higher efficiency or lower human effort is preferred. Some applications to consider:
   - Maintenance activities (replacing heavy components, tooling change out)
   - Construction
   - Gantry cranes
   - Davit cranes
   - Fire and rescue
   - Low-volume production
   - Prototype assembly lines
   - Lifting banners, lights, or speakers in entertainment applications

2. **What capacities and options are available for the BatteryStar?**
   The BatteryStar is a 1-ton hoist with a speed of 8 FPM. There are no other capacities or speeds available currently. We chose 1-ton, 8 FPM as it will cover the majority of applications with a single hoist, making it the only hoist you need for your portable or temporary applications. The BatteryStar offering includes:
   - Rigid or swivel hook suspensions
   - Standard lift of 20 ft.
   - Lift configurable between 5-60 ft.
   - Standard remote control
   - Battery and charger included or sold as hoist only (less battery and charger)
   - Chain bag included as standard
   - Optional carrying case

3. **How heavy is the BatteryStar?**
   The BatteryStar weighs 44 lbs. (20kgs) with a 20 ft chain (less battery).

4. **What is the duty cycle of the BatteryStar?**
   The BatteryStar meets the requirements of FEM(ISO) Class of 1Cm (M2), which is 20% duty with a short time rating of 7.5 minutes at 1-ton capacity.

5. **What battery is used in the BatteryStar?**
The BatteryStar has been designed and optimized to work with Milwaukee Tool® M18™ Red Lithium battery. This battery is compatible with more than 250 Milwaukee Tool® products. The battery can be quickly removed and replaced with a charged battery, just like other battery-powered tools.

The hoist will be supplied with a 12.0Ah battery to optimize uptime and provide the best performance. Smaller Ah battery packs can be used in the hoist, but performance and runtime will be lower.

6. **How will I know if the battery pack in the hoist is getting low on power?**
There is a low battery indicator on the remote. When using the recommended 12.0 Ah battery, the "low battery" indication will illuminate once the battery gets to approximately 25% remaining charge. Once the light illuminates, it is recommended the battery is replaced after completing the lift. Using the hoist in the inverted orientation makes changing the battery easier as the operator will likely be close to the hoist and load at the end of the lift.

7. **Can replacement batteries be purchased through Columbus McKinnon?**
Yes. Replacement or extra 12.0 Ah batteries can be purchased from Columbus McKinnon.

8. **How long will the hoist operate on one battery charge?**
Runtime of the hoist will depend on the weight of the object you are lifting. The chart below shows the estimated total hook travel distance with equal lifting and lowering for each capacity.

| Battery | Load (tonnes) | Est. Hook Travel (ft)* | Est. Hoist Runtime (min) |
|---------|---------------|------------------------|--------------------------|
| 12.0 Ah Battery | 1/4 | 480 | 50 |
| | 1/2 | 300 | 37 |
| | 3/4 | 220 | 27 |
| | 1 | 180 | 22 |

*Estimated total travel with equal lifting and lowering.

9. **What happens if the hoist runs out of power or stops working in the middle of a lift?**
The low battery indicator will illuminate on the remote when there is 25% remaining power left in the battery when using the recommended 12Ahr battery. Once the light illuminates, it is recommended the battery is replaced after completing the lift. Using the hoist in the inverted orientation makes changing the battery easier as the operator will likely be close to the hoist and load at the end of the lift. If the hoist becomes inoperable mid-lift, the hoist can be lowered by accessing the manual lowering shaft and using a 3/16 hex bit to lower the hoist.

10. **Does the hoist have single-speed control?**
The remote for the hoist provides true variable speed control. The further the operator presses the button in, the faster the speed – similar to the gas pedal of a car. The speed can be controlled from 0 to 8 feet per minute. This provides excellent control for fine positioning of the load.

11. **Why does the BatteryStar come with a remote control as standard?**
Many of the applications for the BatteryStar are temporary or require the hoist to be moved frequently. Having a remote reduces the difficulty of managing long pendant cable while moving the hoist. It also allows the hoist to be used at any height (up to 60 ft lift height) without worrying about a pendant cable length.

12. **What do the icons on the remote mean?**

**M18 Battery Indicator**

- Low Battery (12.0 Ah battery at 25% SOC)
    - Indicator is slowly flashing red
- Dead battery
    - Indicator is solid red
    - Hoist does not operate until battery is replaced
- Battery Out-of-Temp
    - Indicator is solid red
    - Hoist does not operate until battery is within normal operating temperature

**Weight Overcapacity Indicator**

- Directional button is pressed while the hoist load is overweight capacity
    - Indicator is solid red
    - Hoist buzzer sounds
    - Hoist will only operate in down direction

**Operator Indicator**

- Hoist is above or below the safe operating temperature
    - Indicator is solid red
    - Hoist does not operate until operating temperatures are within product specifications are reached
- Hoist electronics error
    - Indicator is solid red
    - Hoist does not operate

# CM® BatteryStar™ FAQ

## Battery-Powered Chain Hoist
## Frequently Asked Questions

**Inspection Indicator**

- If hoist inspection is due based on interval set (number of days) within ONE-KEY™ Configuration
    - Indicator is solid red
    - Hoist still operational
- Hoist inspection is due within 30 days
    - Indicator is slowly flashing red
- After inspection
    - Indicator must be cleared via ONE-KEY™ app while connected to the hoist

13. **What safety features are built into the BatteryStar?**
    - Operator Safety
        - Hoist helps reduce operator effort and fatigue as compared to using a lever or hand chain hoist.
        - Inverted operation eliminates the need to carry the weight of the hoist up to the anchor point.
        - Wireless remote keeps the operator safe and away from the load, allowing for operation from over 60 ft. away.
    - Load Security and Hoist Safety
        - Electronic clutch and secondary mechanical clutch provide dual protection from hoist overload.
        - Remote features built-in intelligence, alerting the operator with light-up icons if the hoist is overcapacity, low battery, or hoist inspection is due.
        - Patented design protects every battery, safeguarding through drops, weather exposure, and harsh environments.
        - Brake inspection windows on the top and bottom of the hoist allow operators to easily check brake wear, helping to facilitate preventative maintenance.
        - If the battery runs out during hoist operation, the hoist has a feature that allows the load to be manually lowered via a power drill or screwdriver.

14. **Does the hoist have an electric brake?**
    No. The BatteryStar hoist uses a patent-pending mechanical brake similar to what can be found in manual chain hoists. The brake automatically applies when lowering the load, providing controlled descent and positioning.

15. **What service is required on the BatteryStar?**
    The BatteryStar should be inspected and serviced following the same procedures as an electric chain hoist. See the manual for more details.

    To simplify the inspection, there are easily accessible brake inspection windows that allow the brake to be inspected without disassembly of the hoist.

16. **What chain is used in the BatteryStar?**
    The chain in the BatteryStar is a Type T per EN818-7 (through-hardened) manufactured by Columbus McKinnon.

# CM® BatteryStar™ FAQ

Battery-Powered Chain Hoist
Frequently Asked Questions

17. **Can the batteries be recycled?**
Yes, Contact a recycling agency, such as Call2Recycle, in your area for recycling locations. You should always dispose of your battery pack according to federal, state, and local regulations. Contact a recycling agency in your area for recycling locations.

18. **What is the warranty on the BatteryStar?**
The battery has a three-year warranty supported by Milwaukee Tool. See the manual provided with the battery for more details. The hoist has a five-year warranty supported by Columbus McKinnon's service network. See the hoist operation manual for more details.

19. **What is the operating temperature of the BatteryStar?**
The operating temperature range is 0F-104F (-18C – 40C).

20. **Is the BatteryStar weatherproof?**
The motor, electronics, and remote are rated IP55, while the hoist housing is rated IP54. The lower IP54 rating on the hoist housing is due to the integrated venting around the motor that allows for better heat dissipation.

21. **What is ONE-KEY™?**
ONE-KEY™ is an app-based tool developed by Milwaukee Tool® that allows users to connect to the hoist (and other Milwaukee Tool® smart tools) for:
- Easy asset management and tracking
- Access to equipment information from your computer or smartphone with an easy-to-use app and interface
- Inspection interval feature allows user to set reminders and store records of hoist inspections

ONE-KEY™ app is available for download on Google Play or in the Apple App Store.

22. **Are replacement parts available?**
Yes. Common service parts for the hoist are available. See the hoist manual for more information.

23. **Are there any transportation requirements that I need to be aware of for the battery?**
The recommended 12Ahr battery exceeds 100Whr and falls within the Class 9 DG requirements. Always check compliance with Li-Ion battery consignments against the current regulations governing the chosen mode of transport. When in doubt, contact the carrier or other trained Dangerous Goods professional to confirm acceptability. Li-Ion packs are shipped under classification UN 3480 (battery only) or UN 3481 (batteries contained in or packed with equipment).

24. **What standards does the BatteryStar meet?**
- ASME B30.16
- FEM 1Cm rated
- Third-party certified to UL and CSA requirements

25. **Is the BatteryStar available with a carrying case?**
Yes, a carrying case is available as an optional add-on. This durable, splash-resistant case features smooth-glide wheels for easy transport. It holds up to 60 feet of chain, so you do not need to remove the chain before storage, and fits within the standard 22.4-inch truck depth thanks to its 19.8-inch height. A removable top tray keeps essentials organized and easily accessible. Custom insert inside the case organizes and protects the hoist, remote, and charger.