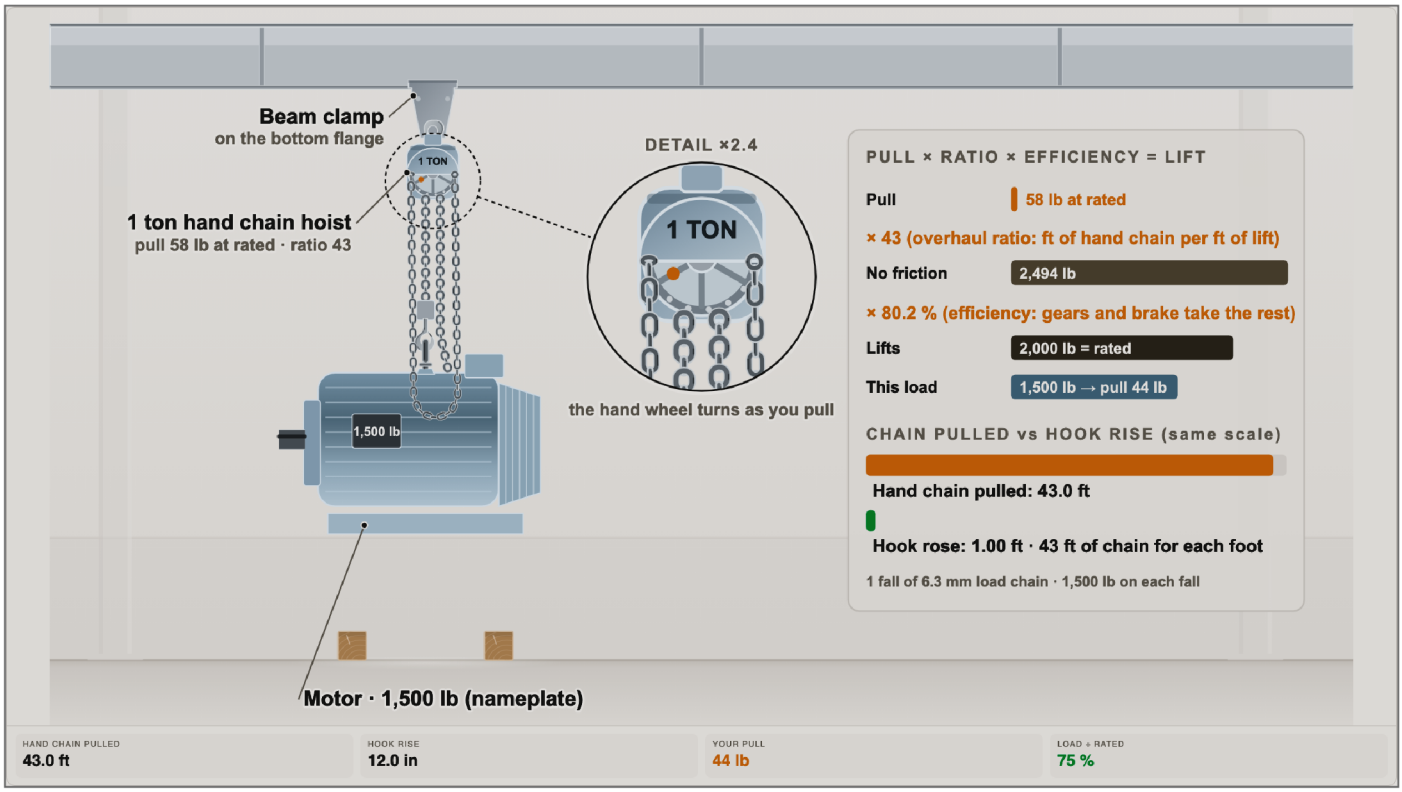
CREWFORGE · SIMULATOR-LESSON SUMMARY · CHAIN HOISTS

Chain hoists and lever hoists



- Pull × overhaul ratio × efficiency = lift. 1 ton Harrington CB: 58 lb × 43 = 2,494 lb with no friction; lifts 2,000 lb (80 %).
- Pull follows the load: pull = load ÷ rated × pull at rated. More pull than rated = overloaded: stop.
- Hand chain = lift × overhaul ratio (2 ft on a ratio of 43 = 86 ft).
- The overload (slip) clutch slips at about 20 % over rated. It protects the hoist; it is not a scale.
- Lever hoists: never a cheater bar or extension; one person, hand power only; never load it in neutral.
- Hook: remove at more than 5 % throat opening (maker), any twist past the limit, latch missing.
- Load chain: gauge over 5 pitches against the maker's discard length (6.3 mm: 95.5 → 98.3 mm).
- Trial lift a few inches: the brake must hold. Support (clamp, lug, beam) rated ≥ the hoist's capacity (WorkSafeBC 14.11(1)).
- No side pull: hook to hook in a straight line.

Exam prep, not a procedure: on the job, check the tag, the manufacturer's data and the lift plan. Check your province's rules. Practice at crewforge.ca.