

SOLVING CHALLENGES THROUGH CUSTOM APPLICATIONS

TUG BOAT TOW WINCH OIL REFINERY DOCKING TERMINAL



CHALLENGE

to tow large vessels into port during docking operations.

SOLUTION

large capacity winch designed for heavy load handling in saltwater environment.

PRODUCT FEATURES

- Load Rating: 50,000 lb
- Line Speed: 25 fpm
- Travel Distance: 1,500 ft
- Power: 408 VAC, 3 Phase
- Large capacity drum to accommodate long travel distances.
- Stainless steel level wind for uniform spooling of cable onto drum.
- Double disc brake for additional static load holding capacity.
- Epoxy finish for corrosion resistance in marine environment.
- ABS design compliance

TOWED ARRAY SLIP RING WINCH FOREIGN NAVY



CHALLENGE

deploying and retrieving underwater sensor equipment.

SOLUTION

custom winch fitted with slip ring and level wind to receive feedback.

PRODUCT FEATURES

- Load Rating: 3,000 lb
- Line Speed: 190 fpm
- Travel Distance: 1,300 ft
- Power: 440 VAC, 3 phase
- Slip ring to receive electronic feedback from towed array.
- Level wind to ensure uniform spooling of cable.
- Variable speed drive for precise control of load.
- Large diameter drum for faster line speeds.
- Epoxy finish for corrosion resistance in saltwater environment.

ANNEALING FURNACE DOOR WINCH FLAT ROLLED STEEL MILL

CHALLENGE

to simultaneously lift multiple doors on furnace during the annealing process.

SOLUTION

single drum winch system to lift different sized doors in unison.

PRODUCT FEATURES

- Load Rating: 2,000 lb
- Line Speed: 28 fpm and 56 fpm
- Travel Distance: 14 ft and 6 ft
- Power: 460 VAC, 3 phase
- 4-drum compartments with different diameters for different line speeds.
- Grooved drums with pressure roller bars for uniform winding of wire rope.
- Extended drum with two compartments at each end to separate cable center lines.
- Drum guard to help prevent injury.
- Slack line detector to prevent shock load if doors jam while lowering.
- Rotary and paddle style limit switches to provide automatic shut off with overtravel protection.



SOLVING CHALLENGES THROUGH CUSTOM APPLICATIONS

SCREEN RAKE LIFTING WINCH METROPOLITAN WATER DISTRICT



CHALLENGE

to lift screen rakes out of water canal for removal of debris.

SOLUTION

electric winch system with two part rigging and custom bolt hole pattern to meet existing requirements.

PRODUCT FEATURES

- Load Rating: 9,000 lb to deliver 18,000 lb with two-part rigging
- Line Speed: 10 fpm
- Travel Distance: 17 ft
- Power: 460 VAC, 3 Phase
- Narrow drum to accommodate short fleet angle distance.
- Epoxy finish for durability in corrosive environment.

CONVEYOR MAINTENANCE WINCH COAL MINE IN WYOMING

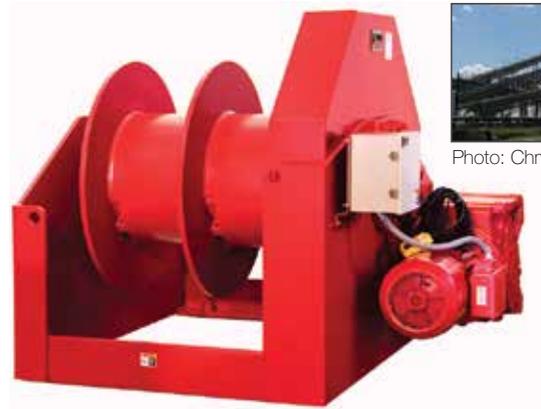


Photo: Chmee

CHALLENGE

to lift a 50 ton conveyor counterweight in gravity take up tower during routine conveyor maintenance.

SOLUTION

winch mounted at top of tower with two separate two-part rigging lines to load.

PRODUCT FEATURES

- Load Rating: 56,000 lb to deliver 100,000 lb with two-part rigging
- Line Speed: 18 fpm
- Travel Distance: 50 ft
- Power: 460 VAC, 3 phase
- Dual compartment drum for two lift lines.
- Controls with pendant for remote operation.

RAIL CAR PULLING WINCH SHIP UNLOADING TERMINAL IN CHILE



Photo: Chris McKenna

CHALLENGE

to position up to ten railcars during loading and unloading process.

SOLUTION

closed loop, single winch system to move large loads in two directions.

PRODUCT FEATURES

- Load Rating: 30,000 lb
- Line Speed: 40 fpm
- Travel Distance: 625 ft
- Power: 380 VAC, 3 phase, 50 hertz.
- Extended grooved drum for single layer wrapping and uniform speed.
- Chain driven rotary limit switch to limit travel in both directions.
- Epoxy gray finish for improved corrosion resistance in marine environment.

SOLVING CHALLENGES THROUGH CUSTOM APPLICATIONS



SUBMERGED LID LIFTING WINCH NUCLEAR POWER PLANT



Photo: Simone Ramella

CHALLENGE
to raise hinged lids during removal of fuel rods from cylinders in a cooling pool.

SOLUTION
overhead mounted winch to provide smooth lifting control.

PRODUCT FEATURES

- Load Rating: 4,000 lb
- Line Speed: 10 fpm
- Travel Distance: 8 ft
- Power: 460 VAC, 3 phase
- Variable speed controls for smooth operation and overload protection.
- Stainless steel drum and white epoxy finish for corrosion resistance.
- Rotary limit switch to limit travel in both directions.
- Grooved drum for uniform winding of wire rope.



LAUNCH WAY RETRIEVAL WINCH BARGE MANUFACTURER



Photo: Alexander Solch

CHALLENGE
to pull barges into position during production at ship building and repair facility.

SOLUTION
large capacity winch system to move barges.

PRODUCT FEATURES

- Load Rating: 20,000 lb
- Line Speed: 54 fpm
- Travel Distance: 600 ft
- Power: 460 VAC, 3 phase
- Manual clutch to disengage drum for quick payout of unloaded cable.
- Level wind to accommodate short fleet angle distances.



DREDGE POSITIONING WINCHES COUNTY WATER DISTRICT

CHALLENGE
economical continuous back and forth positioning of floating dredges in water settling basin.

SOLUTION
multiple winch systems operating simultaneously from different locations around the basin.

PRODUCT FEATURES

- Load Rating: 12,000 lb
- Line Speed: 15 fpm
- Travel Distance: 1,600 ft
- Power: 460 VAC, 3 phase
- Drum guard to help prevent injury.
- Programmable computerized variable speed controls for automatic operation.
- Extended length drum with single layer wrapping for uniform tensioning.



SOLVING CHALLENGES THROUGH CUSTOM APPLICATIONS

CASCADING CHUTE POSITIONING WINCH BULK HANDLING FACILITY



CHALLENGE
to vertically position cascading load out chute during barge loading process.



SOLUTION
winch system with two lift lines for controlled positioning of chute.

PRODUCT FEATURES

- Load Rating: 9,800 lb
- Line Speed: 15 fpm
- Travel Distance: 40 ft
- Power: 460 VAC, 3 phase
- Grooved drum for uniform spooling of wire rope.
- Non-standard drum length to increase cable capacity.
- Rotary limit switch to limit travel in both directions.
- Two cable anchors to accommodate two lift lines.
- Custom color epoxy finish to meet customer's safety specifications.

ACCOMMODATION LADDER WINCH SERVICE VESSEL OPERATOR



CHALLENGE
to raise and lower service vessel accommodation ladder during boarding and disembarking.

SOLUTION
small, conveniently located winch for controlled positioning of ladder.

PRODUCT FEATURES

- Load Rating: 1,500 lb
- Line Speed: 65 fpm
- Travel Distance: 65 ft
- Power: 460 VAC, 3 phase
- Pressure roller bar for uniform winding of wire rope.
- Stainless steel control enclosure and epoxy finish for corrosion resistance in marine environment.

ORBITER DOOR POSITIONING WINCH AEROSPACE COMPANY



CHALLENGE
to open and close large steel orbiter door at launch platform during pre-launch operations.



SOLUTION
closed loop winch system to pull protective door in front of orbiter.

PRODUCT FEATURES

- Load Rating: 65,000 lb
- Line Speed: 13 fpm
- Travel Distance: 63 ft
- Power: 460 VAC, 3 phase
- Single drum with two cable anchors for closed loop operation.
- Grooved drum for uniform winding of cable.
- Rotary limit switch to limit travel in both directions.
- Yellow epoxy finish provides protection in harsh environment.
- Variable speed controls with encoder for accurate positioning and soft starting and stopping.