

## ACROBAT HOIST ZERO FLEET DESIGN

Green Stage Machinery Ltd is proud to introduce its Zero Fleet Acrobat Hoist.

Our Zero Fleet Acrobat Hoist has a Safe Working Load capacity of 400 lb with output speeds ranging from 120 F.P.M. to 600 F.P.M. and travel distances from 30 to 120 feet.

The key components and materials for the **Modular Zero Fleet Acrobat Hoist** have been carefully selected to ensure absolute safety, reliability and serviceability of the hoist.

The motorized geared reducer consisting of the motor, gearbox, primary disc brake and encoder is supplied from a single sourced manufacturer whom is renowned for their superb engineering quality and worldwide technical and maintenance support.

Gearboxes are designed around a helical bevel gear unit. This type of gearing is highly efficient and is designed to withstand the rigorous acceleration, braking and reversing demands of performer powered flying. The high performance gear units selected by Green Stage Machinery Ltd have noise optimized motors and gearing with a minimum AGMA service factor of 1.0 and a mechanical strength service factor of 2.0.

For reasons of absolute safety, each hoist unit is fitted with a secondary spring applied 'mechanical fail safe' electrically released disc brake as standard.

The hauling drum is of a 6351-T6 aluminum construction and is precision machined to ensure constant rope layering along its entire length. The drum shafting is of high-grade steel and is supported at the gear head by high capacity bearings and at its opposite end by a self-aligning flange bearing.

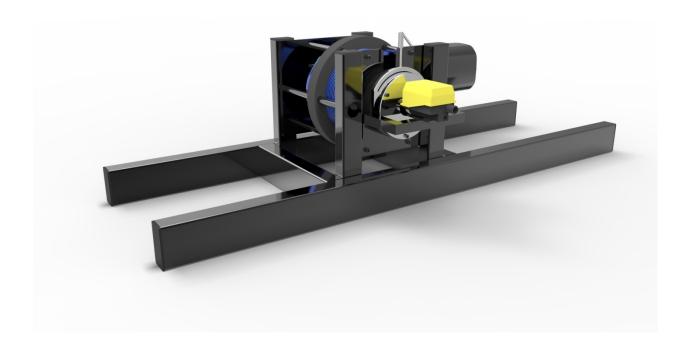
Each winch is equipped with a positively driven rotary limit box that contains normal travel and ultimate over travel limit switches.

Each hauling drum is fitted with a 'patent pending' zero fleet drive mechanism that ensures smooth and constant linear motion of the drum.

Each drum is protected by four (4) cable retaining bars to prevent cross grooving of the suspension cables, one of which has been electrically isolated for use as a low voltage slack cable detector.

An optional cable guide roller can be fitted to the hoist frame to ensure that the alignment of the hauling cable to the hauling drum remains constant during operation.





The GSM standard ACROBAT HOIST is designed to meet or exceed the following specification:

Acrobat Hoist S.W.L. = 400 lb

Hoist Speed. = 120 feet - 600 feet / minute

Max. Acceleration = 10 feet / ^2

Max. Travel Distance = 120 feet

Suspension Cable =  $\emptyset$  3/16" - 7x19 Galvanized Wire Rope

Number of Lift Lines = One (1) on standard unit (min cable F.O.S = 12:1)

Duty Cycle = 100 % Continuously Rated