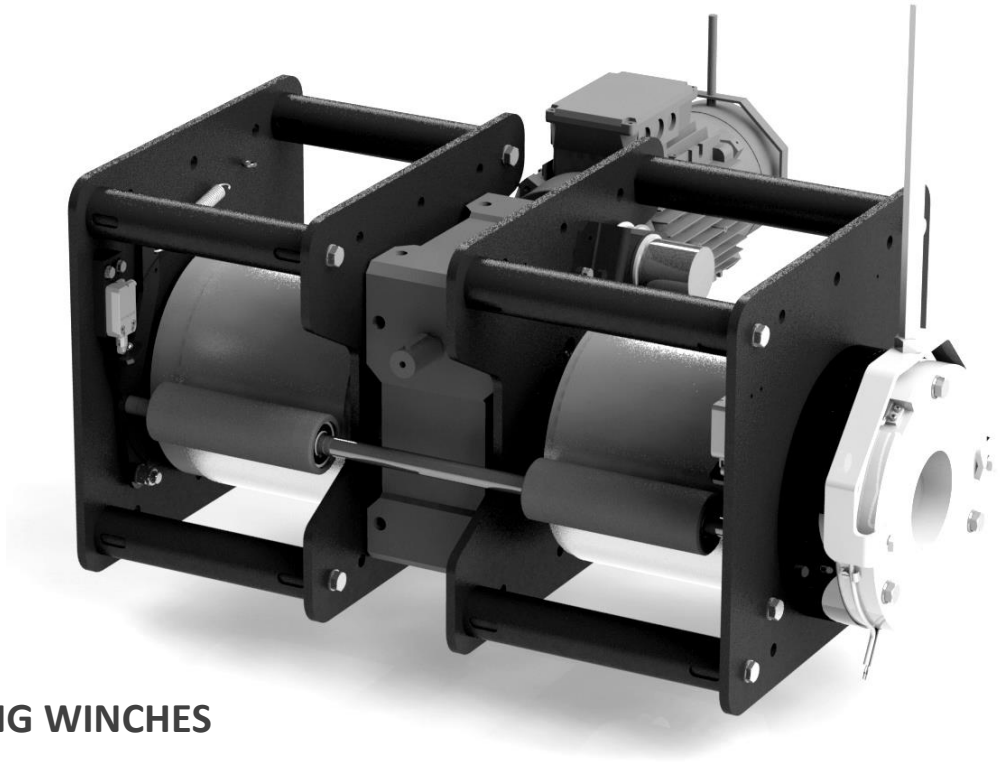
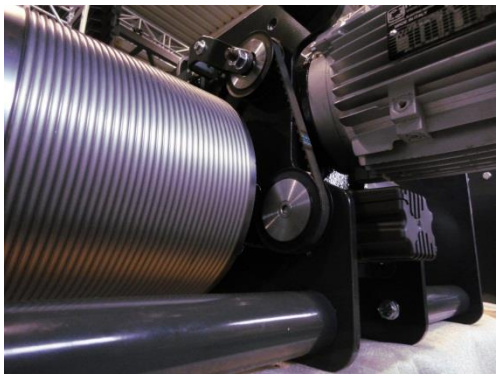


EVENT SOLUTIONS

POWERED FLYING WINCHES

Sky Winch

Delivering flying effects in the easiest way



A simple construction still bringing versatility and a design meeting the needs of the touring use.
Maintenance-free, simple to install and, above all, safe enough for high demanding applications.

ALFASYSTEM

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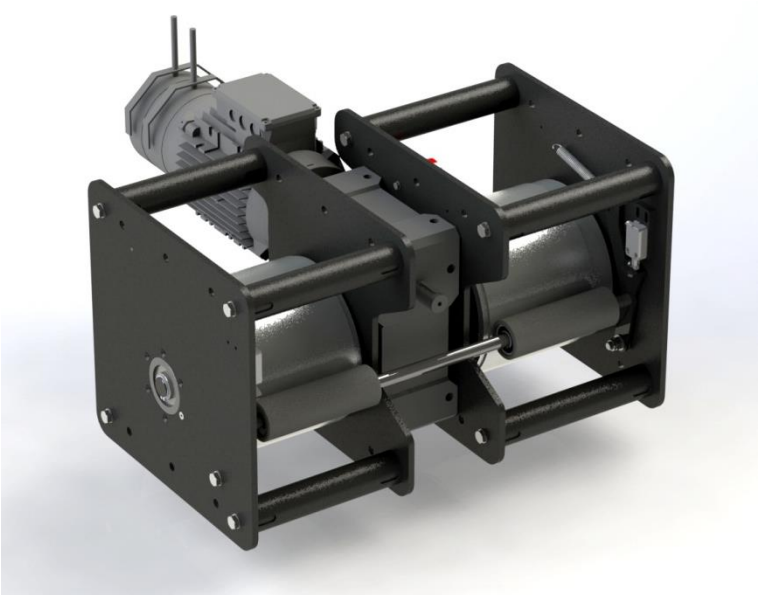
Sky Winch

Sky winch is a two lines hoist designed for touring and rental applications. It consists of a winding unit featuring two drums, one to each side of the gearbox, enclosed within an aluminum frame matching a standard square truss size 40. The lifting lines leave the drum directly without any diversion.



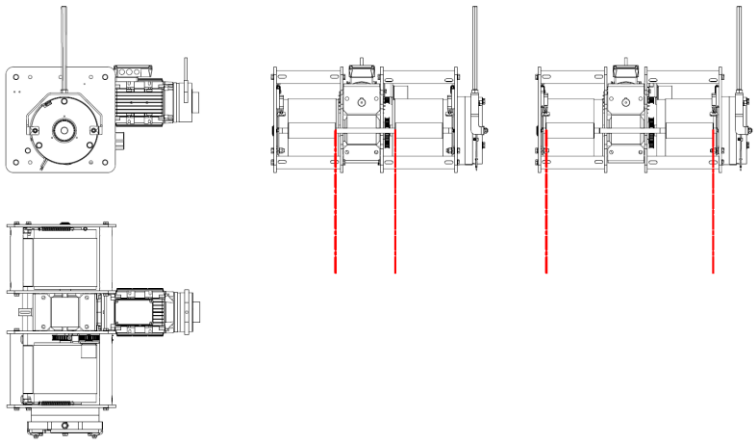
SIMPLY VERSATILE

Sky winch is the ideal solution when the hoist can be installed right above the load, directly clamped to a truss or a trolley. It can also be placed at stage floor, with the lifting lines going straight to the grid and here diverted in any direction by an head block.

Matching different truss sizes Sky winch can be fixed directly to a standard truss by using common aluminum clamps. The chords of the frame can be easily repositioned to meet a truss size 40 or size 30.

One or two lines, same performances No matter if the second line is a trouble. Just take it away and put all the load on one line only, without any limitation.

Alternative line interaxis Depending on the application, you might need the lines to leave the winch on a closer position. Not a problem, a few moments and the winch can be reconfigured.



Configuration example: Sky-1 Winch - 3 kW power - FEM / ISO class: 2m / M5
WLL 125 kg at 1.84 m/s - 4 m/s^2 maximum acceleration
20 m travel - 2xØ5 mm, non-rotating steed wire rope
External dimensions: 820 x 760 x 415 mm - 190 kg dead load

SAFETY AND RELIABILITY FOR HIGH DEMANDING APPLICATIONS

Sky winch is developed and manufactured according to the European standards and the international guidelines for stage engineering and machinery (CWA 15902, DIN 56950, FEM 9.756, etc…).

High safety factors Faults are excluded by applying high safety factors as a standard rule. All components between the load and the brakes are designed for a minimum of two times the dynamic load; wire ropes have a dynamic safety factor greater than 10.

High reliability Sky winch's components are designed to perform a working life of 1600 hours at full load and full speed, without any need to be replaced.

Double-braking Sky winch is equipped with two independent braking units, each able to safely stop the load.

Load side brake One of the two braking units can be installed in the drum side, to give the maximum level of safety.

Double limit switches Movement of the load is limited by means of two travel switches. Two over-travel switches, with separate and redundant circuits, stop the winch in the event of a failure of the first switches.

Encoders Speed and position are measured by incremental and absolute encoders. Different interfaces are available.

Load sensor Load sensing is provided by a separate anchoring plate, to be installed on top of the winch, giving a precise and direct measure of the load.

Keeper roller The rope is kept in its intended groove in the drum by means of a spring-loaded keeper roller.

Cross-groove detection Two microswitches, activated by the keeper roller, inhibits upward motion should the wire rope come out of its groove.

Low maintenance All components are lubricated for life or are self-lubricating. The high reliability of the components ensures low-maintenance and no need for replacements.

Cover Sky winch can be provided with cover elements specially designed to fit the specific installation.

CONTROL OPTIONS

Sky winch can be used with any control system suitable for high speed applications.

SIL3 / PLe ready All devices provided with the winch are suited for use in safety-related applications up to SIL3 according to EN 61508 or PLe to EN ISO 13849.

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