

MOTORIZED BAR HOISTS SPIRAL DRUM North American - Imperial Range

Green Stage Machinery Ltd offers a complete range of Motorized Bar Hoists to suit the most demanding applications of Over Stage theatrical applications.

The most common type of hoist used for High Speed Powered Flying theatrical applications is the Spiral Groove Drum Hoist. This type of hoist has a single drum, which carries the suspension lines in a single layer along its length. This type of design ensures that the hoist drive has constant speed and constant torque characteristics.

Spiral Drum Bar Hoists are available in a variety of speed and load combinations to suit the most demanding of Bar Hoist and Point Hoist single purchase and double purchase applications.

The key components of the hoist unit are the motor, gearbox, primary disc brake and encoder. For reasons of safety, reliability and serviceability these items are supplied as a single integral unit from a single sourced manufacturer whom is renowned for their superb engineering quality and worldwide technical and maintenance support.

Gearboxes in the high-speed hoist range are typically designed around the helical bevel or helical worm gear units. This type of gearing is highly efficient and is designed to withstand the rigorous acceleration, braking and reversing demands of theatre 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 is fitted with a secondary spring applied 'mechanical fail safe' electrically released disc brake as standard.

Each drum is of an all welded steel 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.



TYPE	ORDERING EXAMPLES	CAPACITY / DISTANCE	NUMBER OF SUSPENSIONS	HOIST SPEED
Bar Hoist	BH-I-2200-66-3-180	2200 lb – 66 ft	3,4,5,6,7 & 8 Line	180 F.P.M.
Bar Hoist	BH-I-2200-66-4-300	2200 lb – 66 ft	3,4,5,6,7 & 8 Line	300 F.P.M.
Bar Hoist	BH-I-2200-66-5-360	2200 lb – 66 ft	3,4,5,6,7 & 8 Line	360 F.P.M.
Bar Hoist	BH-I-1100-66-6-180	1100 lb – 66 ft	3,4,5,6,7 & 8 Line	180 F.P.M.
Bar Hoist	BH-I-1100-66-7-300	1100 lb – 66 ft	3,4,5,6,7 & 8 Line	300 F.P.M.
Bar Hoist	BH-I-1100-66-8-360	1100 lb – 66 ft	3,4,5,6,7 & 8 Line	360 F.P.M.
Point Hoist	PH-I-850- 66-1-180	850 lb – 66 ft	Single Line	180 F.P.M.
Point Hoist	PH-I-850- 66-1-300	850 lb – 66 ft	Single Line	300 F.P.M.
Point Hoist	PH-I-850- 66-1-360	850 lb – 66 ft	Single Line	360 F.P.M.
Point Hoist	PH-I-450-130-1-360	450 lb – 130 ft	Single Line	360 F.P.M.
Point Hoist	PH-I-450-130-1-600	450 lb – 130 ft	Single Line	600 F.P.M.
Point Hoist	PH-I-450-130-1-720	450 lb – 130 ft	Single Line	720 F.P.M.

Other Load / Distance / Speed combinations are available - Enquiry / Ordering Example:

Bar Hoist – Type (Imperial) – Hoist Load (lb) – Travel (ft) – No of Lines – Hoist Speed (F.P.M.)

BH – I – 2200 – 66 – 3 – 180