

Title (en)

Cable arrangement and lifting platform for stabilized load lifting.

Title (de)

Kabelanordnung und Hebeplattform zum Stabilisieren einer Last beim Heben.

Title (fr)

Dispositif de câble et plate-forme de levage pour stabiliser une charge pendant le levage.

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Application

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Priority

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Abstract (en)

The present invention is directed to a cable arrangement and lifting platform for lifting a load in a stabilized manner. The lifting platform (12) secures loads to a securing device and the platform (12) is able to be suspended from a crane by an attachment carriage (11). The attachment carriage (11) includes a cable winch (23) onto which six cables (C#SB1#, C#SB2#, C#SB3#, C#SB4#, C#SB5#, C#SB6#) suspend and attach to the lifting platform (12). The attachment carriage (11) also includes cable guides (G#SB1#, G#SB2#, G#SB3#) which guide the six cables away from the winch (23) in three cable pairs (C#SB1#-C#SB2#, C#SB3#-C#SB4#, C#SB5#-C#SB6#), preferably equidistantly-spaced. In order to secure the cables to the lifting platform (12), the platform includes an attachment frame (41) having three cable attachment points (13, 14, 15), preferably spaced equidistantly apart with respect to each other. The lifting platform (12) helps stabilize the lifting of loads by sensing the load's imbalance relative to the center of mass of the platform and repositioning the load to correct for the imbalance. In addition, in order to precisely position the load and exert controlled forces on the load in all six degrees of freedom, the present invention includes a device (50) for rotating the load in a 360 DEG angle relative to the horizontal plane, a device for adjusting the tilt position of the load up to a 90 DEG angle relative to the horizontal plane of the platform, and a device (51) for rotating the load in a 360 DEG angle about the longitudinal axis of the load securing device.

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