DESIGN OF DEVICE FOR TOWING TROLLEYS

Project report submitted by

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in part satisfaction of the award of Diploma of Technician Engineer in Mechanical Engineering of the Higher Technical Institure, Cyprus.

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Type of Project : Individual [✓]

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June 1989

OVERHEAD CONVEYORS

A. General description and purpose.

Overhead or trolley conveyors of the main load-carrying type (Figure 1) consist of the endless pulling member 1, securing trolleys 2, to which are suspended carriers 3, holding loads 4. The trolleys move along overhead track 5, following a closed loop. The track is suspended from strustural members of the building or is supported from the ground by suitable stanchions.

The pulling member (a special chain of the "biflex" or "biplanar" type, sometimes a steel rope) is flexible in two planes and enables the conveyor to run up and down and around corners, ie permits it to have bends in two planes and in any direction. The pulling member receives motion from drive 6. The pulling member is taken over-bends in the horizontal plane by means of turning pulleys or sprockets 7 or roller banks and guided over vertical bands by bent track sections 8.

The carriers are loaded and unloaded en route. This may be done at one or more points of the conveying run, either manually or automatically by devices of different design. The closed loop path of the conveyor permits to transport materials practically along the whole length of the conveyor.

Overhead conveyors are used for continuous (less often, intermittent) intrashop and intershop conveyance of various units loads (blanks, semi-finished articles, parts and assemblies, packaged items etc.) and pachaged bulk materials and also for in-process movement of goods, building materials etc.

C O N T E N T S