CEMA STANDARD NO. 405-2003

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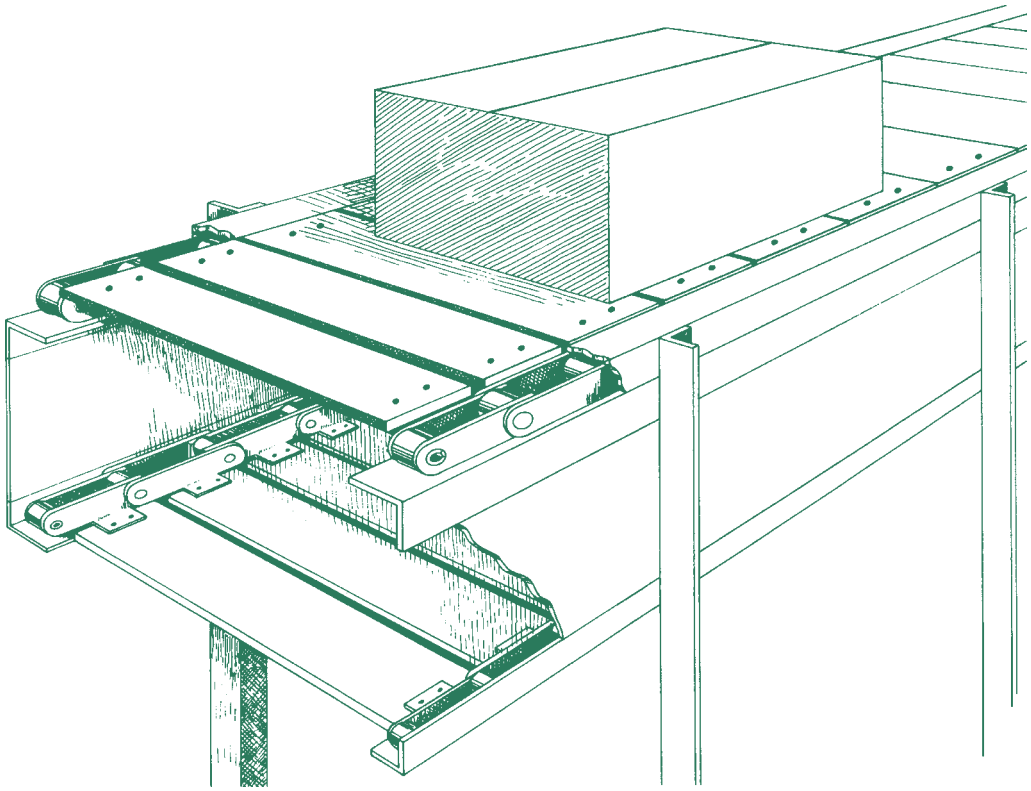
SLAT CONVEYORS



Unit Handling Conveyors

Conveyor Equipment
Manufacturers Association

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FOREWORD

Slat conveyors are used for the controlled movement of a great variety of regular or irregular shaped commodities. The conveyor may be level, inclined, declined, or curved, limited only by the stability of the commodity, the frictional relation of the slats and the commodity, and the strength of the conveyor elements. Slat conveyors can be operated at the speed best suited for the work being performed. They are frequently used for conveying commodities through assembly and testing operations. Their use simplifies the coordination of varied operations.

The purpose of this work is to establish minimum standards for use in manufacturing and applying unit handling slat conveyors.

For additional information relating to definitions and selection of common components, see the latest edition of the following publications: ANSI/CEMA Standard No. 102, Conveyor Terms and Definitions; ANSI/CEMA Standard No. 401, Roller Conveyors - Non Powered; ANSI/CEMA Standard No. 402, Belt Conveyors; ANSI/CEMA Standard No. 403, Belt Driven Live Roller Conveyors; ANSI/CEMA Standard No. 404, Chain Driven Live Roller Conveyors; and ANSI/CEMA Standard No. 406, Lineshaft Driven Live Roller Conveyors.

The illustrations throughout this book are schematic in nature and represent the general nature of a particular device. The illustrations are not intended to represent the recommended safety configurations since guarding has been omitted to permit clarity in showing the operational characteristics of the device. Refer to the current editions of ANSI/ASME B20.1, Safety Standard for Conveyors and Related Equipment; ANSI/ASME B15.1, Safety Standard for Mechanical Power Transmission Apparatus; and ANSI Z244.1, American National Safety Standards for Lock-out/Tag-out of Energy Sources - Minimum Safety Requirements; Title 29, Code of Federal Regulations (29 C.F.R.) Part 1910.147, The Control of Hazardous Energy (lock-out/tag-out); Title 29, Code of Federal Regulations (29 C.F.R.) Part 1910 Subpart O, Machinery and Machine Guarding. Consult ASME or ANSI for the latest editions.

In 2003 Edition, A Safety Notice regarding Industry Standard Safety Labels has been added, Terms and Definitions have been modified to conform with ANSI/CEMA standard No. 102: Conveyor Terms and Definitions, Chart 1 "Shafts for Combined Tension and Bending" has been expanded to cover more combinations of moment, Additional clarification in the section on "Selecting Chains and Sprockets for Conveyor Service", "Note" added to Table 5 "Service Factors"

TABLE OF CONTENTS