

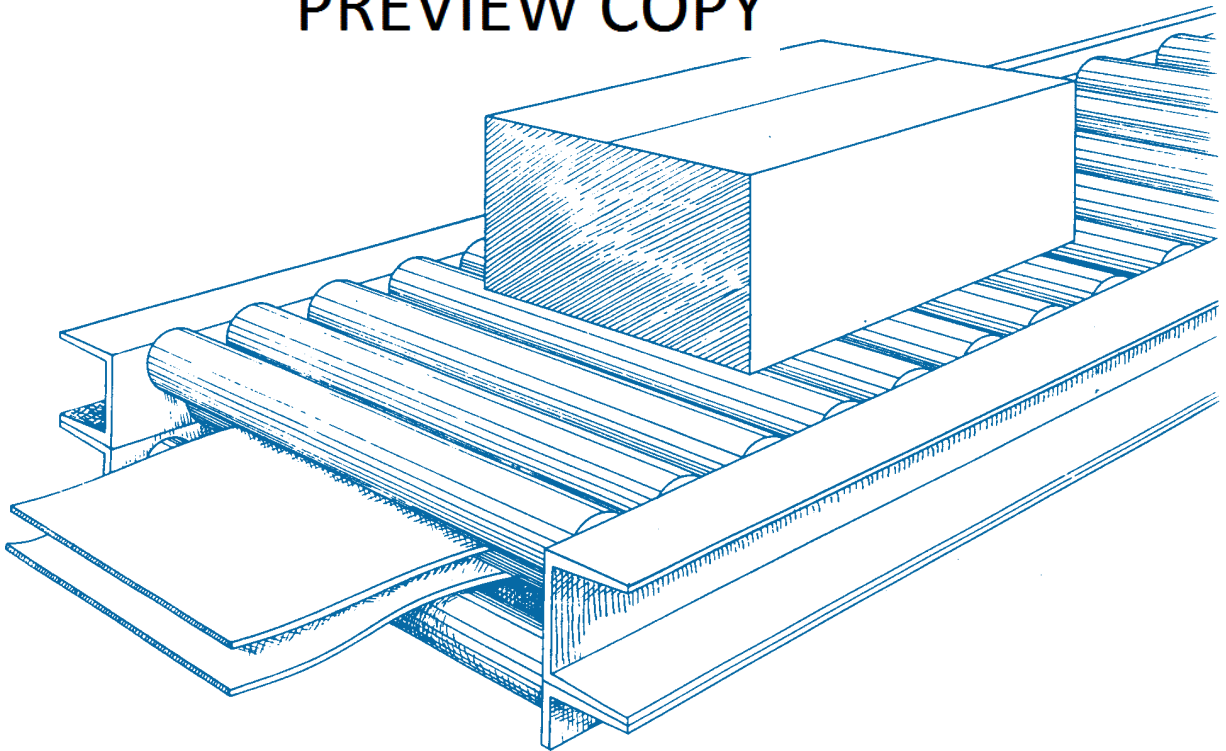
CEMA STANDARD NO. 403-2003



ANSI/CEMA 403-2003 (R2009)
Reaffirmation of ANSI/CEMA 403-2003
(Approved January 22, 2009)

BELT DRIVEN LIVE ROLLER CONVEYORS

PREVIEW COPY



Unit Handling Conveyors



Conveyor Equipment
Manufacturers Association

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FOREWORD

Belt driven live roller conveyors--conveyors which use a roller bed for the carrying surface and a belt as a driving medium--are used for the controlled movement of a great variety of regular or irregular shaped loads, from light and fragile to heavy and rugged unit loads. The bottom surface of the load must be conveyable on a roller bed.

The path is usually horizontal, but it can be slightly inclined or declined, limited only by the friction between the rollers, drive belt, and the load.

Belt driven live roller conveyors can be operated at the speed best suited for the work being performed. They are used where unit loads are allowed to accumulate causing blocked line conditions, as a pacesetter for assembly operation, for loading on and off, for transportation, or as a timing medium for integrated handling systems.

The purpose of this work is to establish certain minimum standards for use by concerns manufacturing or utilizing unit handling live roller conveyors.

For additional information relating to definitions and selection of common components, see the latest edition of the following publications: CEMA Standard No. 102, *Conveyor Terms and Definitions*; CEMA Standard No. 401, *Belt Conveyors*; CEMA Standard No. 402, *Belt Conveyors*; CEMA Standard No. 404, *Chain Driven Live Roller Conveyors*; CEMA Standard No. 405, *Slat Conveyors*; and 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 Lockout/Tagout of Energy Sources - Minimum Safety Requirements*; Title 29,

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**Note - CEMA Has Reaffirmed the 2003 Edition.
This 2009 Edition is Identical to the 2003 Edition**

SUMMARY OF CHANGES IN 2003 EDITION

- All drawings have been cleaned up and enhanced for clarity where necessary.
- Foreword has been updated to include new Safety References.
- A Safety Notice regarding Industry Standard Safety Labels has been added.
- Terms and Definitions have been edited to conform with those in ANSI/CEMA 102 “Conveyor Terms and Definitions”.
- All Figures and charts have been redrawn and, in some cases, modified for clarity

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Reviewed by the
Unit Handling Section
of the
CEMA Engineering Conference**