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**CEMA Standard No. 407**

# **Motor Driven Live Roller (MDR) Conveyors**



Conveyor Equipment Manufacturers Association

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## FOREWORD

Motor Driven Live Roller (MDR) Conveyors – Conveyors which use individual motors and rollers as a carrying surface, or utilize a belt as a carrying 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 path may be horizontal, inclined or declined, limited by the stability of the load and the friction between the carrying surface and the load.

MDR conveyors typically can be set-up to the speed best suited for the work being performed, and in some cases variable speeds can be used. They are used where unit loads are allowed to accumulate, typically with no load to load contact, causing blocked line conditions, as a pace setter for assembly operation, for loading on and off, or for transportation.

The Unit Handling Conveyor Section of the Conveyor Equipment Manufacturers Association has the responsibility for maintenance of this standard. The purpose of this standard is to establish certain minimum standards for use in the design and application of motor driven live roller conveyors. For additional information relating to definitions and selection of common components, see current edition of ANSI/CEMA Standard No. 102, Conveyor Terms and Definitions.

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.

## TABLE OF CONTENTS

		<b>Page</b>
Sections		
1	<b>Definitions</b>	1
	Typical cross section	3
2	<b>Applications</b>	5
	Conveyor width	5
	Speed and load	7
	Conveyor bed	7
	Straight beds	8
	Inclined / declines conveyors	8
	Slope	8
	Nose-overs / power feeder	9
	Curves	9
	Transfer / diverters	9
	Merge Spurs	10
	Control options	10
	Supports	11
	Belting selection	11
3	<b>Technical Data</b>	12
	Roller selection	12
	Torque requirements	12
	Speed requirements	13