



2019 CEMA ENGINEERING CONFERENCE

UNIT HANDLING SECTION MEETING

La Playa Hotel, Naples, FL

Tuesday, June 25, 2019 – 8:00 am

AGENDA

1. Call to order
2. Review of the committee purpose
The purpose of the Unit Handling committee is to prepare and govern CEMA publications and standards relative to Unit Handling conveyors. This is conducted in support of the CEMA organizational purpose of promoting standardization of design, safety, manufacture and application on a voluntary basis and in such manner as will not impede development of conveying equipment and component parts or lessen competition
3. Attendance and introductions
4. Review and approval of Agenda
5. Review and approval of June 26, 2018 minutes (attached)
6. Old Business
 - a) **CEMA Standards for Unit Handling**
 - ANSI/CEMA Std. No. 102 Conveyor Terms & Definitions – Subcommittee Updates
 - ANSI/CEMA Std. 401 – 2003 (R2015) Roller Conveyors (Dan Modzeleski) – ANSI Revision. (Attached Draft 1)
 - ANSI/CEMA Std. 402 – 2003 (R2015) Belt Conveyors (Ron Wagner) – ANSI Revision or Reaffirmation. (Attached)
 - ANSI/CEMA Std. 403 – 2003 (R2015) Belt Driven Live Roller Conveyors (Boyce Bonham) – ANSI Revision or Reaffirmation. (Attached)
 - ANSI/CEMA Std. 404 – 2003 (R2015) Chain Driven Live Roller Conveyors (Mitch Smith) – ANSI Revision or Reaffirmation. (Attached)
 - ANSI/CEMA Std. 405 – 2003 (R2015) Slat Conveyors (Boyce Bonham) – ANSI Revision or Reaffirmation. (Attached)
 - ANSI/CEMA Std. 406 – 2003 (R2015) Line Shaft Driven Conveyors (Mitch Smith) – ANSI Revision. (Attached Draft 1)
 - ANSI/CEMA Std. 407 – 2019 Motor Driven Live Roller Conveyors (Randy Carlson) – Adopted as an American National Standard.

- CEMA 601 – 1995 Overhead Trolley Conveyors (Mike Wohletz) – Draft 3 Review (Attached).
 - b) **Review documented Manufactures of equipment relative to each standard**
 - ANSI/CEMA Std. 401 – Dematic, Honeywell Intelligrated, Hytrol, and Arrowhead
 - ANSI/CEMA Std. 402 – Honeywell Intelligrated, Dematic, Hytrol, Transnorm, Interroll, Arrowhead, Bunting Magnetics, and Talos
 - ANSI/CEMA Std. 403 – Intelligrated, Dematic, and Hytrol
 - ANSI/CEMA Std. 404 – Dematic, Honeywell Intelligrated, Hytrol, and Arrowhead
 - ANSI/CEMA Std. 405 – Dematic, Honeywell Intelligrated, and Hytrol
 - ANSI/CEMA Std. 406 – Dematic, Honeywell Intelligrated, and Hytrol
 - ANSI/CEMA Std. 407 – Dematic, Honeywell Intelligrated, Hytrol, and Wynright
 - CEMA Std. 601 – Automatic Systems, Inc
 - c) **CEMA Unit Safety Video** – Status, inventory and sales
 - d) **CEMA Application Guide for Unit Handling Conveyors, 2nd Edition** – Status, inventory and sales. Marketing Committee optional sales ideas.
 - e) **Industry Standard Updates**
 - i. NFPA79
 - ii. Others
 - f) **MDR Safety Review Committee** – Updates
 - g) **Additional Conveyor Products under review for CEMA Standards** – Updates
 - i. Extendible Conveyors – Updates
 - ii. Loop Sorters – Updates
 - h) **CEMA White Paper**
 - a. “New Developments in the IIOT can Optimize Operations”.
Author: Charlie Ritinski, Sumitomo Machinery Corporation of America.
7. New Business
- a) **CEMA White Papers** – Volunteers needed
 - b) **CEMA Publications Report** (Attached)
8. Next Meeting – June 16, 2020, La Playa Hotel, Naples, FL
9. Adjourn

Ron Wagner, Chair
Rodney Mishmash, Vice Chair



MINUTES OF THE CEMA ENGINEERING CONFERENCE UNIT HANDLING SECTION MEETING Tuesday, June 26, 2018

1. Call to order
Section Chair, Ron Wagner, Honeywell Intelligrated, Inc.; called the meeting to order at 8:05 am.
2. The committee purpose was read.
3. An attendance sheet was circulated (attached).
4. The current agenda was approved.
5. Minutes from the June 27, 2017 were reviewed and approved.
6. Old Business.
 - a) **CEMA Standards for Unit Handling.**
 1. ANSI/CEMA Std. No. 102 Conveyor Terms & Definitions – Status update from the sub-committee and Bulk Handling group inputs.
 - Two (2) separate groups were working to provide review and inputs. The groups are consolidated to one (1) working group with Boyce Bonham, Hytrol Conveyor Co., Inc.; Ken Soldan, Wynright, Daifuku North America; and Dan Modzeleski, Dematic.
 - Naylu received inputs from Joe Pahlow, Arrowhead Conveyor Corporation; previously and is coordinating the inputs from all into the final document. Naylu provided input for term combining and appendix relevance, which will be reviewed by the group.
 - The group agreed to a **December 2018** deadline for completion. Bulk has assigned resources to review.
 2. CEMA 401 – 2003 (R2015) Roller Conveyors (Dan Modzeleski)
 - No content changes required
 3. CEMA 402 – 2003 (R2015) Belt Conveyors (Ron Wagner)
 - No content changes required
 4. CEMA 403 – 2003 (R2015) Belt Driven Live Roller Conveyors (Boyce Bonham)
 - No content changes required
 5. CEMA 404 – 2003 (R2015) Chain Driven Live Roller Conveyors (Mitch Smith)
 - Change the assigned steward from Brandy Lloyd to Mitch Smith, Hytrol Conveyor Co., Inc.
 6. CEMA 405 – 2003 (R2015) Slat Conveyors (Boyce Bonham)
 - No content changes required
 7. CEMA 406 – 2003 (R2015) Line Shaft Driven Conveyors (Mitch Smith)
 - Change the assigned steward from Brandy Lloyd to Mitch Smith, Hytrol

Conveyor Co., Inc.

8. CEMA 407 – 2015 Motor Driven Live Roller Conveyors (Randy Carlson)

- No content changes required

9. CEMA 601 – 1995 Overhead Trolley Conveyors (Mike Wohletz)

- See New Business section

b) Review documented Manufactures of equipment relative to each standard

1. CEMA 401 – Dematic, Honeywell Intelligrated Inc., Hytrol Conveyor Co., Inc.; and Arrowhead Conveyor Corporation

- Add Wynright, Daifuku North America; Bastian Solutions and INTERROLL Corporation.

2. CEMA 402 – Honeywell Intelligrated Inc., Dematic, Hytrol Conveyor Co., Inc.; Transnorm System, Inc., INTERROLL Corporation, Arrowhead Conveyor Corporation, Bunting Magnetics Co., and Talos Engineered Products, LLC.

- Add Wynright, Daifuku North America and Bastian Solutions.

3. CEMA 403 – Honeywell Intelligrated Inc., Dematic, and Hytrol Conveyor Co., Inc.

- Add Arrowhead Conveyor Corporation; Wynright, Daifuku North America and Bastian Solutions.

4. CEMA 404 – Dematic, Honeywell Intelligrated Inc., Hytrol Conveyor Co., Inc.; and Arrowhead Conveyor Corporation.

- No changes.

5. CEMA 405 – Dematic, Honeywell Intelligrated Inc., and Hytrol Conveyor Co.

- Add Wynright, Daifuku North America; Bastian Solutions and INTERROLL Corporation.

6. CEMA 406 – Dematic, Honeywell Intelligrated Inc., and Hytrol Conveyor Co.

- No changes.

7. CEMA 407 – Dematic, Honeywell Intelligrated Inc., Hytrol Conveyor Co., and Wynright, Daifuku North America.

- Add INTERROLL Corporation, Bastian Solutions and Itoh Denki USA, Inc.

8. CEMA 601 – Companies involved?

- Add Automatic Systems, Inc.

c) CEMA Unit Safety Video – Status, inventory and sales

Reported the sales number as 82 in 2018 as shown in minutes from Annual Meeting. No other discussion.

d) CEMA Application Guide for Unit Handling Conveyors, 2nd Edition - Status, inventory and sales

- 24 sold YTD. 43 in inventory. 656 of 2nd edition sold of PDF and hardcopy.
- Discussion of lower than expected sales occurred. Action item to have Marketing committee review concern. The marketing committee was to be engaged to see if there are any other ideas to help drive sales.

e) Industry Standard Updates

- NFPA79 - Bill Brungs, Honeywell Intelligrated Inc.; provided update relative to NFPA79. Current edition is 2018 and the next release, 2021 is open for public input now. He asked for more companies to try to provide input and join the technical committee to have higher representation from our industry.

f) MDR Safety Review Committee

Sub-Committee: Dan Modzeleski, Dematic; Ron Wagner, Honeywell Intelligrated Inc.; Donald Erickson, Wynright, Daifuku North America; Rodney Mishmash, INTERROLL

Corporation.

- Chairman Randy Carlson was not in attendance. Ron Wagner read through summary provided by sub-committee.
 - The Unit Handling committee agrees that the work should continue by the sub-committee with the following inputs and goals:
 - Standardize the measurement method of testing/validation
 - Sub-committee companies to conclude testing with device created by Dematic
 - Review ISO/PDTS 15066, collaborative robot standard for any applicable information to forces or safety
 - Review label placement recommendations
 - Add Troy Uahinui, Honeywell Intelligrated Inc. and Boyce Bonham, Hytrol Conveyor Co., Inc. to committee communications.
- g) **The Current Technology and Codes Associated to Motors** – Presentation by Charlie Ritinski, Jim Alt and Stephanie Berry.
- Tim Schumann, SEW-Eurodrive, Inc.; provided the presentation “Improving Efficiency with Technology and Standards” to the committee (Attached).
- h) **Additional Conveyor Products under review for CEMA Standards – Updates**
1. Extendible Conveyors
Sub-Committee: Mike Hake, Transnorm System, Inc.; will lead with assistance of Dan Modzeleski, Dematic; Bart Natoli, Habasit America; and Patrick Cucco, Ashland Conveyor Products.
 - No work occurred, but committee agreed to continue review.
 2. Loop Sorters
Sub-Committee: Rodney Mishmash, INTERROLL Corporation; will lead the investigation with assistance of Shawn Grubb, Honeywell Intelligrated Inc.; and Randy Carlson, Dematic.
 - No work occurred, but committee agreed to continue review.
7. Election of a 2nd Vice Chair for Engineering Conference for the Unit Handling Section.
- Rodney Mishmash, INTERROLL Corporation; was elected as the UH Committee representative as 2nd Vice Chair of the 2019 CEMA Engineering Conference.
 - Rodney will also become the Unit Handling Section Vice Chair and move into the Chair position in 2021.
8. New Business
- a) **Submit CEMA Std. No. 407 to consensus for ANSI Certification.**
 - The section voted and approved the submission of the CEMA Std. 407 to ANSI.
 - b) **CEMA Std. 601 – Review Proposal.**
 - Mike Wohletz, Automatic Systems, Inc.; will lead review of 601 in cooperation with Naylu.
 - Mike will confirm that Std. 601 compares with information that is in Unit Handling book.
 - Question brought forth if standard should still exist separate from book.
 - Ken Soldan, Wynright, Daifuku North America; to reach out to Jervis B Webb to see if any assistance is available.

- Mike to provide recommendation of actions by October 1,2018.
- c) **CEMA Whitepaper – Volunteers needed.**
 - The motor presentation given was proposed to be turned into a whitepaper. Jim Alt, NORD Drivesystems to coordinate.
 - Another suggestion of IOT/Industry 4.0 whitepaper was presented. Another suggestion of IOT/Industry 4.0 whitepaper was presented. Charlie Ritinski, Sumitomo Machinery Corp. of America; will lead with Jim Alt, NORD Drivesystems and Mike Stegmann, Boston Gear.

9. Next Meeting – June 25, 2019, La Playa Hotel, Naples, FL.

10. The meeting was adjourned at 11:45 am.

Respectfully submitted,
Ron Wagner, Chair

2019 CEMA Engineering Conference
Status of CEMA Publications as of June 2019

ANSI Standards Status

General

- **ANSI/CEMA Std. 102 (2012) “Conveyor Terms and Definitions”** – Revision in progress. (ANSI extended our deadline revision until 2019)

Screw Conveyor/Bucket Elevator

- **ANSI/CEMA Std. 300 (2015) “Screw Conveyor Dimensional Standards”** – ANSI Revision due 2020. Metric conversion needed.
- **ANSI/CEMA Std. 350 (2015) “Screw Conveyors for Bulk Materials”** – ANSI Revision due 2020. Metric conversion needed.

Unit Handling

- **ANSI/CEMA Std. 401-2003 (R2015) “Roller Conveyors - Non-Powered”** – ANSI Revision due 2020. The formula for determining width between frames (or guard rails) for curves was updated to be consistent with Unit Book.
- **ANSI/CEMA Std. 402-2003 (R2015) “Belt Conveyors”** – ANSI Revision or reaffirmation due 2020. Need metric examples? Calculations must be performed in the English system, and answers may be converted to metric?
- **ANSI/CEMA Std. 403-2003 (R2015) “Belt Driven Live Roller Conveyors”** – ANSI Revision or reaffirmation due 2020. Need metric examples? Calculations must be performed in the English system, and answers may be converted to metric?
- **ANSI/CEMA Std. 404-2003 (R2015) “Chain Driven Live Roller Conveyors”** – ANSI Revision or reaffirmation due 2020.
- **ANSI/CEMA Std. 405-2003 (R2015) “Slat Conveyors”** – ANSI Revision or reaffirmation due 2020. Calculations must be performed in the English system, and answers may be converted to metric?
- **ANSI/CEMA Std. 406-2003 (R2015) “Lineshaft Driven Live Roller Conveyors”** – ANSI Revision due 2020. The formula for determining width between frames (or guard rails) for curves was updated to be consistent with Unit Book. Calculations must be performed in the English system, and answers may be converted to metric?
- **ANSI/CEMA Std. 407 (2019) “Motor Driven Live Roller (MDR) Conveyors”** – approved to be adopted as an American National Standard on February 15, 2019. Calculations must be performed in the English system, and answers may be converted to metric?

Pulley

- **ANSI/CEMA Std. 501.1 (2015) “Specifications for Welded Steel Wing Pulleys”** – ANSI Revision or reaffirmation due 2020.
- **ANSI/CEMA Std. B105.1 (2015) “Specifications for Welded Steel Conveyor Pulleys with Compression Type Hubs”** – ANSI Revision or reaffirmation due 2020. Addendum stating Balancing Standard (Pulley Committee – 2019 EC)

Bulk Handling

- **ANSI/CEMA Std. 550-2003 (R2015) “Classification and Definitions of Bulk Materials”** – ANSI Revision due 2020. Final Draft ready for approval.

Other CEMA Publications Status

Bulk Conveyor Accessories

- **CEMA Std. 575 (2013) “Bulk Material Belt Conveyor Impact Bed/Cradle: Selection and Dimensions”** – Revision in progress.
- **CEMA Std. 576 (2013) “Classification of Applications for Bulk Material Conveyor Belt Cleaning”** – Revision in progress.

Idler

- **CEMA Std. 502 (2019) “Bulk Material Belt Conveyor Troughing and Return Idlers”** – CEMA G updated dimensions approved. Standard was posted at the 2019 CEMA Annual Meeting.

Unit Handling/Chain

- **CEMA Std. 601 (1995) “Overhead Trolley Chain Conveyors”** – Draft 3 ready for review.

Screw Conveyor

- **CEMA No. 351 (2007) “Variable Frequency Drive (VFD) Selection for Screw Feeders”** – is a CEMA Std. 350 excerpt. need to be updated. Need metric conversion.