



# Conveyor Equipment Manufacturers Association

## 2020 CEMA ENGINEERING CONFERENCE CONVEYOR IDLER COMMITTEE MEETING

Thursday, August 20, 2020 – 1:30 pm

### AGENDA

1. Call to Order
2. Attendance and Introductions
3. Approval of Agenda
4. Review and approval of June 25, 2019 minutes and September 17, 2019 minutes (Attached)
5. Old Business
  - a) **High Speed Conveying** – Updates  
Subcommittee: Jim Masek, PPI (chair); Tomm Hubbert, Dos Santos International; Paul Ormsbee, Overland Conveyor Co. Inc; Paul Schmidgall, Superior Industries; Andrew Jennings, Conveyor Dynamics, Inc; Robin Steven, Contitech North America, Inc; Benjamin Brewer, Douglas Manufacturing Co. Inc; Luis Estay, Bechtel Mining and Metals; Nick Mackenzie, Rulmeca Canada Limited; Andrew Hustrulid, Shaw Almex Industries.
    - i. Five different papers on high speed conveying have been submitted and available on the CEMA website at:  
<https://cemanet.org/emerging-technologies-8th-ed-belt-book-development/>
    - ii. Call for more high-speed conveying research papers
    - iii. The main task in front of the committee is to define high speed conveying as it refers to idlers.
  - b) **Three-Roll Offset Idlers** – Updates  
Volunteer: Andrew Jennings, Conveyor Dynamics, Inc.
    - i. Better and modern description and uses to be added to the Belt Book
    - ii. Preferred direction of belt travel needs to be indicated.
  - c) **Impact Equations**  
Volunteer: Brett DeVries, FLEXCO
    - i. Need range of K values (spring constant) to be able to compare these.
  - d) **Inconsistencies between Belt Book and CEMA Standard No. 502 for Idler Selection Procedure** – Updates.  
Subcommittee: Jim Masek, PPI (chair); Paul Schmidgall, Superior Industries; Brett DeVries, FLEXCO; Paul Harrison, Martin Engineering.
    - i. Easier and less expensive to make changes to the standards
    - ii. The Belt Book lists fewer steps that CEMA Standard No. 502.

- iii. The Belt Book shows single equations for Calculated Idler Load and Material Weight while the CEMA Standard No. 502 shows both imperial and metric equations. Both are correct.
  - e) **CEMA Standards compared to International Standards (DIN, ISO, etc.). Roll Standard compared to complete idler standard, dimensions, and design limits.**  
Subcommittee: Dr. Andrew Hustrulid, Shaw Almex Industries (chair); Jim Masek, PPI; Paul Schmidgall, Superior Industries.
    - i. Compare idler roll standards and complete idler set standards, dimensions, and design limits.
    - ii. CEMA Standard No. 502 has Appendix II, which compares CEMA Standard No. 502 to international standards.
    - iii. Reference other international standards.
    - iv. Is the appendix of CEMA Standard No. 502 the best place to have this comparison?
6. New Business
- a) **CEMA White Paper**
    - i. Possible  $L_{10}$  life in idler roll bearings into a white paper.
    - ii. Call for more volunteers to submit additional white paper.
7. Next Meeting: June 15, 2021 at La Playa Hotel. Naples, FL
8. Adjourn
- Jim Masek, Chair  
Paul Schmidgall, Vice Chair