



**2022 CEMA FALL ENGINEERING CONFERENCE  
CONVEYOR IDLER COMMITTEE MEETING**

Cisco Webex Meetings  
Monday, November 7, 2022

**MINUTES**

1. Call to order  
Paul Schmidgall, Superior Industries, Inc.; Chair, called the meeting to order at 2:15 pm.
2. Attendance and Introductions – Roll call attached.
3. Approval of Minutes of June 14, 2022 – Minutes were approved.
4. Old business

a) **High-Speed Conveying for Idlers** – Updates.

Subcommittee: Jim Masek, PPI (chair); Tom Hubbert, Dos Santos International; Paul Ormsbee, Overland Conveyor Co., Inc.; Paul Schmidgall, Superior Industries, Inc.; Andrew Jennings, Conveyor Dynamics, Inc.; Benjamin Brewer, Douglas Manufacturing Co., Inc.; Luis Estay, Bechtel Corporation; Nick Mackenzie, Rulmeca Canada Limited; Dr. Andrew Hustrulid, Shaw Almex Industries; Muhammed Malik, Luff Industries Ltd.; Bob Hawkins, Continental Global Material Handling, LLC.

The subcommittee is working on a white/technical paper that will lead to an addition to the CEMA's Belt Book.

There was some discussion about what could be required from high-speed idlers such as tight TIR, balancing requirement, specific surface finish, and low TIR rate of change. The subcommittee will reach out to gather specifications from large end-users to better understand what is regularly called for in high-speed applications.

To avoid confusion the name of this item will be "How speed affects Idler Rolls". The subcommittee continues working on this project. The final draft will be presented at the 2023 CEMA Summer Engineering Conference.

b) **3-Roll Offset Idlers White Paper** – Updates

*Volunteer*: Andrew Jennings, Conveyor Dynamics, Inc.

Some references to an end-user needed to be removed before the white paper is ready. Andrew was not present during this meeting to provide updates. Paul Schmidgall will



contact him regarding the status of the white paper and get back to this committee.

c) **Impact Equations** – Updates.

Subcommittee: Brett DeVries, FLEXCO (Chair); Benjamin Brewer, Douglas Manufacturing Co., Inc.; Tony Van Zee & Jim Masek, PPI; Scott Adams, Ingenium Design; Ray Weidenfeller, Sunhill America, LLC.; Paul Schmidgall, Superior Industries, Inc.; Bob Hawkins, Continental Global Material Handling, LLC.

A range of “k” factor values (spring constant) is required to be able to perform the work to move away from force equations for impact idlers. The plan is to leverage the work performed on CEMA Standard No. 575 “Bulk Material Belt Conveyor Impact Bed/Cradle: Selection and Dimensions”. Also, try to harmonize the impact idler equations with those related to impact beds.

Brett led the charge to harmonize the impact idler equations with those of the impact beds. He was looking at deflection from a single impact and using the remainder of the deflection for handling the material flow. He created spreadsheets to easily show how various k factors affect the results of the equations.

Work is still in progress. He plans to present a clean and organized form to be discussed during the 2023 CEMA Summer Engineering Conference, showing different scenarios about what could happen and how it will affect users.

d) **Idler Monitoring White Paper** – Updates

Subcommittee: Benjamin Brewer, Douglas Manufacturing Co., Inc. (chair); Dr. Andrew Hustrulid, Shaw Almex Industries; Jim Masek, PPI; Paul Schmidgall, Superior Industries, Inc.; Kevin Guay, NHI.

The white paper became a technical paper because of the length of the document. Part of this content will be included in the CEMA’s Belt Book, Chapter 16, and needs to cover all the components because nowadays everything is monitored. The final draft will be presented at the 2023 CEMA Summer Engineering Conference.

e) **White Papers Topics** – Volunteers needed

Possible topics include (but are not limited to) the following:

- Gap between CEMA standards and international standards (If a volunteer decides to tackle this topic, it might be best to start by defining the differences in approaches)
- Idler junction or roll gap as it relates to belt failures
- Energy efficiency scale for idlers (including how it relates to belt indentation)



CONVEYOR EQUIPMENT  
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rolling resistance

- Non-Standard Configuration Idlers.

No volunteers at this time.

f) **Non-Steel Rolls – Updates**

Subcommittee: Paul Schmidgall, Superior Industries, inc. (Chair); Brett DeVries, FLEXCO; Tony VanZee & Jim Masek, PPI; Kevin Guay, NHI; Bob Hawkins, Continental Global Material Handling, LLC; Scott Adams, Ingenium Design; Wendell Love, Bunting.

This committee considers this should be added to the CEMA's Belt Book 8<sup>th</sup> Edition. The subcommittee started working on a white paper that will ultimately be added to the CEMA's Belt Book Chapter 5. In previous meetings, the different rollers were briefly discussed, and how they could be separated into categories based on construction.

The subcommittee is still working on this document. Updates will be presented at the 2023 CEMA Summer Engineering Conference.

g) **Energy Efficiency Rating for Idlers – Updates. Survey Results.**

ARPM adopted an energy efficiency chart for conveyor belts and having a similar tool has been brought up in other committees.

A question was brought up: Should something like this be done for idlers? It would need to look at torque, seal effectiveness, and temperature. Also, it was mentioned that there was some difficulty moving forward back when the rolling drag was measured and published.

This committee needed to see if the Official Representatives (ORs) wanted to develop a color-coded efficiency scale for idlers. A survey was developed and sent to them to receive their feedback.

The results of the survey showed that the majority of ORs do not see a need for a tool like this for idlers at this time.

5. New Business – No new business was discussed at this meeting.
6. Next Meeting – June 13, 2023, LaPlaya Beach & Golf Resort, Naples, FL.
7. Meeting was adjourned at 2:45 pm

Paul Schmidgall, Chair

2022 CEMA VIRTUAL FALL ENGINEERING CONFERENCE - CONVEYOR IDLER COMMITTEE - Roll Call

Attendance Count	Event Name	First Name	Last Name	Email	Title	Company	Phone	Country/Region
1	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Juan	Aristizabal	<a href="mailto:aristizabal.juan@dismet.com">aristizabal.juan@dismet.com</a>	Engineer	DISMET SAS	57-6017494000	Colombia
2	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Casey	Bergman	<a href="mailto:casey@vortexglobal.com">casey@vortexglobal.com</a>	Product Development Manager	Salina Vortex Corp.	1-7858257177	United States of America
3	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Benjamin	Brewer	<a href="mailto:bbrewer@douglasmanufacturing.com">bbrewer@douglasmanufacturing.com</a>	Chief Engineer	Douglas Mfg	1-2057530347	United States of America
4	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Alberto	Chamorro	<a href="mailto:achamorro@douglasmanufacturing.com">achamorro@douglasmanufacturing.com</a>	Engineer	Douglas Manufacturing	1-2057530727	United States of America
5	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Patrick	Cucco	<a href="mailto:pcucco@ashlandconveyor.com">pcucco@ashlandconveyor.com</a>	Product Design Manager	Ashland Conveyor Products	1-4192811235	United States of America
6	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Brett	DeVries	<a href="mailto:bdevries@flexco.com">bdevries@flexco.com</a>	Engineer	FLEXCO	1-6162421636	United States of America
7	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Marc	Dos Santos	<a href="mailto:marc@dossantosintl.com">marc@dossantosintl.com</a>	VP/COO	Dos Santos International	1-7704239895	United States of America
8	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Jeff	Ellis	<a href="mailto:jellis@ppi-global.com">jellis@ppi-global.com</a>	Product Engineering Manager	Precision Pulley and Idler	1-6416212523	United States of America
9	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Nate	Evans	<a href="mailto:nevans@seweurodrive.com">nevans@seweurodrive.com</a>	Application Engineer	SEW Eurodrive	1-12143304824	United States of America
10	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Naylu	Garces	<a href="mailto:naylu@cemanet.org">naylu@cemanet.org</a>	CEMA's Engineering Manager	CEMA	1-2392608009	United States of America
11	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Kevin	Guay	<a href="mailto:kevin.guay@nhi-mfg.com">kevin.guay@nhi-mfg.com</a>	Dir.-Product Development & Engineering	NHI	1-603-285-9336	United States of America
12	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Nick	Heward	<a href="mailto:nicholas.heward@mhsglobal.com">nicholas.heward@mhsglobal.com</a>	Project Engineer	Material Handling Systems	1-801-834-3535	United States of America
13	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Joshua	Holcombe	<a href="mailto:joshua.holcombe@continental.com">joshua.holcombe@continental.com</a>	Research and Development Engineer	Continental	1-9376448913	United States of America
14	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	David	Keech	<a href="mailto:dkeech@dodgeindustrial.com">dkeech@dodgeindustrial.com</a>	Senior Development Engineer	Dodge Industrial	1-8645532101	United States of America
15	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Kara	Leeds	<a href="mailto:karaleeds@dfandi.com">karaleeds@dfandi.com</a>	Engineering Supervisor	Design, Fabricators, and Integrators	1-5137078749	United States of America
16	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Jim	Masek	<a href="mailto:jmasek@ppi-global.com">jmasek@ppi-global.com</a>	Engineering Manager	PPI	1-6417803135	United States of America
17	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Paul	Ormsbee	<a href="mailto:ormsbee@overlandconveyor.com">ormsbee@overlandconveyor.com</a>	General Manager	Overland Conveyor Company	1-3038038850	United States of America
18	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Andres	Pinto Goya	<a href="mailto:f.vergara@tecrapol.com">f.vergara@tecrapol.com</a>	Engineer	TEC RAPOL	56-990893706	Chile
19	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Ryan	Remetich	<a href="mailto:rremetich@douglasmanufacturing.com">rremetich@douglasmanufacturing.com</a>	Mechanical Engineer	Douglas Manufacturing	1-2058841200	United States of America
20	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Paul	Schmidgall	<a href="mailto:p.schmidgall@superior-ind.com">p.schmidgall@superior-ind.com</a>	Chief Engineer	Superior Industries	1-3205892406	United States of America
21	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Scott	Smith	<a href="mailto:ssmith@richwood.com">ssmith@richwood.com</a>	R&D Engineer	Richwood	1-3046339677	United States of America
22	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Geoff	Stoll	<a href="mailto:gstoll@richwood.com">gstoll@richwood.com</a>	Engineering Manager	Richwood	1-3045255436	United States of America
23	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Andrew	Timmerman	<a href="mailto:andrewt@martin-eng.com">andrewt@martin-eng.com</a>	Global Engineering Manager - R&D	Martin Engineering	1-3095071988	United States of America
24	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	R.	Todd Swinderman	<a href="mailto:rtodds.eng@gmail.com">rtodds.eng@gmail.com</a>	Owner	RTodds Engineering, LLC	1-386-589-4384	United States of America
25	2022 CEMA Fall Engineering Conference - Conveyor Idler Committee	Tony	Van Zee	<a href="mailto:tvanee@ppi-global.com">tvanee@ppi-global.com</a>	Engineer	PPI	1-6416212520	United States of America