



MINUTES

TECHNICAL COMMITTEE 8.10

Mechanical and Desiccant Dehumidification Equipment, Heat Pipes and Components

2023 Summer Meeting

June 27, 2023



06/27/2023

**180 Technology Parkway NW, Peachtree Corners, GA 30092
404-636-8400**

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. TC 8.10 DATE 06/27/2023

TC/TG/MTG/TRG TITLE Mechanical and Desiccant Dehumidification Equipment, Heat Pipes and Components

DATE OF MEETING 06/27/2023 LOCATION Tampa Bay, FL

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Peter Luttik		Wayne Caudle		
Kevin Muldoon		John Murphy		
Jim Piscopo		James Bogart		
Eric Kozubal		Gayle Davis		
Onieluan Tamunobere		Darrell Sandlin		
Craig Burg				

DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head:	SH8@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	See ASHRAE email alias list for needed addresses.
Steve Hammerling, Assistant Manager of Research & Technical Services	AMORTS@ashrae.net

Call to order & Introductions: Chair, Peter Luttik

1. Meeting called to order at 1:04 pm local time.
2. Peter reiterated the ASHRAE Code of Ethics “In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests”
3. All in attendance provided brief introduction.
4. Roll call – 6 of 11 voting members present, quorum is met.
5. Muldoon motion to replace John Murphy (retirement) with Ronnie Moffitt as voting member. Motion passes 6-0-0 CV.

Liaisons

1. MTG CEA Indoor Agriculture – Kevin Muldoon: Nothing to report, meeting is after 8.10 meeting.
2. SPC 198 – Craig Burg: Meeting yesterday, doing some cleanup, virtual meeting in one month, most content done, working on facts and figures, public review in fall.
3. SPC 241P Control of Infectious Aerosols – Peter Luttik: Relevant issues for 8.10...energy recovery, covered in appendix, we need to understand implications, if recovery is turned off will impact dehumidification capacity. Equivalent air changes intended to be achieved with additional equipment inside room. Is this the best approach? Are the ways systems could be modified to better deal with infectious disease situations? Suggest all TC members review the standard and communicate any concerns/impacts.
4. TC 1.12 – Peter Luttik: Looking to co-sponsor RTAR related to humidity from desiccant systems in heating mode. 1.12 is also discussing humidity in buildings related to health. May be more collaboration for desiccant systems in heat mode.
5. SPC 62.2/62.1 – Peter Luttik: 62.2 requiring mechanical ventilation. RTAR up for consideration to explore implications of this.
6. Decarbonization Handbook – Peter Luttik: Looking for volunteers to participate.
7. TC Chair Breakfast:
 - a. TAC is looking at operational efficiencies within TCs.
 - b. Looking for TC strategic plan, we are in good shape with what Peter has put together.
 - c. Activity form due by 9pm today, use new version.
8. TAC Representative – Charlie Henck: Reiterated the importance of forms. If you complete good abstracts and speaker bios for programs they stand a better chance. Don't submit one liners. Contact Charlie with questions.

Programs - Onieluan Tamunobere (Tam)

1. Seminar proposed for Chicago
 - a. Submission not complete
 - b. Deadline is August 2
 - c. Tam motions to submit, second by Ralph, motion passes 6-0-0 CV.
2. TC 1.12 looking for co-sponsor for seminar about minimum humidity levels and contribution to health. Tam motions to co-sponsor, Ralph seconds, motion passes 6-0-0 CV.
3. Reach out to Tam with any other ideas.
4. Peter utility industry perspective on how we rate our equipment.

Handbook – Ralph Kittler

1. DOAS, Systems and Equipment Chapter 51: Done.
 - a. Discussion: Did we land on agreement on language in introductory paragraph related to dew point definition? Ralph to follow up. Vote to take place via letter ballot to give committee time to review all changes.
 - b. Deadline for revisions is July 31, Ralph will send out after meeting.
2. Sorbents and Desiccants, Fundamentals Chapter 32: Couple of years still to revise. Saeed working on overhaul.
3. Desiccant dehumidifier, Systems and Equipment Chapter 24: Saeed has been working on updates. Have not seen progress since January. If there is preliminary information we will make an intermediate update. Luttik to discuss with Saeed and team. Letter ballot to follow mid-July.

Research – Alois Malik

1. RAC Breakfast: More money available for research projects, encouraging to find other co-funders to share the load.
2. WS 1566 – Equations to Estimate Evaporation Rates from Heated Water Pools in Indoor Recreational Aquatic Facilities: Three bids received, meeting yesterday to discuss final selection, decision expected by end of Summer Meeting. Committee will review submissions in executive session.
3. WS 1865 – Optimizing Supply Air Temperature Control for Dedicated Outdoor Air Systems: Researcher looking for input on modeling. When they got to the heating mode operation models converged on 48F supply air temperature which would contradict recommendations in the DOAS Design Guide. End goal is to develop a sequence for inclusion in Guideline 36. Work statement made some assumptions that may not be correct. Need to discuss change in scope or different project. Need someone on the PMS, John was our liaison. Tam motions for Ronnie to replace John, Muldoon seconds, motion passes 6-0-0 CV.
4. Comments received from RAC on DCV RTAR. Peter addressed comments, this was already voted on.
5. Comments received from RAC on Maximum Humidity Level RTAR from TC 1.12. Comments sent to 1.12 as lead TC.
6. John Bade provided presentation on California market transformation initiatives. Funding available to remove barriers to innovative ideas and products entering the market. Submitted ideas do not get money directly. Approved submissions go out to bid. May be opportunity for RTARs that have not received funding.

Standards, Craig Burg

1. Standards 174 and 139 voted for reaffirmation last years. Committee to think about whether they are still relevant for future affirmation.
2. Standard 190 no updates.
3. Wrap-around heat pipe performance standard on hold.
4. 90.1 Mechanical Subcommittee: Addendum out by end of next year. Dehumidification side settled. Open issues with energy recovery requiring further discussion which could impact dehumidification.

Website, Gayle Davis

1. No update.

Other Business

1. MTG Utilities: Meeting occurred yesterday. Looking for more input from TCs. Could be done under MTG, could be GA. Luttik proposes we continue to explore a mechanism for coordinating with utilities.
2. 8.10 Objectives: Committee reviewed the objectives that have been developed and discussed over the past few meetings. Suggested revision of the word “Homes” to “Residential” was incorporated. Luttik motion to approve, Alois seconds, motion passes 6-0-0 CV.

Executive Session

1. Committee entered executive session at 2:52pm local time.
2. Craig Burg presented the three bidders for WS-1566.
3. Bidder #1 is preferred based on understanding of the goals and tasks for the RP. They gave the widest variety of conditions and indicated they would be investigating direction of airflow which had not been included in the WS. Previous relevant experience was excellent.
4. Bidder #2 did not include everything that was asked for with respect to conditions to be evaluated. Either didn't understand the request or took exception. They had a good approach and it was obvious they had done this type of research.
5. Bidder #3 good understanding but did not show similar previous research.
6. Bidder #1 weighted at 94.5, Bidder #2 89.3, Bidder #3 87.1.
7. PES recommends Bidder #1 and requests approval from the TC.
8. Luttik motion to approve recommendation, Bogart seconds, 6-0-0 CV.

Motion to Adjourn

1. Muldoon motions to adjourn, second by Burg, meeting adjourned at 3:06 local time.