

TECHNICAL COMMITTEE MEETING T.C. 8.2 CENTRIFUGAL MACHINES

Date/Time: Monday, January 14th, 2019 at 2:15 PM - 4:15 PM

Location: Spruce Room, South Tower, AT Floor, Omni Atlanta, GA

MINUTES

- 1) Call to Order at 2:19 PM by Chair, Forrest Yount
- 2) Introduction of Attendees, Liaisons, Officers and Guests Quorum Achieved, 8/9 Members Present
- 3) ASHRAE Code of Ethics Commitment Read at beginning of every meeting 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. (See full Code of Ethics: https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics.)
- 4) Review of the Agenda Chair
- 5) Approval of Previous Meeting Minutes: Forrest Yount suggested motion to approve the Houston 2018 Annual Meeting minutes, Mark Rogan seconded: 8-0 All Approved
- 6) Review of TC 8.2 Mission Statement & Scope
- 7) Subcommittee Reports:
 - a) Program L. King

Ideas for Kansas City, Annual Meeting June 2019:

1. High Efficiency/Pump System

Trent Hunt came up with the idea, reached out to Pumps TC Program Subcommittee TC 6.1 Program Subcommittee chair to reach out to Lindsey for Cosponsoring Idea Still Need Speakers

***Pump TC did not reach out to Lindsey, will keep this idea for future conference.

2. Rick Heiden brought up Co-Sponsoring Opportunity from TC 8.1: "What's Loss got to do with it? Power Loss Analysis in Compressors".

TC 8.1 is good with two speakers, but if a third speaker from TC 8.2 would like to volunteer they should contact Margaret Mathison <u>3mathison@gmail.com</u>

Phil Johnson reached out to Margaret with a speaker, but she felt that the speaker would go better with a follow up seminar.

Alternate Name: Bring me a parasite

Craig Bradshaw & Davide Ziviani are speakers, Margaret Mathison will chair. TC 1.02 will also cosponsor.

Phil Johnson motioned to approve, Mark Rogan seconds. 8-0 All approved.

Orlando, Winter Meeting 2020 Ideas:

TC 2.6 Requested to Cosponsor:

Mag Bearing Noise Seminar:

TC 2.6 to provide speakers, TC 8.2 to provide chair (Marc Neufcourt)

All Approved to Cosponsor

TC 8.1 Requested to Cosponsor:

How do you select a compressor?

Possible Handbook Chapter 38 discussion:

Debate compressor type vs application, TC 8.1 still thinking about exact idea.

TC 8.2 Voted to approve once exact idea is formed.

Other TC 8.1 Cosponsor Ideas for later conferences:

Oil management issues,

Idea: what's oil got to do with it?

Will talk again in Kansas City

From Rick Heiden: Straw poll: Any desire for developing standard for hermetic motors? Reasons behind the research project: being productive with our natural resources, reducing variation increases manufacturing standardization

Forrest assigned action item to discuss further

General approval of idea from TC 8.2

b) Handbook

D. Turner

Centrifugal compressor section been approved by the subcommittee, ready to vote by full TC Centrifugal chiller section needs some minor revisions still.

Intro to liquid chiller section, we co-own chapter and we might need to update this portion.

Sound Files

In the chiller section, Updated all but one issue, sound files online chapter Rick wants to add foot note for text version that says "see online version for sound files" Dwayne Johnson motions to approve compressor section, Mark Rogan seconded, Motion amended to include edits from Rick Heiden's initial email, and sound file notation Motion to approve handbook with amendment approved 8-0-0

Centrifugal Chiller chapter section will be done with a few weeks of the meeting, sub-committee will confirm changes, then will send out to entire committee for approval.

With liquid chillers section, Fred Betz to follow up with Alex from TC 8.1 to confirm intro to chapter.

- 8.1 is working on approving their section of chapter 38 Tuesday 1/15, should send our centrifugal chiller section to 8.1 for informational purposes.
- 8.1 is approving only their sections

Drew Turner to send revision with track changes copy for review.

c) Standards

P. Johnson

i) SPC 184P Update

J. Vucci

- -Taking P off of name, because it is now published.
- -Addendum A was just released in December (Addendum A is the Uncertainty calculator, examples on how to plug information into the document)
- -SPC will Disband now that Addendum is released.
- -Phil to send me a link to standard for minutes.
- -Reaffirm, revise, withdraw, revision process should start sooner rather than later to make sure changes are made prior to 5 year cycle deadline.
- -Committee focuses on electrical chillers, but other types of chillers are included

ii) SPC 30 Update

Dan. Kemper

Meets Monday morning, draft version went out late 2018, will be published in first quarter by ASHRAE

Will officially become an SSPC

Republished, SSPC created for addendum changes

Justin Prosser mentioned that AHRI 550/590 is expected to reference SPC 30 this year

Ongoing work:

- 1. Pressure adjustment data template
- 2. Atmospheric adjustment postponed, waiting for results of ahri survey
- 3. Considering additional equipment and modes, such as 4 pipe, free cooling, and adiabatic cooling
- iii) SPC 90.1 Update S. Hanson

No real update for chiller section

iv) Test Standard Update added to this list?

Meeting Tuesday

Cognizant TC: needs to be added to Phil's update list

ASHRAE 225p, Method of Test for Centrifugal Compressors, Meeting Tuesday

Rating standard for centrifugal compressors has moved forward with AHRI standard 1520p

- d) Guideline 22 update J. Vucci
 - -Chiller water plant system
 - -COP of entire chiller plant

Published in 2008, reaffirmed in 2012, technically overdue for 5 year cycle change Adding more than one type of chiller plant, only electrical chiller plant now

Give user opportunity method of dashboard was original intent, put together these changes by June timeline

Program Idea: increased awareness of guideline 22, case studies?, can use guideline 22 Under high efficiency topic

e) Research M. Adams

-Continually seeking new research ideas.

f) MTG Low GWP Liaison

P. Johnson

15-20 TCs make up this MTG Primary focus is currently on research

They meet 2x every conference

Research

3 main research topics right now:

1806, flammable, simulation results to update risk assessments, behind schedule, not under budget

30%complete

1807, literature search

1808 assessment of field made mechanical joints, joints being made with flammable refrigerant Mtg meeting, conditional approval per easy changes

Essentially 2 of 3 portions of the project completed Phil Johnson, is representative, Ray Good is an alternate member

g) MTG O&MEE

J. Vucci

Not being attended by John, disbanded and reformatted as a different type of committee

h) Membership

R. Good

Forrest recommended Drew Turner for Secretary, Mark Rogan seconded,

i) Web Master

D. Johnson

j) Honors and Awards F. Betz

YEA awards

k) Section 8 Chair's Breakfast

R. Good

TC Structure Change Proposal:

114 to 30 larger groups

Thinking that various benefits will come from

- 1. Ashrae strategic plan, reorg coming
- 2. Survey results, move very slowly, smaller tes are under represented
- 3. Ideal "30" came from schedule, seminars in the morning, to meetings in the afternoon

Major TC Concerns with Restructure from our TC: TAC is asking for possible merger capabilities:

Have 60 days to submit questions, concerns, thoughts to TAC

Pandora's box: 4 questions

Ray good will forward email to committee from Section Head.

Forrest to Set Up a basecamp thread for TC 8.2 response to TAC proposal.

Dustin came by for section head updates

Rick Heiden mentions to Dustin about doing a high level review of title, process and scope

- 8) Old Business
- 9) New Business
- 10) For the Good and Wellbeing
- 11) Adjourn