

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS,
INC.**

**1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400**

TC/TG/TRG MINUTES COVER SHEET

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

TC/TG/TRG NO TC 8.5 DATE Jan 23, 2012

TC/TG/TRG TITLE Liquid to Refrigerant Heat Exchangers

DATE OF MEETING Monday, Jan 23, 2012 LOCATION Chicago, USA

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Ben Dingel	2012	James Bryan	2012	Massoud Neshan
Petur Thors	2013			Justin Piggush
Joe Huber	2012	<i>Corresponding Members:</i>		Kent Perkins
Amir Jokar	2013	Ty Newell-		Luke Luo
Satheesh Kulankara	2012	Josua Meyer-		Ehsan Moallem
Andreas Knoepfler	2012	Parviz Payvar-		Liping Liy
Steve Eckels	2014	Mahesh Valiya-Naduvath-		Dave Miller
Omar Abdelaziz	2014	Jamal Yagoobi-		Evrarn Gorgy
John Thome	2012	Olivier Pelletier-		Jacob Wagner
Ebrahim Al Hajri	2015	Michael Taras-		Jason Schlop
Zahid Ayub	2012	Harry Li-		Adrew Sommers
Lorenzo Cremaschi	2015	Arthur Fovargue-		Ariudom Joarder
Samuel Yana-Motta	2015	Michael Ohadi-		Jared Stearns
		Thomas Ortiz-		Hyun Young Kim
		Keith Starnier-		
		James Everett Bryan-		
<i>Corresponding Members:</i>		Andreas Beutler-		
Stanislav Perencevic		William McQuade-		
Sankar Padhmanabhan		Jeb Schreiber-		
Satyam Bendapudi		Axel Kriegsmann-		
Ken Schultz		Scott MacBain-		
Kash Oza		Eduardo Nunez-		
James Schaefer		Bo Shen-		
Jon Hartfield				
Justin Kauffman				

DISTRIBUTION

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

TAC SECTION HEAD:	Stephen Duda
TAC CHAIR:	Charles Culp
ASHRAE MANAGER OF RESEARCH AND TECHNICAL SERVICES:	Michael R. Vaughn, P.E.
ALL COMMITTEE LIAISONS AS SHOWN ON TC/TG/TRG ROSTERS:	John H Nix — ALI/PDC Davis Yushar — RAC Research Liaison Keith H Reihl — Chapter Technology Transfer Liaison William Fleming – Special Publications Debra H Kennoy– Standards Liaison
ADDITIONAL DISTRIBUTION	
MANAGER OF STANDARDS	Stephanie Reiniche

**AMERICAN SOCIETY OF HEATING, REFRIGERATION,
AND AIR-CONDITIONING ENGINEERS, INC.**

Minutes

Technical Committee 8.5

Liquid-to-Refrigerant Heat Exchangers

Jan 23, 2012

2012 ASHRAE Winter Conference, Chicago, IL, USA, June 21-25, 2012

1. Call to Order and Reading of TC8.5 Scope

Chairman Ben Dingel called the meeting to order at 4:20 pm. He then read the scope of TC 8.5.

2. Introduction of Members and Guests (Sign attendance sheet)

Members and guests introduced themselves. Please note that attendees should provide their email address on the circulated sign-up sheet at the meeting if they want to be assured of receiving committee meeting minutes. The following were present:

Ben Dingel	Trane
Omar Abdelaziz	Oak Ridge National Laboratory
Zahid Ayub	Isotherm inc.
Justin Kauffman	JCI
Stanislav Perencevic	Guntner AG & Co. KG
Steve Eckels	KSU
Ebrahim Al Hajri	Petroleum Institute
Joe Huber	Alfa Laval
Sankar Padhmanabhan	JCI
Luke Luo	Wolverine Tube, Shanghai
Ehsan Moallem	
Kent Perkins	Colmac Coil
Petur Thors	Wolverine Tube, Inc.
Amir Jokar	Exponent, Inc. (Thermal Sciences)
John Thome	EPFL
Satheesh Kulankara	Johnson Controls
Satyam Bendapudi	Carrier Corporation
Ken Schultz	Trane - Ingersoll Rand
Liping Liu	Lawrence Tech University
Samuel Yana-Motta	Honeywell
Kash Oza	Alfa Laval
Justin Piggush	Trane - Ingersoll Rand
Dave Miller	McQuay
Evaam Gorgy	Wolverine Tube Inc.
Jacob Wagner	Kansas State University
James Schaefer	HTRI
Andreas Knoepfler	Wieland-Werke AG
Ariudom Joardar	Carrier Corp.
Andrew Sommers	Miami University

Jared Stearns	Mestek Inc.
Jon Hartfield	Trane
Hyun Young Kim	Daikin Industries
Lorenzo Cremaschi	Oklahoma University

3. **Establish Quorum Requirements**

Thirteen of fourteen voting members were present. The voting members present were: Ben Dingel, Satheesh Kulankara, Joe Huber, Steve Eckels, Andreas Knoepfler, Omar Abdelaziz, Petur Thors, Amir Jokar, Ebrahim Al Hajri, John Thome, Samuel Yana-Motta, Zahid Ayub and Lorenzo Cremaschi. Voting member(s) absent were: James Bogart. With thirteen of fourteen voting members present, the quorum was satisfied.

Votes below are listed as [for-against-abstain] and should add up to thirteen.

4. **Review/Approve Previous Meeting Minutes**

Minutes from the previous meeting (Montreal) were circulated prior to the meeting. Ebrahim moved the motion to “Approve the minutes of the Montreal meeting” and Omar seconded the motion. The committee voted [13-0-0] to approve the minutes as circulated. Meeting minutes will become official and re-circulated.

5. **Chairman’s Comments** (Ben Dingel)

The chairman gave a brief update on the outcomes of the Chairs Breakfast Meeting and below is what the TC Chairman has shared:

- TC members should not speak on behalf of a TC unless they have the authorization to do so from the chair of the TC.
- Manual of Procedures is update and available on line.
- Google group webinars are available on line for TC member use.
- ASHRAE has web-meeting tools to be used for TC meetings. If required, please contact Ben for more information.

6. **Section Head Comments** (Steve Duda)

The Section Head gave positive comments about the TC’s performance, activities and the effort put in place from the members of the TC. He also gave an update on the new ASHRAE website.

7. **Comments from Liaisons (Handbook, Standards, Journal, Research, Program, TEGA, Technical Services, Refrigeration)**

Dr. David Yashar, the research liaison, showed up and commented on the great efforts of the TC research activities.

8. **Handbook Subcommittee Report** (Jim Bogart)

Subcommittee chair was not present at the meeting. Ben gave an update on the subcommittee accomplishments. The subcommittee has completed updating chapters 38 and 41 and they will be published in the 2012 Handbook version. Ben thanked the good work that Jim and the subcommittee member have done for updating the chapter. Jim has asked Ben to pass chairing the subcommittee to someone else, Shankar has volunteered to step up for the task. He will resume the Handbook Subcommittee chairman position starting after this meeting.

9. **Program Subcommittee Report** (Omar Abdelaziz)

Ben gave an update which was shared at the chairman breakfast that ASHRAE has introduced mini-conference program as a new type of program that TCs can organize. This is affective in Chicago and San Antonio as well.

Ben asked for volunteers to review conference paper, Ken, Ebrahim, Satyam and Justin Kauffman showed an interest to be reviewers.

Ben informed the TC that ASHRAE has established a policy to evaluate speakers in all the programs, any speaker who receives a ranking of 3.5 or below, will receive a letter from ASHRAE and maybe asked to attend presentation training session before she/he allowed to speak again in ASHRAEs' programs. Members of the TC showed their discomfort towards this new policy. A discussion was carried out on the subject, then Zahid moved a motion to send a strong letter to ASHRAE against the implementation of this policy, Ben seconded the motion. The collected votes on this motion was (11-0-1) (NOTE: one voting members joined late)

The Subcommittee chair gave a brief on the forum on "Low GWP Refrigerant: Current Status & Future Path" held on Sunday during the TCs' research meeting time slot. The forum was well attended and the discussion was rich. Omar and Lorenzo will consolidate the notes taken from the forum and will make then available to the TC.

Amir has suggested resubmitting a previous seminar program for San Antonio meeting sponsored by TC 1.3 and cosponsored by TC 8.5. The seminar titled "Impact of Compact Heat Exchanges in Energy Application". The TC agreed on the suggestion and asked to move forward with the submission of the seminar by TC 1.3.

The committee also discussed the submission of a seminar program for Dallas on "Oil Effect on Heat Transfer Performance" with John Thome, Lorenzo and Sultan as potential speakers.

10. **Membership Subcommittee Report** (Kash Oza)

The subcommittee chair gave an overview of the TCs' membership. The TC currently has 14 voting members where 7 members are rolling off. Justin will be voted on as the chair by July and he will automatically be a voting member. There will be 5 members rolling on as voting members and they are: Kash, James Shafer, Satyam and Ken or Ben. This brings the number of voting members to 12. Ebrahim is interested to take on the vice chair position and Satyam will assume the secretary position after San Antonio.

11. **Standards Subcommittee Report** (Joe Huber)

Joe Huber reported activities related to standards 22 and 181 for which the TC is responsible for and that the standards are under public review at the moment.

The TC has been asked to make a decision on standard 24 to revise, reaffirm or withdraw. Ben suggested reaffirming the standard at this time due to the current work load on the subcommittee in reviewing two other standards. Omar moved a motion to reaffirm standard 24, and then Joe Huber seconded the motion. The committee votes were: (13-0-0).

12. **Journal/Insights/Webmaster Subcommittee Report** (Joe Huber)

The website is up to date. All thank s go to Joe for keeping the webmaster in shape. The URL for TC 8.5's website is: <http://www.tc85.ashraetcs.org/>.

13. **Research Subcommittee Report** (Ken Schultz)

1316-RP has come to an end and was closed by a vote through email.

1345-RP Ken will circulate the subcommittees' recommendations and the final report to the member for voting via email.

Ken is interested to work on an RTAR titled "Waterside Fouling Performance of Coiled-Tube Type Condensers in Cooling Tower Applications". Avram and Andreas Knöpfler agreed to help with the RTAR.

Ken, Ben, Andreas, Satyam, Justin and Satheesh would like to draft an RTAR on "Fouling in Enhanced Chiller Tubes Coil". Ben volunteered to take the lead on starting the RTAR then circulate it to the other individuals. Once it's ready, the RTAR will be circulated for voting via email.

Zahid proposed a research idea on propane enhanced tubes or micro-channels.

NOTE: A more detailed report on research subcommittee activities was circulated by Ken through email on Feb 9th, 2012.

14. New Business

The start of MTG on Alternative Lower GWP Refrigerant.

15. Schedule Next Meeting

The next committee meeting will be held on June 25th, 2012 at 4:15 – 6:30 PM in San Antonio, USA.

16. Adjourn

Following all discussions, the meeting was adjourned by majority vote [13-0-0] at 6:15 PM.