





Who Am I?



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Who We Are

A non-profit trade association committed to the *technical advancement, promotion, and understanding* of a broad range of utility and industrial-scale heat exchange and vacuum apparatus.



Founding Drive

Established in 1933 to bring order to power equipment manufacturing segment.

With no specific standards for condensers, HEI developed one and it became the governing design guideline.

Same lack of guidelines on ACC was noticed and so member companies decided to develop this guideline.



Sections

Air Cooled Condenser

Steam Surface Condenser

Closed Feedwater Heater

Shell & Tube Heat Exchanger

Plate Heat Exchanger

Vacuum Technology

Deaerator

Associate – Tube Mfg



Members

- Alfa Laval
- American Exchanger Services
- B&W SPIG
- BFS Industries
- Busch Vacuum Pumps & Systems
- Croll Reynolds Company
- DC Fabricators
- ENEXIO
- Flowserve US
- Gardner Denver Nash
- Graham Corporation
- Holtec International
- Industrial Steam
- Johnston Boiler Company
- Kansas City Deaerator Company
- Kelvion Inc., PHE
- Maarky Thermal Systems
- Neotiss Inc.
- Plymouth Tube Co.
- SPX Dry Cooling
- Sterling Deaerator Company
- Thermal Engineering International (USA), Inc.
- Tranter, Inc.
- Unique Systems, Inc.



Current HEI Standards

Standards for Closed
Feedwater Heaters, 9th
Edition

Standards for Shell &
Tube Heat Exchangers,
5th Edition

Standards for Tray Type
Deaerators, 10th Edition

Performance Standards
for Liquid Ring Vacuum
Pumps, 5th Edition



Current HEI Standards

Standards for Direct
Contact Barometric and
Low Level Condensers,
9th Edition

Standards for Steam Jet
Vacuum Systems, 7th
Edition + Addendum

Standards for Steam
Surface Condensers,
12th Edition

Standards for Gasketed
Plate Heat Exchangers,
1st Edition



Current HEI Standards

Standards for Air Cooled Condensers 2nd Edition (2016)





ACC Members

- **B&W SPIG**
- **ENEXIO**
- **Holtec International**
- **SPX Dry Cooling**



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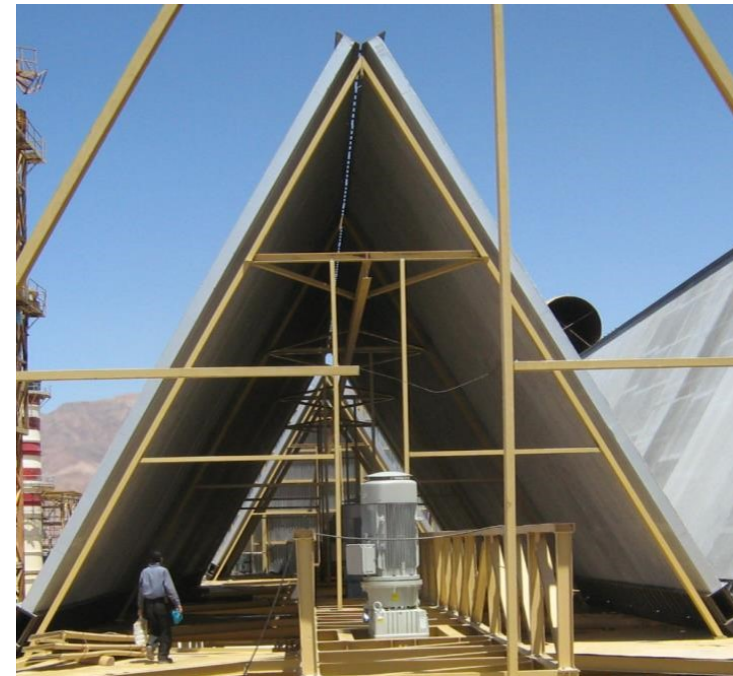




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ACC Scope

This Standard covers the specification and design recommendations along with the performance and operational issues with Air Cooled Condensers (ACC) for power plant applications. In addition, general field installation and commissioning practices are also discussed.





ACC Scope

This Standard addresses common operational problems experienced during extreme ambient conditions such as thermal performance effects in the summer, dead-zone formation, and freezing in the winter.





ACC Scope

There are many different types of ACCs designed for various services. This Standard applies only to two-stage vacuum steam condensers predominantly utilized in power plant applications.





ACC Standards

Maintenance Requirements –
especially useful for owners without
broad ACC experience





A Living Standard

Technical Committee meets twice a year to improve/add to the standard.

Last discussion in July:

- Preventative Maintenance
- Expansion Joints
- Flow Activated Corrosion
- Steam Velocity
- CEU Training?





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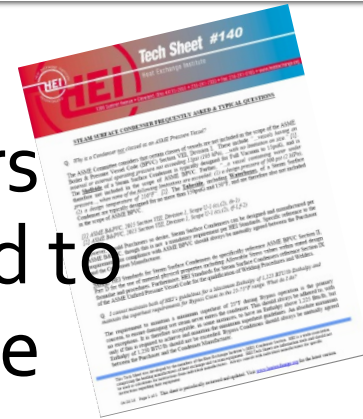




Also Available from HEI

- Tech Sheets – educational white papers that provide guidance on topics related to HEI scope equipment. Available for free download

www.heatexchange.org/tech_sheets.html.



- Other HEI standards are available in print and electronic formats,

www.techstreet.com/publishers/he.





Questions/Comments



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