

Chapter-5

Reference

References

- [1] "Central air conditioner and refrigeration," [Online]. Available: <http://www.central-air-conditioner-and-refrigeration.com/basic-refrigeration-cycle.html>. [Accessed 15 10 2016].
- [2] " Inverter Drive Systems Ltd - energy efficiency motor control," Inverter Drive Systems Ltd, [Online]. Available: <https://www.inverterdrivesystems.com/cube-law/>. [Accessed 13 10 2018].
- [3] "Slideplayer," [Online]. Available: <https://slideplayer.com/slide/15883966/>. [Accessed 26 08 2018].
- [4] "Chiller," [Online]. Available: <https://en.wikipedia.org/wiki/Chiller>. [Accessed 15 10 2016].
- [5] "Air handler," [Online]. Available: https://en.wikipedia.org/wiki/Air_handler. [Accessed 15 10 2016].
- [6] "Ceiling Cassette Chilled Water Fan Coil Unit," Koppel, Inc, [Online]. Available: <http://www.koppel.ph/products/ceiling-cassette-chilled-water-fan-coil-unit/#..> [Accessed 15 10 2016].
- [7] "Cooling Tower Marley Anna Laberge," Tighe-Zeman Equipments LLC, [Online]. Available: <http://www.tighe-zeman.com/cooling-towers/cooling-tower-marley-anna-laberge/>. [Accessed 15 10 2016].
- [8] V. Mulyandasari, COOLING TOWER SELECTION AND SIZING (ENGINEERING DESIGN GUIDELINE), Johor Bahru - Malaysia: KLM Technology Group, 2011.
- [9] Bureau Of Energy Efficiency, "Cooling Tower," Bureau Of Energy Efficiency.
- [10] "The Tower Design," Industrial refrigeration equipment, [Online]. Available: <https://www.ref-wiki.com/technical-information/147-condensers-and-cooling-towers/31781-cooling-towers-design.html>. [Accessed 22 11 2016].
- [11] S. Thorat, "Learnmech," Learnmech, [Online]. Available: <https://learnmech.com/what-is-cooling-towers-types-of-cooling-towers/>.

- [12] "Difference Between Natural Draft And Forced Draft Cooling Towers," Kooldrop cooling tower PVT LTD, [Online]. Available: <https://www.kooldrop.com/blog/difference-between-natural-draft-and-forced-draft-cooling-towers>. [Accessed 22 11 2016].
- [13] "Technical Resources," Matrix, [Online]. Available: <http://www.matrixcooling.com/technical-resources/>. [Accessed 22 11 2016].
- [14] "Types of Cooling Towers – Natural Draft and Mechanical Draft," Bright Hub Engineering, [Online]. Available: <https://www.brighthubengineering.com/hvac/100882-hvacr-cooling-towers-and-their-types/>. [Accessed 22 11 2016].
- [15] M. R. M. Donald Kasten, *Assessing the Performance of Cooling Towers and Their Effect on Chiller Efficiency*, New Jersey, 2007.
- [16] S. C. Technologies, *Cooling Tower Fundamentals*, Kansas, USA: SPX Cooling Technologies, Inc.
- [17] "Process Cooling," [Online]. Available: <https://www.process-cooling.com/articles/88448-cooling-tower-basics-piping-and-controls#>. [Accessed 23 11 2016].
- [18] A. Chiasson, "Sciencedirect," 2016. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/B9780081003374000152>.
- [19] T. Doyon, "Plant Services," 02 12 2008. [Online]. Available: <https://www.plantservices.com/articles/2008/258/>. [Accessed 22 11 2016].
- [20] IMPROVING ENERGY EFFICIENCY IN COOLING TOWER DESIGN, Marley, an SPX brand.
- [21] E. Hajidavalloo, R. Shakeri and M. Mehrabian, M.A. Thermal performance of cross flow cooling towers in variable wet bulb temperature. *Energy Convers. Manag.*, 2010, pp. 51, 1298–1303..
- [22] M. Lucas, J. Ruiz, P. Martínez, A. Kaiser, A. Viedma and B. Zamora, Experimental study on the performance of a mechanical cooling tower fitted with different types of water distribution systems and drift eliminators. *Appl. Therm. Eng.*, 2013, pp. 50, 282.
- [23] G. Jin, W. Cai, L. Lu, E. Lee and A. Chiang, A simplified modeling of mechanical cooling tower for control and optimization of HVAC systems. *Energy Convers. Manag.*, 2007, pp. 48, 355–365..

- [24] P. Engelmann, D. Kalz and G. Salvalai, Cooling concepts for non-residential buildings: A comparison of cooling concepts in different climate zones. *Energy Build.*, 2014, pp. 82, 447–456.
- [25] L. Lu, W. Cai, Y. Chai and L. Xie, Global optimization for overall HVAC systems—Part I problem formulation and analysis. *Energy Convers. Manag.*, 2005, pp. 46, 999–1014.
- [26] C. Chang, S. Shieh, S. Jang, C. Wu and Y. Tsou, Energy conservation improvement and ON–OFF switch times reduction for an existing VFD-fan-based cooling tower. *Appl. Energy*, 2015, pp. 154, 491–499..
- [27] H. Sayyaadi and M. Nejatolahi, Multi-objective optimization of a cooling tower assisted vapor compression refrigeration system. *Int. J. Refrig.*, 2011, pp. 34, 243–256.
- [28] E. Rubio-Castro, M. Serna-González, J. Ponce-Ortega and M. Morales-Cabrera, Optimization of mechanical draft counter flow wet-cooling towers using a rigorous model. *Appl. Therm. Eng.*, 2011, pp. 31, 3615–3628.
- [29] G. Cortinovis, J. Paiva, T. Song and J. Pinto, A systemic approach for optimal cooling tower operation. *Energy Convers. Manag.*, 2009, pp. 50, 2200–2209..
- [30] H. Sane, C. Haugstetter and S. Bortoff, Building HVAC control systems—role of controls and optimization. In *Proceedings of the American Control Conference*, vol. 6, In *Proceedings of the American Control Conference*, Minneapolis, MN, USA, 14–16 June 2006.
- [31] C. Marques, C. Fontes, M. Embiruçu and R. Kalid, Efficiency control in a commercial counter flow wet cooling tower. *Energy Convers. Manag.*, 2009, pp. 50, 2843–2855.
- [32] E. Al-Bassam and R. Alasseri, Measurable energy savings of installing variable frequency drives for cooling towers' fans, compared to dual speed motors. *Energy Build.*, 2013, pp. 67, 261–266.
- [33] A. K. M. M. a. K. Kant, "Knowledge base for the systematic design of wet cooling towers", Paper," 1996.
- [34] J. Braun and G. Diderrich, Near-Optimal Control of Cooling Towers for Chilled Water Systems, 96, 806–816., 1962, p. 1962.
- [35] J. Urchueguía, E. Alakangas, I. Berre, L. Cabeza, P. Grammelis, W. Haslinger, R. Hellmer, D. Mugnier, P. Papillon and G. Stryi-Hipp, "Common Implementation Roadmap for Renewable Heating and Cooling Technologies: European Technology Platform on Renewable Heating and Cooling; Technical Report;

- Renewable Heating and Cooling (RHC-Platform)," Brussels, Belgium, 2014, 2014.
- [36] A. Mohiuddin and K. Kant, "Knowledge base for the systematic design of wet cooling towers. Part I: Selection and tower characteristics. Int. J. Refrig.," 1996.
- [37] S. K. (. K. Wang, "Handbook of air conditioning and refrigeration," in air conditioning and refrigeration., Shan K. Wang—2nd ed. p. cm. Includes index. ISBN 0-07-068167-8, 2009.
- [38] Daeil Aqua Co., Ltd. (n.d.). Cooling Tower Thermal Design Manual. Daeil Aqua Co., Ltd. hanafos. Retrieved from <http://myhome.hanafos.com/~criok/english/publication/thermal/thermal0eng.html>
- [39] Yow, K. Y. (2016, 09 09). Tips for High performance Chiller Plant. ASHRAE GreenGuide - Design, Construction, and Operation of Sustainable Buildings, 3rd. ASHRAE.
- [40] Thomas Hartman, P. (2001, september). All-Variable Speed Centrifugal Chiller Plants. ASHRAE Journal, 9.
- [41] Taylor, S. T. (2012, June). Optimizing Design & Control Of Chilled Water Plants. ASHRAE Journal, 5, 20. Retrieved from www.ashrae.org.
- [42] Takashi Hara, S. K. (1995). Non-linear finite element analysis of a reinforced concrete cooling tower shell. Engineering Computations.
- [43] Stewart, D. J. (1983). Selecting and Installing a Cooling Tower. Emerald.
- [44] Pacific Northwest National Laboratory. (2011, February). Cooling Towers: Understanding Key Components of Cooling Towers and How to Improve Water Efficiency. Energy efficiency & renewable energy, 9. U.S. DOE-Federal Energy Management Program. Retrieved from www.eere.energy.gov/informationcenter
- [45] M KALPANA, D. M. (2018). ANALYSIS AND DESIGN OF COOLING TOWER. International Journal of Pure and Applied Mathematics, 119, 8. Retrieved from <http://www.acadpubl.eu/hub/>
- [46] Hansberry, D. (2014). Chiller Plant Efficiency. Association of professional energy managers, (p. 76).
- [47] Engineering. Hong Kong: Emerald Group Publishing Limited. Retrieved from www.emeraldinsight.com/0263-2772.htm

- [48] Fu Wing Yu, K. T. (n.d.). Energy management of chiller systems by data envelopment analysis. The Hong Kong Polytechnic University, Department of Building Services
- [49] Emerson, A. G. (1962, 01). CORROSION in CHILLED WATER SYSTEMS. p. 4.
- [50] Prof. Ajit Prasad Dash, K. K. (2016, April). Design of mechanical draftcooling tower and determination of thermal efficiency. International Journal of Scientific Development and Research (IJS DR), 1(4), 7. Retrieved from www.ijedr.org
- [51] B Bhavani Sai, I. S. (2013, May). DESIGN OF COOLING TOWER. International Journal of Scientific & Engineering Research, 4(5), 1560-1563. Retrieved from <http://www.ijser.org>
- [52] B.A.Chowdhury, M. ., (n.d.). Design and performance analysis of a cooling tower in sulfuric acid plant.
- [53] Dileep KJ, D. K. (2017, May). Design and Fabrication of Cooling Tower. International Journal of Latest Engineering Research and Applications, 02(05), 27-37. Retrieved from www.ijlera.co
- [54] Rubio-Castro, E.; Ponce-Ortega, J.M.; Nápoles-Rivera, F.; El-Halwagi, M.M.; Serna-González, M. & Jiménez-Gutiérrez, A. (2010). Water integration of eco-industrial parks using a global optimization approach. Industrial and Engineering Chemistry Research, Vol. 49, No. 20, (September 2010), pp. 9945-9960, ISSN 0888-5885.
- [55] Medardo Serna-González, A. J.-G.-O.-C. (2011, September). Optimal Design of Cooling Towers. México. Retrieved from <https://www.researchgate.net/publication/221917080>
- [56] SPX COOLING TECHNOLOGIES, INC. (2016, 04). Cooling Tower Performance. Cooling Tower Performance. OVERLAND PARK, KS: SPX COOLING TECHNOLOGIES, INC. Retrieved from www.spxcooling.com
- [57] Bureau of Energy Efficiency. (n.d.). COOLING TOWER. Bureau of Energy Efficiency.
- [58] Xiaoxiao Li, H. G. (2017, September 13). Experimental study of cold inflow effect on a small natural draft dry. Applied Thermal Engineering, 762–771. Retrieved from www.elsevier.com/locate/apthermeng
- [59] YILMAZ, A. (2010). ANALYTICAL CALCULATION OF WET COOLING TOWER PERFORMANCE WITH LARGE COOLING RANGES. Çukurova

University, Faculty of Engineering & Architecture, Department of Mechanical Engineering. Retrieved from alpyil@cu.edu.tr

- [60] Serna-González, M.; Ponce-Ortega, J.M. & Jiménez-Gutiérrez, A. (2010). MINLP optimization of mechanical draft counter flow wet-cooling towers. *Chemical Engineering and Design*, Vol. 88, No. 5-6, (May-June 2010), pp. 614-625, ISSN 0263-8762.
- [61] Singham, J.R. (1983). *Heat Exchanger Design Handbook*, Hemisphere Publishing Corporation, USA.
- [62] El-Dessouky, H. T.-H.-J. (1997). A modified analysis of counter flow wet cooling towers. *Journal of Heat Transfer*, 119, 617-626.
- [63] Halasz, B. (1999). Application of a general non-dimensional mathematical model to cooling towers. *International Journal of Thermal Sciences*, 38, 75-88.
- [64] (2001). ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Handbook, Fundamentals, Chapter 6 (Psychometrics). Atlanta.
- [65] Solberg, P. (2007, September). Ice Storage as Part of a LEED Building Design. *Engineers*
- [66] Braun, J.E. and G.T. Diderrich.(1990) “Near Optimal Control of Cooling Towers for Chilled-Water Systems.” *ASHRAE Transactions* 96, no. 2: 806-13.
- [67] Guven, H. and J. Flynn. (1992). “Commissioning TES systems.” *Heating, Piping, Air Conditioning Magazine* January.
- [68] Hartman, T. (2000). “Chiller plant control using gateway technologies.” *Heating, Piping, Air Conditioning Magazine* January
- [69] Redden, G.H. (1996). “Effect of variable flow on centrifugal chiller performance.” *ASHRAE Transactions* 102(2).
- [70] Frayne, C. (1999). *Cooling water Treatment: Principles and Practice*, CHEMICAL. Company Incorporated (NY).
- [71] Milford, R. (1984). Nonlinear behavior of reinforced concrete cooling towers. PhD thesis. University of Illinois at urbana.
- [72] Ragupathy, R. R. (2011, 6 3). Thermal Performance of Forced Draft counter Flow Cooling tower with Expanded Wire Mesh Packing. *International Journal Technical and Physical Problems of Engineering (IJTPE)*, 19-23.

- [73] Y.Lu. (2015). Small Natural Draft Dry Cooling Towers For Renewable Power plant. Dissertation/Thesis. The University of Queensland, School of Mechanical and Mining Engineering .