

*The Covid-19 pandemic has had a tremendous impact on our campus and community. The people of UK Facilities Management remain the “boots on the ground” for UK, providing the essential services needed to keep our campus safe, secure, and positioned to respond to the evolving crisis. The strength each of you demonstrate daily is inspiring and represents such courage and compassion. We are in this together and we will get through it together. **Thank you for everything you do.** – Mary Vosevich, Vice President for Facilities Management*

OUR PEOPLE. ————— OUR STORIES.

Summer temperatures have returned to the bluegrass which means cooling season has arrived for Utilities and Energy Management’s Heating and Cooling Plant teams. For the vast majority of our building we use a district level, or centralized cooling systems. Similar to the “central air” in your home, where a central system or systems produces cold air that is transported to the rooms of the house via duct work, the campus cooling system uses evaporative cooling combined with a refrigerant and condenser to produce chilled water that is piped to campus buildings where air handling (big fans!) equipment mixes outside air with return air and moves this air across the chilled water coils to keep the buildings cool and the humidity levels low. The photos below show our UEM Cooling team at work last week maintaining our systems. Below that, UEM’s Carter Whitton provides a more technical look at how our systems work.



Joseph Harris jetting/brushing tubes on Chiller 2.

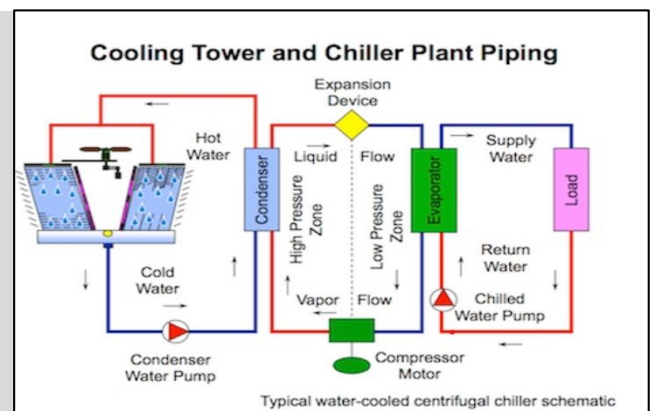


Steve Irvin jetting/brushing evaporator tubes on Chiller 2.



Steve Monroe buttoning up Chiller 6.

A common term used for chillers is “approach temperature”. This metric looks at the effectiveness of the heat transfer occurring within the chiller and is simply the difference in the refrigerant temperature in the chiller’s evaporator (or condenser) and the leaving chilled water (or condenser water) temperature. For example, with a saturated refrigerant temperature of 40°F and a leaving chiller water temperature of 42°F, the evaporator approach would be 2°F. The lower the difference in temperature (T) across the heat transfer surface is, the better equipped we are to meet our cooling demands safely and efficiently. –Carter Whitton



NOW 3X A WEEK

The Facilities Daily is shifting to a 3 day per week schedule for the summer starting this week. New issues will be distributed every Monday, Wednesday, and Friday. Please continue to send pictures, shout outs, and story ideas to shane.tedder@uky.edu.