

Ohio Valley Surgical Hospital O.R. Addition

Springfield, OH

Project Completion: 2018
Sizes: 4,200 SF
Tri-Tech Services: MEP Engineering



Project Description

Ohio Valley Surgical Hospital needed two new operating rooms (OR) for additional surgical capacity, so they looked to expand their facility. The new addition would provide space for the new operating rooms along with a shell space for a future hybrid OR, and a new sterilizer for OR equipment.

Tri-Tech provided plumbing, mechanical, and electrical engineering for the project. Tri-Tech's electrical design included lighting, and power distribution. Tri-Tech's team worked with the owner to coordinate the existing fire alarm, nurse call, access control, and tele/comm systems for the addition.

Tri-Tech's plumbing design included new scrub sinks, medical gas design, roof drains, natural gas supply for the new air handling unit and sterilizer, and fire suppression. The mechanical design included a new air handling unit, chiller, and piping for both hot and chilled water systems.

Tri-Tech connected to existing electrical and water distribution, as well as the existing boiler system. Tri-Tech also designed infrastructure for the future hybrid OR to minimize future impact.

During their analysis, Tri-Tech discovered the existing chiller did not have the capacity to serve the entire hospital and the new addition. Tri-Tech worked with the owner to design a new chiller system sized to do so, including serving future additions and infrastructure changes. Tri-Tech's new chiller system design connected to the existing chiller system to provide full redundancy for the hospital, reducing the impact if there were an equipment failure.

To satisfy additional owner requirements, Tri-Tech designed a dedicated air-handling unit specifically for the new operating rooms to provide precise temperature and humidity controls in each of the operating rooms.