ST. VINCENT CHARITY MEDICAL CENTER

CLEVELAND, OH | DESIGN-BUILD BOILER PLANT RENOVATION

SIZE
500,000 sq. ft.

COST
$1,534,701

DURATION
9 Months

SCOPE

- Boiler plant renovations
- Steam trap survey & repair
- Commissioning of services provided

St. Vincent Charity Medical Center, a non-profit hospital, was founded under the auspice of the Roman Catholic Diocese of Cleveland in 1865. St. Vincent's is a faith-based, teaching hospital with a renowned Spine and Orthopedic Institute. The facility also operates the Center for Bariatric Surgery and offers services in primary care, behavioral and occupational health, and addiction medicine among many others.

The Brewer-Garrett (**BG**) team was selected to perform a design-build, renovation project for the hospital in order to reduce energy usage and operational costs with a focus on its aging central boiler plant. The existing boilers were utilized to produce high pressure steam which was then distributed throughout the hospital for heating and sterilizing purposes. In addition to being nearly 40 years old, the steam plant was oversized by nearly 400% of the current steam demand. Furthermore, the boiler sizing required five-and-a-half full-time employees to operate the equipment. Based on these factors, BG developed a design that design that would provide full capacity steam from "cold stand-by" in a matter of minutes and achieves the revised peak load requirements with only two boilers, which maintained the Joint commission's N+1 redundancy requirement. In response to St. Vincent's operational cost concerns, BG provided a rate structure guarantee which not only guaranteed the efficiency of the plant but outsourced the operation to BG personnel that could maintain the plant at a reduced cost.

This rate structure allowed St. Vincent Hospital to cost effectively replace aging infrastructure with a contractual guarantee of overall plant efficiency while enabling the hospital to reallocate the human resources previously required to operate the plant while diverting the operational risks of preventive maintenance and repairs to BG.

DESIGNED & INSTALLED
CENTRAL BOILER PLANT

OPERATED THROUGH
LONG-TERM
RATE STRUCTURE
OPERATION
AND EFFICIENCY
GUARANTEED

INCREASED OVERALL
PLANT EFFICIENCY





