

MAKING BUILDINGS BETTER

HEALTHCARE



NORTHWESTERN MEMORIAL HOSPITAL CGMP STEM CELL FACILITY

Owner: Northwestern Memorial Hospital

Mechanical Engineer: Henneman Engineering, Inc.

Contractor: Bulley & Andrews, LLC – General Contractor

Customer Challenges:

Critical climate control was required for the sensitive processes involved with pharmaceutical blood stem cell production. There were some extreme conditions involved in this project. For example there was one clean room which was maintained at 40° setpoint! Northwestern Memorial also had to comply with the FDA due to the nature of the development and production.

The requirements for FDA compliance included continuously monitoring and trending space conditions, and verifying the data has not been tampered with in any way. Trane worked closely with the validation agent to develop and verify Standard Operating Procedures and calibration. There were less than a dozen class 100 clean rooms, like this one, in the US when it was built.

Trane Solutions to the Challenges of the Project:

The Trane sales engineer and his team designed a Trane BAS with Tracer Summit Critical Software Control to meet FDA requirements. Trane Controls experts set up the SQL database for the data monitoring. Trane also provided service with emergency response and on-site spare parts. Trane included Customer training for the controls system, as well as a full service contract.

Measurable Results of this Project?

- FDA compliance, met Standard 21 CFR part 11
- ASHRAE Technology Award in recognition of Advancements in Technology and Design for the Cgmp Cell Processing Facility.

Why Did the Customer Choose Trane:

Trane verified that it was able to meet the FDA requirements with previous cases. Trane established a relationship with the owner by visiting Trane St. Paul.

Trane Equipment & Controls:

Trane provided a Building Automation System equipped with Tracer Summit Critical Software and accessories. The BAS system was tied into the existing LAN. Trane provided sensors and valves to meet the critical control requirements.

