DIVERSIFIED HEAT TRANSFER INC.

CASE STUDY

Ensuring Reliable Heat: Healthcare

Client - Major Medical Center/Large Healthcare Facility



PROJECT SNAPSHOT

PROJECT SPEC:
53 Brand Name Replacement Tube Bundles

SPECIFIER:
A Major NY Metropolitan Area Medical Center

MANUFACTURER/ PRODUCT:
DHT/Tube Bundles for existing Shell and Tube Heat Exchangers (Steam to Hot Water)

REQUIREMENT:
High/Medium Pressure Steam

URGENCY LEVEL:
High

PROJECT OVERVIEW

The Client: A Major Medical Facility in the New York Metro Region (Long Island) providing essential healthcare services for their patients, was in need of replacement equipment for their heating system that was mission-critical. The Deputy Chief Engineer of this facility manages an Engineering team there that consists of roughly **70 employees**, who are collectively responsible for the facility's heating, cooling, and operational systems.

The Problem: Aging Infrastructure and Energy Loss - The Medical Center faced two critical, and related issues driven by equipment that was past its life expectancy:

1. **Failing Heat System**: The existing heat exchangers and tube bundles were failing, leading to poor heating performance during the winter months—a serious reliability concern in a healthcare setting.
2. **Wasted Energy**: The facility was unable to safely return condensate back to the boiler plant, meaning valuable hot water that could power their CoGen (Cogeneration) unit was being wasted instead of recycled.

The Challenge: To prevent the heating system from becoming **inoperable**, the facility needed to immediately procure **53 brand-name replacement tube bundles**. The existing tube bundles, which were part of the hospital's critical steam-to-water heat exchange system, had reached the end of their life cycle. These replacements were essential for continuing to reliably heat the facility's multiple buildings.

Primary Goals: The Engineering team needed a solution that would:

- **Establish a better heating system** to ensure patient comfort and safety.
- **Return condensate** back to the boiler plant to improve efficiency and power the CoGen unit.

THE SOLUTION

When evaluating replacement options, the Engineering team prioritized **quality, compatibility with existing infrastructure, and price**. The deciding factor in choosing Diversified Heat Transfer was compatibility combined with exceptional early support. The team appreciated the **readiness of DHT personnel to assess the equipment in the field** firsthand, to determine their exact needs before any financial or contractual commitments were made.

The implementation process was efficient, moving smoothly through the internal procurement and contracting stages, after the submission of the required package. The Deputy Chief Engineer was highly satisfied with the partnership, stating:
"I was very satisfied with the level of **customer service**. Everyone was very **responsive** and kept us in the loop concerning all deliveries at every stage."



THE RESULTS

With the new system recently installed and initially being turned on for the winter heating season, quantitative results are still pending. However, the qualitative and long-term strategic benefits are already obvious and significant.

Key Outcome and Benefits:

- **Mitigated Risk:** The team no longer must worry about out-of-life cycle heat exchangers failing during peak heating demand, securing the facility's operational safety.
- **Most Valuable Benefit:** The assurance of reliable heat for the Medical Center.
- **Future Efficiency:** The facility is now positioned to safely and reliably return condensate to the boiler plant, enabling the full function of the CoGen unit and driving future energy savings.

FINAL THOUGHTS & TESTIMONIALS

Our engineering contact at the facility offered a strong summary of the service provided by the team: **"DHT provided excellence service and were extremely responsive during our time of need, from beginning to end."** When asked if he would recommend the service, he replied, **"Yes, I would. DHT personnel were extremely knowledgeable and very easy to work with."**

This feedback highlights the critical importance of responsive and expert customer relations when mitigating risk in infrastructure projects vital to the healthcare industry.



DHT HEALTHCARE APPLICATIONS

Diversified Heat Transfer (DHT) provides essential heat transfer solutions for a wide variety of applications, including for healthcare facilities (hospitals, labs, etc.). We ensure reliable Domestic Hot Water (DHW) through specialized hot water heaters, often featuring double-wall heat exchangers for safety and compliance against cross-contamination, with precise controls to prevent scalding and Legionella growth.

Additionally, our Sussman branded products can generate the high-temperature clean steam necessary for sterilizing surgical instruments (autoclaves) and for HVAC humidification in patient areas. By offering zero-on-site-emission electric heating, these products help healthcare systems meet critical demands for sanitation, patient care, and decarbonization goals.

DHT's specialized heat exchangers can also provide the accurate, dedicated cooling required for sensitive medical equipment like MRI and CT scanners. This packaged solution was specifically designed for the advanced cooling needs of sensitive medical technology.

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