Methodist Healthcare Optimizes Geothermal System with MultiGEO™ Design and Control Software

For its new 100-bed hospital in Olive Branch, Miss., Methodist Healthcare implemented a geothermal system in an effort to reduce operating costs, increase efficiencies and provide a quiet environment for patients. A conventional geothermal solution for a facility this size would be very large. Wetlands surrounding the hospital site put a real premium on space. The original design called for 408 bores, 300 feet deep for the geothermal heat exchanger. With the advanced, intelligent MultiGEO™ software from Multistack and developed by Greensleeves, the bore field was reduced to 196 bores, a 52 percent reduction resulting in significant first cost savings.

Ron Holdaway, P.E., C.E.M., LEED AP and Senior Design Principal for Smith, Seckman, Reid, Inc., Engineer of Record, noted that temperature saturation is “one of the biggest risks in geothermal installations.” As one of the only products on the market that monitors, plans and makes adjustments for temperature fluctuations, MultiGEO software technology provides a secure low-risk solution. The MultiGEO product from Multistack is a hybrid-ready geothermal bore field management system that includes a prefabricated pump and controls package that reduces the bore field size, construction time and labor all while having a smaller footprint and increasing quality control.

Multistack is the exclusive licensee of the Greensleeves design and operational software for unitary and centralized geothermal systems. It is sold under the trade name “MultiGEO.” Contact your nearest Multistack representative for more information on this revolutionary product that makes the energy savings of geothermal systems available to building owners who previously could not overcome the initial cost of a bore field.

Methodist Le Bonheur Healthcare, in partnership with its medical staffs, works to collaborate with patients and their families to be the leader in providing high quality, cost-effective patient- and family-centered care. The 225,000 sq. ft. hospital serves approximately 47,000 Mississippi residents.

MultiGEO Software Benefits
• Reduced geothermal bore field size 52 percent vs. conventional geothermal system
• Reduced energy and water costs 72 percent vs. conventional geothermal system
• Projected energy savings of $106,500 according to the Engineer of Record

Architect: Gresham, Smith and Partners
Engineer: Smith Seckman Reid, Inc.
Contractor: Turner Construction

Methodist Healthcare’s new hospital in Olive Branch, Miss., opened in July, 2013. The full-service hospital offers emergency services, obstetrics, cardiology, MRI and a diagnostic cardiac catheterization laboratory.
Originators. Innovators. Never the Imitators.

Originators…
Multistack invented the modular water chiller. It started with a radically simple idea: chiller modules that could be brought into the equipment room one at a time, through standard doorways and down elevators, to form a fully integrated chiller system. The idea launched a revolution and transformed Multistack into a leader in the commercial water-chiller industry.

Innovators…
Multistack perfected the modular chiller and leads the industry in innovative and environmentally friendly modular solutions. Since founding in the late 1980s, Multistack has engineered, manufactured, and distributed an impressive array of modular air conditioning firsts: the first on-board strainer, the first modular automatic blow-down device, the first modular chiller for variable flow, the first modular chiller-heater (heat pump), the first modular heat-recovery chiller, the first modular air-to-water heat pump, the first modular chiller to utilize MagLev™ compressor technology, and the first modular chiller to utilize R-410A.

Never the Imitators…
Multistack sets the standard in the industry for superior customer service, fast and on time shipment, superior product quality, and new product development. Our pioneering leadership in environmental issues is well documented. If you want the best, be sure to specify the original – Multistack®.