

Enerflex in action

Plaquemine, Louisiana, USA

6,800 TR propylene refrigeration system for a three-stage 14,000 hp electric motor drive compressor on two levels

Modularized approach minimizes costs and maximizes efficiency of a field installation on an industrial refrigeration system.

Enerflex engineered, designed, and manufactured an industrial propylene refrigeration system capable of providing cooling loads to three sets of users as part of an ethylene propylene diene monomer (a type of plastic) expansion project, located in Louisiana.

The 6,800 TR propylene refrigeration system includes a three-stage 14,000 HP electric motor driven centrifugal compressor, and the drivetrain,

which together comprises 12 modules and two levels. The grade level included a propylene receiver, high pressure sub-coolers and knock-out drums, water chiller, relief and drain headers, and a suction and discharge piping rack. A propylene condenser sits on top of the second level.

The completely assembled unit without the drivetrain is approximately 85' x 65' x 46' and includes a water-cooled condenser with 100" diameter capable of holding up to 9,000 tons of refrigerant (TR), and 5,800 tubes weighing over 105 tons (231,485 lbs).



Enerflex

enerflex.com



Outcome

Due to our extensive experience supplying similar modular refrigeration systems, the customer turned to Enerflex to design a solution for one of the largest of these projects to-date, representing some of the heaviest and most sizable equipment constructed by Enerflex. Successful execution resulted in the customer's request for a second plant with similar specs — and we delivered.

Enerflex's modularized approach, including pre-assembly at our state of the art manufacturing facility in Houston, minimized costs and maximized the efficiency of field installation for the industrial refrigeration system.

From concept to construction, Enerflex provided a single source solution in a controlled and safe environment — resulting in cost savings for the customer through efficient project management and supply chain.

