

# **ENERFLEX**

The Single Source



## **LARGE PROPYLENE REFRIGERATION, USA**

**Modularized approach minimizes costs and maximizes efficiency of a field installation on a commercial refrigeration system.**

### **PROJECT OVERVIEW AND CHALLENGES**

Enerflex engineered, designed, and manufactured a commercial 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. Due to Enerflex's extensive experience supplying similar modular refrigeration systems in the past, the customer naturally turned to Enerflex to design a solution for the largest of these projects to-date. The system represents some of the heaviest and most sizable equipment constructed by the Houston manufacturing facility. The completely assembled unit without the drive train stands at approximately 86'L x 56'W x 44'H and includes a 9,000 TR water cooled condenser with 100" diameter shell and 5,800 tubes weighing over 105 tons (231,485 lbs).

### **UNIT LOCATION**

**Plaquemine, Louisiana, USA**

### **ENERFLEX SOLUTION**

The 6,800 TR propylene refrigeration system includes a three-stage 12,000 hp electric motor driven centrifugal compressor, and the drive train which is comprised of 12 modules and two levels. The grade level included a propylene receiver, a high pressure sub-cooler 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. Enerflex's modularized approach, including pre-assembly at the Houston manufacturing facility, minimized costs and maximized the efficiency of field installation for the commercial refrigeration system.

### **CONTACT DETAILS**

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