

# Lube Oil Console Coolers

Compressors generate significant heat due to mechanical friction. It is critical that all moving parts remain properly lubricated for optimum efficiency and longevity of the equipment. Lube Oil Consoles (or Skids) supply clean, cool oil to all bearing points before, during and after compressor operation. As this oil circulates through the compressor, it picks up heat from the parts it is intended to cool, and therefore must be cooled itself via a heat exchanger. A Lube Oil Console, which is generally skidded separately from the Compressor, will consist of a main oil pump, an auxiliary oil pump, twin oil filters, twin oil coolers (heat exchangers), an oil reservoir, interconnecting piping and necessary controls.

The Compressor Oil Console business has certain regulations guiding and specifying Lube Oil Coolers for Compressor Skid applications. The American Petroleum Institute (API) is the recognized standard on this subject. Specifically API-614 covers the Compressor Skid (Console) and auxiliary equipment including the Lube Oil Cooler.

API Heat Transfer uses our standard Basco "OP" (AEW) design to meet both the general & special requirements of API-614. The "OP" design is very unique for a TEMA "AEW" designation in that the tubes side can be checked or serviced without draining or disconnecting the shellside oil piping. This is possible due to the "OP"s special Retainer Ring design that also acts as a leak indicator. The "OP" meets all the requirements that API-614 demands like removable tube bundle, 5/8" O.D. admiralty tubes, NRB tubesheets and Carbon Steel Channels with 3/4" NPT Vents & Drains. API maintains these materials in stock for diameter of 6" through 12" and pressure ratings up to 150 PSI.

The pre-engineered Basco "OP" can be supplied with either "BARE" or "LOFIN" 5/8" X 18 BWG tubing for either aspects of API-614 General & Special Requirements. Both are stocked in one (1) foot increments up to 12 feet. Other materials are also available depending on Customers specific requirements. The "OP" is designed to meet ASME-Section VIII, Div.1 & TEMA "C" construction.

The tube counts have been minimized to give the maximum surface in order to minimize water flow (GPM) but maintain the 5-8 ft/sec. required by API-614. All steel materials include a 1/16" Corrosion Allowance built in as a standard. Special materials and higher pressures are also available to meet our customer's specific needs & commitments. With our pre-engineered "OP" design and stocked materials, delivery dates are minimized to compliment this unique TEMA & API design.



**API Heat Transfer**

2777 Walden Avenue • Buffalo, NY 14225 • (716) 684-6700 • Fax (716) 684-2129  
email: [sales@apiheattransfer.com](mailto:sales@apiheattransfer.com) • [www.apiheattransfer.com](http://www.apiheattransfer.com)