## **CONDENSER COILS**

## **CAPABILITIES OVERVIEW**

Refrigerant condenser coils are used to transfer heat from the refrigerant to the outdoor air. As refrigerant passes through the coil, it is first de-superheated and then condensed to liquid. In many cases an integral or dedicated sub-cooler section is used to further cool the refrigerant below saturation. This reduction in liquid temperature increases overall system capacity and keeps the refrigerant from flashing due to liquid line losses. The heat removed from the refrigerant in the condenser and sub-cooler is equal to the heat absorbed in the evaporator plus the work done by the compressor.

Heat reclaim coils (also referred to as hot gas reheat coils) take advantage of the hot gas in the compressor discharge line as a source for heat. They can be piped either in parallel or in series with the normal condenser. When piped in parallel, the reclaim coil is typically sized to handle the entire condensing load, since the primary condenser coil will not be in operation in reclaim mode. When piped in series (e.g., supply air-reheating), the primary condenser and the reclaim coil will both be in operation in reclaim mode. Therefore, reclaim coils piped in series typically have capacities of 50% or less of the total heat rejection of the system. It is preferable to have saturated gas leaving the heat reclaim coil (de-superheated gas) in lieu of condensed liquid.

Whether your application requires a single refrigerant circuit, integral subcooler or multiple facesplits, Coilmaster can design and build the precise refrigerant heat rejection coil for your application.

http://coilmastercorp.com/coil-capabilities-overview/condenser-coils/

