Designing a Direct Expansion (DX) System

Colville, WA: Bruce Nelson, President of Colmac Coil, was recently asked to provide information on designing a direct expansion (DX) technology refrigeration system for an article in The Condenser Magazine. Nelson highlighted the advantages of a DX system including its minimized safety risks and economical first cost.

Nelson went on to lay out four crucial steps to take before designing and installing a DX technology system. These include: selecting the right type of tubing for the evaporator, designing the system to capture and remove water from ammonia, making sure there will be proper piping for handling defrost condensate, and ensuring proper control and distribution of the ammonia to the evaporator coil.

“First and foremost, DX Ammonia technology reduces the amount of ammonia needed to refrigerate a facility, so it is inherently a safer technology,” Nelson said. “You’re also offering the end user the very attractive benefits of lower first cost and lower operating costs.”

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About Colmac Coil Manufacturing, Inc.

Since 1971 Colmac Coil has provided customers worldwide with innovative heat exchangers and heat transfer solutions for industrial refrigeration, HVAC, power generation, and gas compression applications. The company builds heating and cooling coils, refrigeration air coolers and blast freezers, air-cooled fluid coolers and condensers, and heat pipes for heat recovery. State-of-the-art selection software accurately calculates heat exchanger performance for a wide range of working fluids, materials, and operating conditions. World-class manufacturing facilities in both Washington State and in Illinois provide customers with fast delivery times and outstanding after sales support. [www.colmaccoil.com](http://www.colmaccoil.com)