

CASE STUDY

PRODUCT: COLMAC COIL ACVA AIR-COOLED CONDENSER

APPLICATION: AMMONIA REFRIGERATION

(QTY) X MODEL: (2) X ACVA-1502-D



DESCRIPTION:

In many areas, access to water for industrial processes is increasingly limited. Evaporative condensers in large industrial ammonia refrigeration systems use a significant amount of water during operation and may not be the best choice for condensing equipment where water is difficult to obtain. Colmac Coil ACVA air-cooled ammonia condensers solve the “water problem” by rejecting heat from an ammonia refrigeration system using dry surface compact fin-and-tube heat exchange technology. No water is needed!

The eastern side of Washington State along the Columbia River is home to the largest apple growing region in North America. Apple growers in Washington currently produce over 80 million x 42 pound boxes of apples each year. The majority of the apple crop is stored in sophisticated controlled atmosphere (“CA”) cold storage warehouse facilities, most of which utilize ammonia refrigeration systems.

Recently, an important customer approached Colmac Coil with the requirement for an air-cooled ammonia condenser since water for an evaporative condenser was not available at the site for the apple storage facility. Colmac Coil engineers worked closely with Doubl-Kold, a design/build refrigeration contractor located in Yakima, Washington, to select and specify Colmac Coil ACVA air-cooled condensers and matching Colmac Coil ICH air coolers for the system.

The installation was completed and has been working successfully since that time keeping part of the Washington apple crop cool and crisp.

“The Heat Transfer Experts”