COLMAC COIL
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# CASE STUDY

**PRODUCT:** **ACVA AIR-COOLED CONDENSER**

**APPLICATION:** **AMMONIA REFRIGERATION**

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

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 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.

An important customer approached **Colmac** 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** engineers worked closely with **Doubl-Kold**, a design/build refrigeration contractor located in Yakima, Washington, to select and specify **Colmac ACVA air-cooled condensers** and matching **Colmac ICH air coolers** for the system.

The installation was **completed** in **August, 2000**, and has been working **successfully** since that time keeping part of the Washington apple crop cool and crisp.