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CASE STUDY

- PRODUCT:** COLMAC CUSTOM INDUSTRIAL AIR COOLER
- APPLICATION:** MED TEMPERATURE (33°F) CHEESE BLAST COOLING
- FACILITY:** 7,250 SQ FT (58 FT X 125 FT) BLAST COOLING ROOM
- (QTY) X MODEL:** (5) X SPR22-4314-G-42-5-45PG-R/L-E-D
- SPECIFICATIONS:** 44 Tons Capacity, 33F Room, 8F EGT
45% Propylene Glycol
70,000 CFM Airflow
5/8" x 0.025 Copper Tubes, 12 Rows Deep
0.010" Aluminum Fins, 4 per Inch
3 x 5 Hp, 1140 rpm, Cast Aluminum Fans
Electric Defrost
67.5 sq ft Face Area, 8,005 sq ft Total Surface Area
4,450 lbs Dry Weight
Overall Dimensions: 153" H x 54" D x 181" L

DESCRIPTION:

Recently, a large Midwest U. S. food processing company decided to increase the capacity of one of their **cheese processing** plants. The plant produces processed cheese products for various markets primarily in North America. Approximately **200,000 pounds per day** of processed cheese product comes out of the **cookers** at approximately **165F**, which then must be **quickly cooled to 100F** or less to avoid loss of product quality. A local design build contractor contacted Colmac to develop a **custom air cooler** design to match the customer's requirements. An existing chiller system was utilized to provide the **8F propylene glycol** to the air coolers. A **special cabinet configuration** was developed by Colmac at the direction of the contractor to fit the required cooling capacity into the available space while circulating air in the needed quantity and orientation. Air is drawn into the unit at the base, passes vertically up through the coil block, turns 90 degrees and is discharged back into the room at the top of the unit. **Defrosting** is achieved with **electric heating elements**.



Remember – “When you want to specify Quality, specify Colmac”