

TECOCHILL®

- Air-cooled engine-driven condensing unit chiller
- 50 refrigeration tons
- 14,000 sq. ft. restaurant, kitchen and walk-in coolers
- Montpelier, Vermont



New England Culinary Institute's fledging chefs can "take the heat" in this kitchen, air-conditioned by two TECOCHILL® CH-50ACPs.

It's not every day that diners come across a line on a menu that credits the local gas utility for recommending "innovative" natural gas cooling. Yet that's exactly what guests dining in the in-house restaurant of the New England Culinary Institute (NECI), Montpelier, Vt., see when they scan past the mousse and profiteroles on the menu.

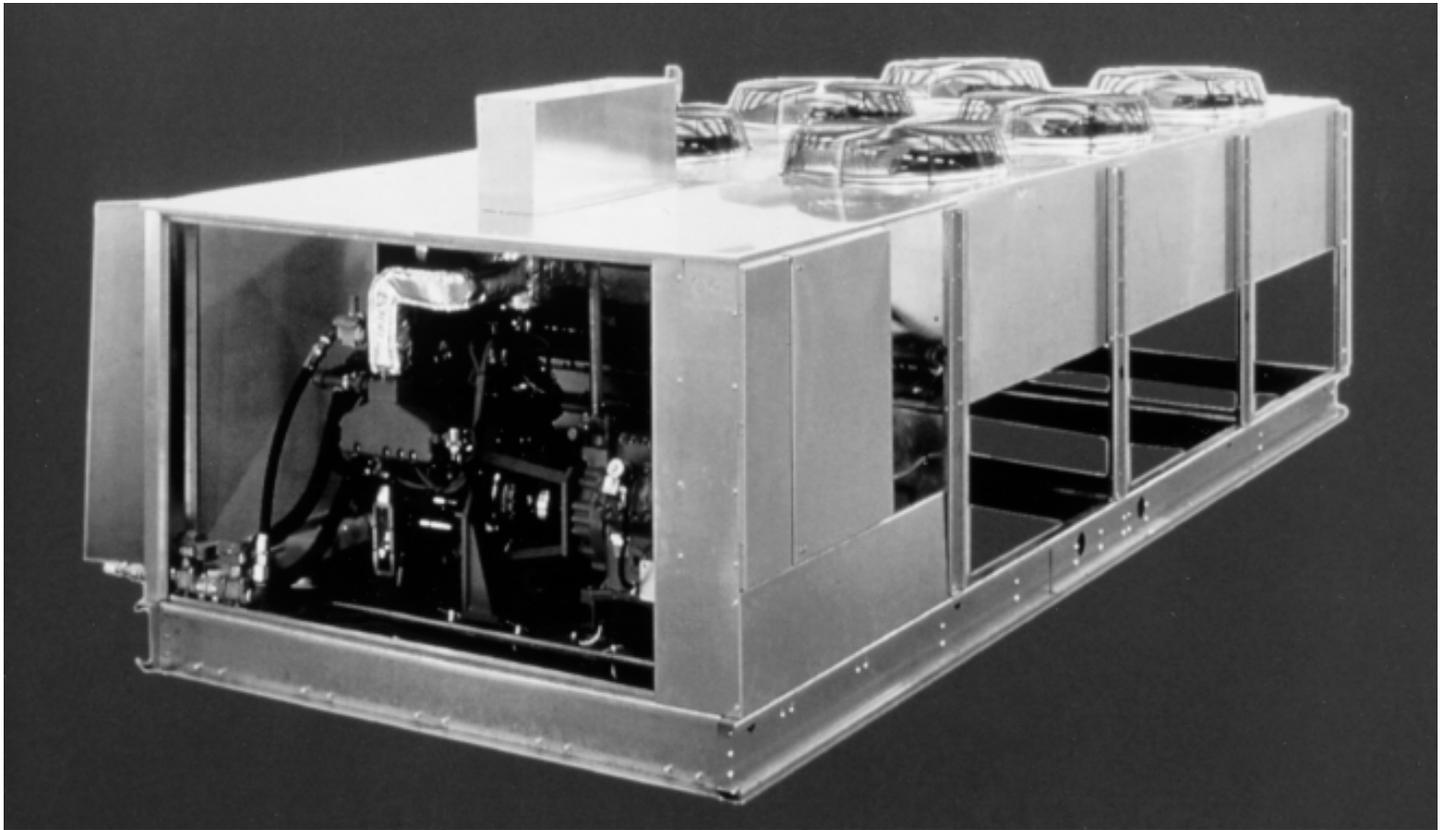
Vermont Gas Systems Inc. recommended and installed a comprehensive gas cooling system based on two TECOCHILL® CH-50ACP air-cooled engine-driven condensing unit chillers for the restaurant. The system saves major operating expenses for the institute, which is pleased to show its gratitude.

NECI is a leading culinary arts

educational facility that graduates almost 200 chefs per year. Students, who will fill posts at restaurants around the world, learn first hand how to prepare various courses in the Institute's kitchen under the watchful eye of a master chef. Their extraordinary fare is served to eager paying diners, who fill the Chef's Table Restaurant, a two-level dining room housed in what was once a department store (circa 1888).

When the facilities were renovated in summer 1997, the HVAC system was converted from electric to a gas engine-driven, four-pipe fan coil system with two chilled-water loops — one which cools five walk-in coolers; the other which provides space cooling throughout the building. The idea for this gas





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cooling system came from NECI Director of Facilities Eric Seidel, who had seen high electric bills paid by similar facilities elsewhere. He knew that natural gas would cost less to operate and found Vermont Gas Systems Inc., the local utility, “very interested in helping us.”

Vermont Gas Sales Engineer John Pifer recalls that “the design/build mechanical contractor had difficulty laying out the ductwork for a conventional electric system.” The mechanical and piping contractors were able to tie in roof-mounted TECOCHILL® units to air handlers above the ceiling in several zones, without adding large ductwork. This zoned, chilled water system yields

precise room conditions. Meantime on the rooftop, the TECOCHILL® duo sits on a special structural steel base and provides complete redundancy.

These chillers cool the three-and-one-half level, 14,000 sq. ft. facility that includes the restaurant with its exhibition kitchen and deli market counter, a production bakery, and prep kitchen with walk-in coolers. The chillers operate year-round and recover engine heat through a shell-and-tube heat exchanger. This feature provides *gratis* hot water for the facility and some heat for the building.

NECI “is very satisfied” with its new gas engine-driven cooling system, according to Pifer.

