

CASE STUDY



HENNEPIN COUNTY FORENSIC SCIENCE BUILDING

LOCATION: Hennepin County, Minneapolis, MN

INSTALLING CONTRACTOR: Jaytech

EQUIPMENT SUPPLIER: SVL

PERFORMANCE VERIFIER: CenterPoint Energy

HIGHLIGHTS:

- The utilities measured 34.8% efficiency improvement after the installation of Hydromx.
- The addition of Hydromx to the run-around loop qualified for both gas and electric rebates with a project payback of just under ten months.

BACKGROUND

The Hennepin County Forensic Crime Lab is one of six accredited crime labs in Minnesota. It provides forensic DNA, firearm examination, a fingerprint database, crime scene processing, and other forensic services.

CHALLENGE

Hennepin County installed a heat recovery loop inside its Forensic Science Building in early 2018. Due to various chemicals in the building and the services provided, the building is heated and cooled with 100% outside air. Typically, this is a costly way to condition a building. The facility runs 24/7 and has 14,000 CFM of outside air and 11,000 CFM of exhaust air through the heat recovery coils.

HENNEPIN COUNTY SHERIFF'S OFFICE
CRIME LABORATORY UNIT
531 PARK AVENUE SOUTH



SOLUTION

After learning about Hydromx's efficiency gain over glycol, Hennepin County decided to switch from glycol to Hydromx to improve the energy recovery performance.

RESULTS

CenterPoint Energy, the natural gas utility, reviewed the performance of Hydromx at the end of the analysis period. Energy engineers calculated the effectiveness of the heat recovery coils during both heating and cooling seasons. **After the installation of Hydromx, the effectiveness of the heat recovery coils improved by 34.8%.**

CenterPoint and Xcel Energy, the electric utility, have reviewed the increase in performance and the addition of Hydromx to the run-around loop qualified for both gas and electric rebates. The cooling savings resulted in a \$514 rebate from Xcel Energy. The heating rebate should have been \$1,213; however, it was "clipped" to \$321 due to CenterPoint's limit of a minimum 1-year pay pack for natural gas savings. These savings resulted in a project payback of just under ten months.

ABOUT HYDROMX®

Hydromx® is a nanotechnology heat transfer fluid that saves a significant amount of energy. Hydromx ethylene-based or propylene-based fluid outperforms not only other glycols, but also outperforms water. Hydromx has been proven in multiple installations to save 20–35% energy in heating and cooling systems around the world.

FOR MORE INFORMATION, VISIT HYDROMX.COM.


HEADQUARTERS

58-75 57th Road, Maspeth, NY 11378

+1 (718) 381 0351
TOLL FREE +1 (844) 449 3766
(+1 (844) 4HYDROMX)

info@hydromx.com

