

U.S. Department of Transportation Announces Hands-Free Mooring Technology Fully Operational at all St. Lawrence Seaway Locks



U.S. Transportation Secretary Elaine L. Chao Highlights Modernization at St. Lawrence Seaway Locks.

The U.S. Department of Transportation's Saint Lawrence Seaway Development Corporation (SLSDC) announced last week that Hands-Free Mooring (HFM) technology is fully deployed throughout the Saint Lawrence Seaway. The new technology revolutionizes the method for locking vessels through the Seaway and is the most important technological advance since the Seaway's opening in 1959.

"This new technology is a significant modernization of the St. Lawrence Seaway's infrastructure, and will enhance workplace safety, lower operating costs for carriers, and decrease vessel transit times through the locks," said U.S. Transportation Secretary Elaine L. Chao.

The SLSDC invested \$23 million to install HFM technology in the U.S. Snell Lock and the U.S. Eisenhower Lock. The Seaway's HFM project is the first use of this technology for an inland waterway, and the SLSDC has prepared its workforce with the skills necessary to implement the new system.



WATCH: HFM Vacuum Pads Attaching to Vessel in Eisenhower Lock.

"The Saint Lawrence Seaway Development Corporation has a long history of implementing technological innovations to improve the safety and efficiency of its operations," said SLSDC Deputy Administrator Craig H. Middlebrook. "Hands-Free Mooring will dramatically improve the vessel transit experience through the Seaway by enhancing safety and achieving greater efficiencies in freight movement."



MV Federal Caribou Entering Eisenhower Lock.

The HFM system uses vacuum pads, each of which provides up to 20 tons of holding force. The vacuum pads are mounted on vertical rails inside the lock chamber wall to secure the ship during the lockage process as it is raised or lowered while keeping it a fixed distance from the lock wall. The last step in the lockage operation consists of releasing the vacuum and retracting the pads so that the vessel can sail safely out of the lock.



MV Federal Caribou Departing Eisenhower Lock.

The full implementation of this new technology is important to the Seaway. Last year, there was a 7 percent increase in vessels transiting the St. Lawrence Seaway, moving 41 million tons of cargo through the binational waterway. The increase in shipping in the St. Lawrence Seaway is the highest cargo total since 2007.

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