



TOUGHMET® APPLICATION:
MARINE

Profile: The South Ferry Company

The South Ferry Company is known as the oldest 'same family' run ferry company in America (circa 1712). The company transports cars, trucks and tourists from Shelter Island to North Haven on the eastern shore of Long Island, with five different vessels outfitted to routinely operate as long as 20 hours per day, and around the clock for emergencies.



ToughMet®
3 CX105
bushings
endure great
stress without
corroding.

ToughMet® Bushing

CHALLENGE:

While travel distance is only one quarter mile from dock to dock, the ferry encounters swift currents along with turbulent underflow carrying sand, silt, and sea life as well as corrosive brine and brackish waters. By any standard, it is a tough operating environment. South Ferry needed a bearing material that could hold up in the harsh environment and endure great stress without corroding.

SOLUTION:

Seeing Materion Brush Performance Alloys' ToughMet® in *Machine Design* magazine, South Ferry decided to use ToughMet® 3 CX105 for the front, central and rear bushings.

After two years, the copper nickel tin bushings lasted two to three times longer than previously used bronze or steel bushings and allowed the boats to stay in the water longer between overhauls, minimizing both expense and time out of service.

