



## SUCCESS STORY OCTOBER 2005

On a 30 foot Hunter sail boat equipped with a Yanmar 3YM30 diesel engine, overheating became a problem. Top RPM is rated at 3600, but when this engine operated in excess of 3200 for about 45 minutes, it would over heat, sounding the alarm. Upon closer inspection, the closed circuit side or glycol side of the heat exchanger did not seem to transfer the excessive heat as designed. With only 188 hours of total running time, all of which occurred upon the fresh water of the Great Lakes, water formed mineral deposits seemed an unlikely culprit for such a predicament.

The coolant was drained and followed up by a simple water flush. Then the mechanic adapted hose fittings to accept a hose clamp configuration. Pumping only two gallons of **RYDLYME Marine** into the bottom of the exchanger and returning out the top and back to our recirculating bucket. One gallon of water was added to maintain circulation, and ran the pump for an hour. Then again, drained and flushed the system, refilled with the proper glycol mixture, and took the vessel out for a sea trial. Once past the break wall, The engine was operated at full throttle in excess of one hour, with no over heating problems whatsoever. (This test was not performed at 3200 for 45 minutes, but 3647 RPM for over an hour!).

Although the closed circuit side of most heat exchangers rarely fouls to the point of overheating, evidently there is the possibility of mixing the improper amounts of coolant that coagulates or thickens into a fouling medium. Incorporating **RYDLYME Marine** into a preventive maintenance program will help alleviate overheating problems and extend the useful life of your Yanmar engines.