

Two Moons Thermal Imaging Services

We see what others can't – finding problems quickly and accurately through the use of today's advanced infrared technology

Marine Vessel Scan/Survey

What is Marine Infrared Thermal Scanning?

Have you ever had a problem with your vessel while at sea? Do you know the condition of your boat's electrical and mechanical systems? Does your vessel have any structural defects or damage? An infrared marine inspection can ease your mind and answer these questions for you. Infrared thermography of a vessel can detect serious faults such as damaged fiberglass gel coat, loose electrical connectors, faulty electrical systems, and failing engine components.

Who is it best for?

Marine Thermal Scans benefit:

- Recreational and small craft/yacht owners
- Commercial tourist/passenger vessels, workboats, and charter fishing boat owners,
- Marinas, boat docks, and marine repair facilities
- Insurance providers and lending financial institutions
- Boat sellers and buyers

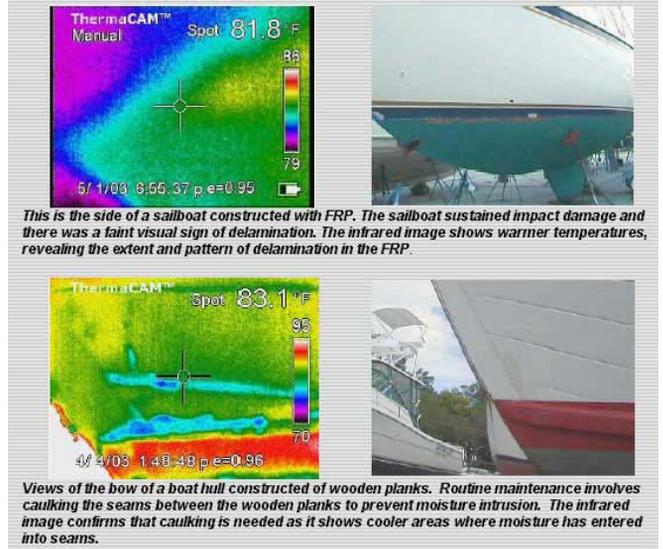
What do I get?

Depending upon the diagnosis being requested, a scan of a specific problem area will take approximately 20 minutes. A comprehensive survey will take approximately 1 1/2 to 2 hours, depending on the vessel size and complexity. You will receive a final report detailing the findings and any recommended actions to be taken. Thermal images will be taken of your vessel's structural, mechanical, and electrical condition, including:

- Hull, deck and superstructure (water intrusion, delaminations, profiling carbon fiber laminates, etc.)
- Electrical system (electric panel imaging, faulty electrical connections, poor breakers, etc.)
- Mechanical system (hot spots in the engine block or cooling system)
- Shore power source

Here's how infrared benefits you in marine applications:

- Locates water and moisture intrusion problems
- Assessment of the hulls, decks, and superstructure condition for defects or faults
- Assures that electrical and mechanical systems are operating efficiently
- Allows a seller/buyer to document a vessel's condition with visual infrared images
- Validates repairs for warranties and confirms repairs properly completed
- Provides insurance documentation
- Appraisal and damage assessments
- May be required by a financial institution before financing a vessel or an insurer before insuring a vessel.
- Marinas and other boat repair contractors in partnership with Two Moons Thermal Imaging Services can add an additional level of service for a minimal cost. For a small cost the service provider can provide a thermal scan as a part of their pre/post service, without having to invest in expensive equipment and training



How much does a marine infrared scan cost?

No two marine vessels are exactly the same therefore all professional inspections are specific and individualized prices are based upon:

- Age of the vessel
- Size
- Location
- Optional Amenities
- Systems Inspected

In general, spot scans for specific problems will cost in the \$75 range with full vessel scans running in the \$200 - \$400 range, depending upon boat length. Partnering relationships are available at reduced costs.

Who performs the marine infrared scan?

Since the technology is advanced and there are so many elements to take into consideration when performing these inspections, it's best to have them done by a trained professional. Tom Mooney, a Level I Thermographer, certified to perform thermographic inspections, interpret results, and generate reports. He is a IICRC certified technician in odor control, water restoration and is certified in Applied Structural Drying (ASD) and Fire & Smoke Restoration. He also holds a State of Michigan Department of Environmental Quality Storm Water Management certification. Tom has been around the marine industry all his life, is a former commercial fisherman and registered U.S. S.C.U.B.A. Diver. He has operated a successful marine design and construction business in the East Tawas area since 1983.