

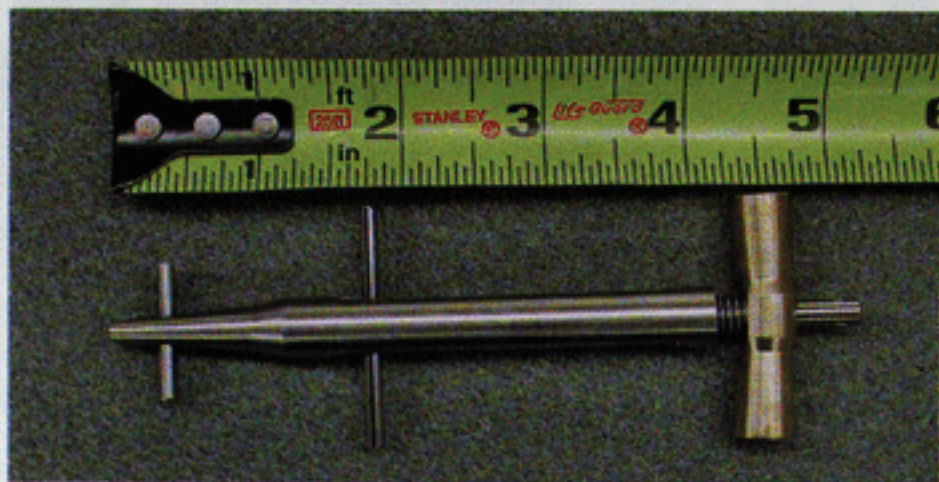
Gear Test: ClampTite tool

By Frank Kehr

TECHNICAL WRITER

When it comes to projects requiring hose clamps, the list for any boat is a long one. And regardless of the inventory you keep on board, it seems you never can find the right clamp for that emergency repair (or even routine maintenance), without heading to the chandlery.

J.S. Enterprises of Yuma, Ariz., manufactures a tool that should make the hunt for the correct hose clamp a thing of the past. Its ClampTite makes use of readily available solid



The ClampTite tool measures around 5 inches in length.

stainless steel wire to form custom clamps around almost anything, with up to 10 times the clamping pressure of standard clamps, according to the manufacturer. As with any tool, there are lessons to be learned, and with the ClampTite the first is to read the instructions slowly and more than once. The tool isn't difficult to use, but it requires a little practice to achieve the correct wrap and tension.

I used the ClampTite to make simple double-wrap clamps, as per the instructions, using wire diameters from .021 through .051 and on hose varying from 3/16-inch vacuum tubing to 1-1/2-inch marine wet exhaust hose. With the .021 wire, the vacuum tube was readily secured to a plastic vacuum fitting without damage to either component. The .041 wire securely clamped the exhaust hose to its hose barb. To further test the holding power of the custom wire clamps, I machined the barbs off a brass fitting and clamped a 3/8-inch hose to it. I was unable to slide the hose off or rotate it on the newly smoothed fitting.

The double-wrap clamp method appeared at least as secure as traditional worm gear or tension hose clamps, if not more so. After following the clamp forming instructions and completing the tension and locking steps, you

See ClampTite, facing page

cut the excess wire off and push it down against the hose, eliminating sharp edges. The completed product is considerably more snag-free than most conventional worm-drive hose clamps. I was initially concerned about the ability to apply adequate torque using the tool's 1-3/4-inch bronze wing, but the thread pitch provided sufficient mechanical advantage to make the job easy.

The ClampTite tool is good to have on board, even if used only for emergencies. Unlike the standard emergency repair method of wrapping a piece of wire around the hose in question and twisting it with pliers, the ClampTite allows multiple wraps of wire that when tensioned with the tool apply torque evenly around the hose. Although there are good hose clamp manufacturers, their products aren't always readily available, so we typically rely on marginal clamps that don't apply equal tension to the circumference of the fitting and have worm gears that can cut into the hose, lose tension or corrode.

One downside of using the ClampTite for permanently replacing hose clamps on certain installations is that once the hose is clamped using the tool, the tension can't be adjusted, as may occasionally be required because of expansion and contraction of the hose.

The ClampTite tool is available in four models, priced from \$30 for the plated tool to \$70 for the all-stainless-steel Mariners Tool, which I tested. All include 8 feet of .041 stainless wire. On my test tool, drilling for the lanyard

hole left sharp burrs around the hole edges; the machined slots on the barrel sides were misaligned, allowing a slight bind at the tool's maximum extension; and the washer pictured under the tensioner adjustment wing was missing. These minor issues aside, the tool would be a good addition to your tool box, along with several rolls of stainless steel wire in various diameters.

Contact J.S. Enterprises at (909) 437-7469 or visit www.clamptool.com for additional information. ■



The writer used the tool to clamp several sizes of hose, including a 1-1/2-inch exhaust hose and a 3/8-inch SAE fuel line.