



V blocks spread the load well and are less prone to slip on uneven surfaces.



Strong Hand 4-in-1 clamps attach to uneven surfaces.



Clamps used as spreaders proved surprisingly effective and far easier than the two-tonne hydraulic jacks we had tried to manoeuvre in here.



Clamping pipes.

PHOTOGRAPHS: JUDE WOODSIDE

Getting a grip

New clamps prove their value

By Stephen Snedden with assistance from Senthoorvelan Krishnamoorthy

I'm currently making a mould for a rotational moulded boat. It's a complex project with barely a square angle in it and dozens of folds and welds. It's the sort of job that requires precision and the often needs more than two hands.

Clamps are useful but they are usually fiddly and can have a tendency to slip at the last moment especially where there aren't any flat even surfaces to get a purchase on. So I

wasn't expecting too much when I was asked to try the StrongHand utility clamps.

They are lighter than cast clamps so I had some doubts that they would have the clamping strength I needed for the more difficult pieces.

I was a bit dubious about the sliding action, too. It's unusual to use sliding F-clamps in engineering but I've seen them used in boat-building and woodworking. This is a very quick

way of getting the clamps to the work and allowing them to be used single-handed.

I never once had one slip once it was in place and even some hammering around the clamp didn't tend to loosen it.

The clamps came standard with V-pads which I think are an improvement on the pads I've seen on other clamps. The two pivoting pieces can spread the load a little better and will

adapt to uneven or round surfaces.

StrongHand also produce magnetic V pads as accessories. They should really be standard. Once you replace the standard pads with the magnetic ones you wouldn't want to change them back. The magnetic pad helps with one-handed operations by holding the clamp on the work surface while you adjust the business end and juggle the pieces into position.

The threaded hole in the top end of the clamp allows you to easily attach the v-blocks and comes with an extender which is intended to get over lips. There are plenty of those here but you can use the clamp with none of these, just the flat end.

The clamp is quite thin so it is easy to get in places where you would normally have trouble inserting a clamp head. The clamps have a spring quality that helps to keep pressure on and prevents them slipping. The handle is a decent size too so you can get a purchase on it.

The ability to flip the head and use the clamp as a spreader is a nice touch. This is possible with other F-clamps of course but the Strong Hand clamps have a small spring-loaded stop in the end of the arm to allow the head to be slipped off and repositioned.

We had to use this process to weld the gunwales in place. I had used small hydraulic jacks to get the right curve and separation on the gunwales and I didn't think the clamp would have enough purchase to hold the gunwale strip in place. I was wrong and we were able to get rid of the admittedly clunky jacks.

These clamps seem to work even where you can't get a flat purchase on the material. For example, in awkward sections with the head on an angle and the body of the clamp at an angle—the sort of position that F-clamps usually fail in—again the magnetic heads certainly help when holding the work.

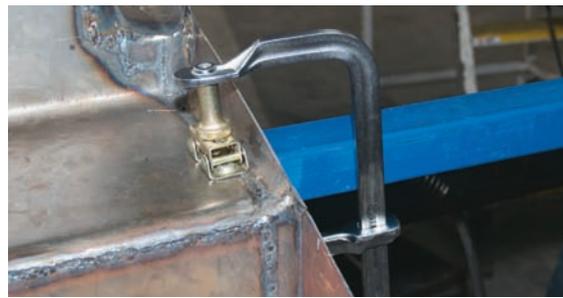
Welding table

It's always useful to have a portable work surface that you can use for fabrication or cutting. The Nomad table is small enough to fit in the boot of a very small car but it can be adjusted to work height. It has wheels that allow it to be rolled about rather than dragged. The table tilts which means you can get to the underside of the work without physically unclamping and turning the piece.

The table comes with adjustable edge-guides to make it easy to find a right angle but we found they were useful for quickly clamping sheet for cutting. The slots in the table allow you to insert the clamps to hold difficult pieces. This is where the v-blocks in the clamps come into their own, clamping pipe for cutting. The table is ideal for light fabrication.

These tools are well-made and it's obvious that a lot of attention to detail has gone into their design. We couldn't fault the manufacture, they surprised us with how versatile they are and over several hard days they stood up to everything we could do to them.

• *Stephen Snedden is a welder, former boat builder and owner of WeldNZ.* 



The step-over is very effective at clearing lips.



The Nomad fabrication table in use.



The table tilts to allow access to the work at all angles.

