

This is another of "those" questions boating journalists and marine dealers have skirted around for years. Following on from our series comparing cats vs monos, this month we study another controversial issue. With nearly 40 years of recreational boating behind him, in dozens of fibreglass and aluminium trailerboats and cruisers, few people in Australia are better equipped to tackle this question than F&B's editor, Peter Webster. In this special report, nothing is held back, there is no hidden agenda, no advertising to protect, just the truth about the real differences between fibreglass and aluminium.

Who Can You Believe? Well, let's start with a basic truth:

Most pressed tinnies cannot match the ride comfort or softness, much less the handling ability, of a well designed moderate or deep vee fibreglass boat.

When it's all said and done, it's really a simple question of how boats are built in the two mediums, and despite 30 years of unceasing attempts by all the pressed tinny manufacturers, there is very little they've been able to do to change the way pressed tinnies are built.

The plain fact of the matter is that while fibreglass boat builders can mould incredibly smooth, curvy, rounded, veed, (whatever) shapes into their cats, tris and monos – the pressed tinnie manufacturer is stuck with a technique that was pioneered way back in the 1960's when Alf Stessl was a foreman in the fledgling Savage aluminium boat shop in Melbourne's Williamstown. And with due respect to all and sundry, apart from a few tweaks here and there, and some benefits from computer-based pattern

making, the technique – and its inherent restrictions, remains the same to this very day.

At the heart of the issue, is the fact that pressed tinnies (small or large) are in principle, built exactly the same way.

They all still use very thin sheets of aluminium (commonly 1.6mm – 2.5mm thick) so they have to be supported by 'ribs' at relatively short intervals (usually no more than 500mm apart).

The raw ally sheets are firstly 'pressed' with a huge stamping press to put the ridges into the sheet. This helps make the sheet much stiffer, and less wobbily (like Rolf's "wobble board"). From there, the pressed ally bottom sheets are laid over a steel jig, and the two bottom sheets (port and starboard) are welded down the centre keel extrusion and right up into the bow.

The two sides are then offered up,

and welded to the bottom sheets on the chine (or edge where bottom and topside sheets meet) with the transom going in last, it being welded to the two bottom sheets and the two sides.

Thus tacked together, the wobbily, quivering upside down result is taken off the steel jig, turned over, and the ribs (like herring bone pattern backbones) start being welded into the bottom of the boat.

This is the crucial part of the process. These ribs provide the stiffness or strength the bottom sheets of aluminium need to ensure they don't move (or "work") as the boat is traveling along the water.

This is the critical point in understanding the difference between a fibreglass boat and a tinnie: even if the tinnie manufacturer develops a really tricky (say) 'variable deadrise' or a deep vee hull on his steel jig, he then faces the problem of having to bend

the ally sheet from the bottom of the boat around and up to the bow – and it can't be done, as aluminium sheet, like plywood, can only be bent or twisted in one direction before it cracks, splits or just breaks off.

Okay – so then the boat builder does a Cliff Joshua, and cuts the ally sheet at the point where it can't be bent. From there, he can only go forward in strips that will cope with bends involved – a laborious, painfully slow process that requires very high welding skills, and much thicker aluminium. Otherwise, there is the real potential (in thin sheet) for the strips to open up and go sprioiing! if someone walks past and sneezes, let alone works the boat in a seaway.

It gets worse – even if the pressed boat builder did invent a way of doing it (such as the innovative Quintrex Millenium hull's use of a rolling mill to forcibly roll the sheet into a pre-

Below: Two fascinating pics . . . Compare the plate metal technique the Bar Crusher team has used to 'get a wrap' around the crucial bow and shoulder sections of their craft, and the softly raked, distinctive stem. All this adds up to one of the softest riding plateys in the business. Then study the awesome curves - multiple convex and concave - and shoulder flare in this gorgeous GRP hull originally designed in the Yamaha studios in Japan, and now manufactured in several places around the world. Sold here as the Waverider 26, this hull embodies the very latest thinking in GRP deep-vee design - and is virtually impossible to replicate in ally. Which hull would offer the dryest ride in choppy conditions?

Ally Vs GRP: Which Is Best For Family Boating?

