The Evolution of wave skis has gone through many experimental changes over the last decade. The 80s saw skis change from hand shaped polyurethane foam blanks to moulded production skis. The early 90s saw the introduction of the hand shaped epoxy board, which revolutionized the sport in one aspect and depleted in another. Because the cost of the epoxy ski in materials and labour was high, the selected few who could afford this type of board had the advantage over the production board, so the decline in competition surfing sadly took its toll.

However the hand shaped epoxy has taken the sport to new heights in performance, due to the extreme shapes which are now possible. The oldest style custom shaped out of polyurethane type blank was limited in bottom curve and weighted considerably more than a polystyrene blank. With the aid of a hot wire, exciting new bottom curves and thickness combinations have progressed customized wave skis into highly tuned weapons capable of handling intense surfing conditions.

Construction has changed as quickly as many of the new shapes, with the intro of styro blanks came the availability of using epoxy resins and exotic cloths which has toughened the custom dramatically. I tend to look toward the sail board industry as a bench mark for strength in epoxy technology. Sailboards have gone through a similar teething period as wave skis. Most custom sailboards are hand shaped in styro foam and laminated in epoxy, and due to the nature of their sport the need for an extra strong board capable of handling continued abuses similar to wave skis is imperative. Most of the bigger companies such as mistral, F2 etc. have poured lots of dollars into epoxy technology. The result, most custom boards are now vacuum bagged using different combinations of core materials. The standard epoxy hand laminated board similar to your standard wave ski is now obsolete, whether it be a sailboard or a wave ski the basic reason behind this is simple, vacuum bagging using different core materials e.g.; wood, diviny cell (D Cell) etc. to a styro blank under pressure for long curing periods of time is by far the strongest technique available for the maximum strength and durability.

Let me explain our part in this field. At Wavemaster Australia we have invested many hours and a lot of money perfecting the process of vacuum bagging using wood veneer. We do not only make custom wave skis but also a range of Malibu's and surfboards and subcontracted to major surf board companies to build their wood veneer boards for local and export markets, Such as Japan, America and Europe. These companies demand excellent quality. Our process is based around using wood veneer as a core material with combinations of carbon fibre and cloth. We use wood because it is a porous material and allows resin to infuse completely through the wood, providing a complete interface with the shaped blank, eliminating pin holes and maximizing strength. This combination with carbon fibre provides the stiffness and durability required with good memory for impact.

Other high density foams such as divini cell (D Cell) and other closed cell foams are also used as core materials because they are not as porous the two faces can only stick together not allowing resin to bleed through. This allows for a stiff laminate, however delamination's can occur with this process. This is the main reason we choose wood as a core material. After the bagging stage the wood is completely sealed with resin. The board is sanded then laminated again making the board completely water resistant, with tissue type stickers glassed under. The board is then urethane sprayed and buffed to a high quality finish.

I suppose you need to ask yourself a few questions when you are looking for a new custom. Firstly the cheapest and lightest custom is it the Best? Let's face it there must be reasons for this……. Is it

too light? How much glass is on the board? If you are looking at spending good money you want more than one season out of your board. And you don't want to ding it just carrying it in your car to the beach. With the vacuum bagging process broken noses, boxes pulling out, and rail cracks are minimized drastically. Is the old story ask someone who owns one?

DESIGN AND SHAPE

The shape of your ski is every bit as important as the construction. The most common problem with custom designs is under buoyancy and bad fitting leg lengths. Simple issues which can be eliminated when you order your custom ski and get measured correctly. The shape is as individual as the name custom applies. Our shapes are completely dependent on the customer that orders the board. Our board shapes are based around a proven format, using single concave with slightly chined rail line through the nose, which blends into a double concave planning surface through the fin area and tail. We have found this combination works well in all conditions with loads of power off the bottom and plenty of release where needed. Being concave means there is no trade-off for stability. Our rail and tail lines vary to suit customer needs and performance levels required, so when you come to order your new custom whether it be a Wavemaster or another brand, do yourself a favour…… be straight with the designer about your skill level and your weight. This will definitely be to your advantage when it comes to stability and floatation of your ski. These points combined with fin placement, rail shape, bottom curve and plan shape make your ski perform. Anybody can shape a custom but putting all of the above points together time after time makes the difference between very good and ordinary. Our deck lines are clean and refined using tail buoyancy to a minimum, our latest tail shape is a swallow combined with double rail flyers which allows you to paddle slightly longer and release the tail easier in slash type turns.

All of our customs carry the adjusta block system which is exclusive to wavemaster . With this system you are guaranteed in getting correct leg settings and spot on point of balance simply by sliding the adjusta block to your correct leg length. How many times have you needed to move your seat, foot wells etc. and your locked in that fixed point? We also do fixed footwells in 2 formats to accommodate riders who prefer this fixed system.

I hope that I have outlined here points that can be used to your advantage and shed a little light on areas that needed answers. Ski design will continue to differ that is progression.

Your welcome to leave your input on the guest page and I will get back to you.

Later Col

As the