



Surfers catch the techno wave

By **ALISON APRHYS**

In the old days, all you needed was a surfboard. Wetsuits were for sissies, leg ropes scorned, and you had to be able to understand a weather chart to find waves. Now the Australian surf industry is worth about \$100 million and has embraced technology, leading some to claim that science is hijacking surfing's soul.

Around the world, about 900,000 boards are made each year, most in factories in Asia using Digital Surfboard Design (DSD) software. Invented by Brazilian surfboard maker Luciano Leo, DSD creates a three-dimensional model of the desired surfboard on a computer screen. Theoretically, every board that comes out should be an exact replica.

That digital model is then carved by a robot arm similar to those used by car manufacturers. All the human "shaper" has to do is fine-sand the end result, reducing shaping time from 90 minutes to 25.

James Cheal, from Sydney, became one of the earliest shapers to use DSD (also known as SurfCAD) when he converted from hand-shaping six years ago. His highly coveted

range of "Chilli" surfboards are ridden by champions such as Andy Irons and Rebecca Woods, and are made in Australia and under licence overseas.

"Using this digital method means that if a surfer loves a board, then we can make them a near-perfect copy" he says. "I design the boards on my laptop using the SurfCAD software. Then we transfer the design file to a floppy disk, which is inserted in the shaping

machine."

Mr Cheal says it's an efficient and fool-proof method and he wouldn't want to return to the days of exclusive shaping by hand. "Using the SurfCAD DSD is ridiculously more effective," he says. "Until now, surfing has been changing faster than the technology."

That is, surfers have previously wanted performance from their boards beyond what technology could produce. But with the ability to produce perfect copies of championship boards, surfboard manufacture has switched focus to design rather than craftsmanship.

It's not just board design that is changing the sport. Rob Holt, Surf Science and Technology course co-ordinator at Edith Cowan University, Western Australia, says the web has made weather knowledge redundant at the click of a mouse.

"The internet allows you to log on to current and predicted weather conditions, so surfers are too well informed — there's no such thing as keeping your eyes on the meteorological charts and noting what the cirrus clouds are doing," says Mr Holt, an oceanographer, meteorologist and keen surfer.

He is concerned that many surf breaks are becoming overcrowded as the internet provides an ever growing array of sophisticated weather data. "It's now all too easy to predict the swell," he says.

Surfing webcams allow surfers to do their dawn patrol in pyjamas. Founded in 1998, Coastalwatch now has cameras at 75 beaches around the country, with more coming

online each month.

Last January, Nielsen Net Ratings reported 4 million page views, including 300,000 uniques, making it the eighth-biggest sporting website in Australia. Coastalwatch also provides weather forecasting, meteorological terminology, links to wave and virtual buoys for swell prediction.

So has surfing lost its soul? Not according to Graeme Galbraith, director of the Torquay Surf Academy, in Victoria, and chief executive of Speedfins. "Technology is not ruining surfing; if a more advanced fin or board design helps you progress, you'll have more fun and that's what it's all about."

Links

- ▶ chillisurfboards.com
- ▶ southwest.ecu.edu.au/surf
- ▶ speedfins.com



Nick White supervises auto shaping of a Chilli surfboard. PICTURE: ALISON APRHYS