

# CompSand

## The composite surfboard cooperative

In this age of mass production and mass consumption, an international cooperative of master craftsmen is kicking against the trend, advancing the ideals of sustainable surfing with ground-breaking construction techniques and custom-built boards Photos: Doug Irwin

Surfboards are big business. The manufacturers associations, SIMA and EuroSIMA, bear witness to a fast-expanding industry, serving a market that's expanding even faster. But as factory lines get bigger one collective, inspired by ground-breaking new materials, is experimenting and pushing the boundaries of board construction while retaining its essential craft.

The Composite Surfboard Cooperative (more catchily known as CompSand) is an international cooperative of small-scale shapers building high-tech boards. This community of like-minded artisans is rapidly advancing the design and construction of ecologically sound, high-performance surfboards by sharing their ideas and the results of their experiments.

### On the rails

Although the CompSand construction technique appears similar to SurfTech or Salomon, in reality it's quite different.

Each board is custom built. A light core and tight, strong skins with glass and environmentally friendly epoxy resin are sandwiched together and clamped using a vacuum bag. A high-density skin material such as balsa or Corecell™ is used, resulting in enormous strength with minimum weight.

But the stand-out feature of a CompSand board is the solid wood or high-density foam rails. These wrap the whole perimeter of the board and allow the shaper to tune the flex and focus the strength and spring where it is needed most, without creating an excessively rigid board. The rails not only give a performance edge, but also a very real durability advantage. They distribute loads efficiently when flexed or stressed, which does a great deal to prevent snapping or creasing. The HD rails also give a firmer feeling while surfing the board, providing good drive, faster response, and less ding vulnerability.

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04

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01  
Jarrod Oldham quad fin  
set up02  
Paul Cannon rests another  
finished design03  
Mark Venn fish04  
Kit Sidwell camouflage  
hybrid05  
Paul Cannon finding the lip  
on a Southern Hemi point

05



### Nature's own spring

There are also fundamental differences under the skin of the board, although CompSand are understandably reluctant to elaborate in too much detail. When making the board they are able to place as much structural potency where they need to, and trade-off weight elsewhere in the design.

Some of the best feedback relates to the board's flex characteristics. We've all had magic poly boards that have great flexibility and pop right off the bat when they're new, but the problem with these traditionally constructed boards is that they start breaking down the very first time they're ridden. Far too soon they simply don't ride properly. But with wood as their primary structural component these boards are using nature's own spring. They retain their flexible return properties, staying magic for far longer, meaning the design can break boundaries in ways that shapers using traditional materials can only dream of.

### No production lines

Undoubtedly, being 100 per cent custom-built is a big plus point for CompSand. In all the board markets, including snow, skate and windsurf, there tends to be a limited selection of models available because the manufacturers' focus is on quantity as well as quality. But the satisfaction of having a unique, personalised piece of functional equipment is second to none; custom-design boards are a precious part of surfing and it's encouraging to see CompSand carrying this torch. CompSand's technology allows infinite variations of surfboards to be built, and from their inception boards are individually tailor-made to specific requirements, whether that's the wave to be ridden, the surfer's style or ability, or simply an artistic expression.

### Alternative materials and experiments

Sustainable surfboards may appear to be a bit of a contradiction in terms, but CompSand offers a balance of characteristics that are kinder on the environment. Low VOCs and minimal use of solvents and toxic blowing agents mean they are offering a real eco-friendly alternative. Boards utilise plantation wood, which still needs to be milled and shipped – but compared to traditional construction techniques, CompSand is miles ahead. EPS is recyclable, provides useful aeration in landfill; the boards can easily be repaired and restored with little effort; and – if it's looked after – the longevity of the board is greatly increased, reducing the amount of waste sent to landfill.

CompSanders generally try to source their materials locally, and some members of the group have started experimenting with bamboo-based fibreglass and carbohydrate-derived epoxies. The only non-organic material used in construction is the EPS itself, and you can bet they'll be experimenting with alternatives as they become available.

The advantage of acting as a cooperative is that it allows CompSand to maximise their R&D capabilities to that of any large corporation. Every member brings specialist knowledge and flair to the table, offering the problem-solving power of many minds. Members also finance their own experimentation, paying for materials and tools from their own funds, and are rapidly making exciting advances without the backing of any big industry partners. Ideas are shared and building techniques are developed as a group, meaning that features can be accurately recreated across different designs.



Ultimately it seems the surf industry has two options. The first is to use the advancing technology to produce the limited models and choice we see in some lines today. This would result in only the professionals and the financially flush having access to custom boards, and would exclude the small-scale shaper who doesn't experience any sort of economy of scale. It's a scary scenario in which any surfer without major sponsorship would be unable to experience what this technology can deliver.

The alternative is CompSand, where the cooperative acts together to make the technology accessible to all of us. It's a democratic alternative that's already taking shape, in which all surfers can appreciate the advances and experience the end results for themselves.

[www.compsand.com](http://www.compsand.com)



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Paul Cannon testing prototypes

02  
Jarrod Oldham decal