

# Cool 'Cats' Of The Seven Seas



Catamaran parked on the beach till the sun goes down to venture out to sea

**Catamarans were first put to the seas off the southern coast of India and were manned by men of Dravidian origin. The boats were main single hull vessels with an outrigger. The Tamils called them '*kattumaram*', which literally means 'tied wood'.**

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Thousands of miles away, east of India in the tiny Pacific Islands, the Polynesian people were using similar sea going vessels to the Tamil *kattumaram* to do their island hopping. But these were multi hull sailboats, and from them a new definition to the Tamil name evolved. Today a catamaran is a multi hulled vessel consisting of two parallel hulls of equal size.

But Westerners, having seen the Dravidian version before the Polynesian invention, named the Pacific boats after the Tamil *kattumaram*, pronouncing the word 'catamaran'. Today, in popular lingo, they are commonly called Cats.

The popularity of catamarans has spread worldwide. This is mainly due to them being swift, stable, adoptable and generally unsinkable unless they spring a leak. The catamaran can use wind power with the sails and manpower with the paddles, a simple inexpensive design that meets the perilous challenges of the roaring deep.

Today in Sri Lanka's modern dockyards, building catamarans has become big business. Here, they are built according to the strict engineering definition of a catamaran being a vessel with two parallel hulls of equal length and size. And their uses are many. Some are made to ferry people and goods across rivers or lagoons. In this instance two equal hulls are kept side by side. A steel plate is placed on top which joins the two hulls. On the steel plate, iron bars are fixed for people to steady their balance. And, hey presto, you have a floating ferry. Or, if you prefer a sailing yacht instead, just add a sail to the steel plate and you are in business, pronto. These are the catamarans the engineers know.

The manufacturing process at the dockyards is as follows. Once the manufactured

mold suitable for the desired size for the hull is selected it is cleaned. A wax known as mirror glazed wax is used to polish the mold with a polishing cloth. Then it is buffed with a buffing machine to achieve the final polish. Thereafter a gel coat is applied to the mold. Before it is applied, however, the gel is mixed with a coat of paint at a gel to paint ratio of 100 to ten. The colour of the paint mixed will be the colour of the finished product. To harden the mixture, a catalyst chemical is added. This must be done within five to ten minutes to achieve its purpose. Then it is left to dry for half an hour.

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Thereafter a chopped strand mat (CSM) is liquefied with emulsion. It is then distributed evenly on the gel coating. A wheel is then used to smooth out all air bubbles and other textural inconsistencies, and another catalyst, this time even stronger, is added. It is then kept for a period of twenty four hours. Though it usually sets within five to eight hours, extra time is given as a safety measure to ensure no deformities will arise. The nuts and bolts of the mold are removed after the hardening process has finished. If the nuts and bolts don't come out easily, air pressure is used to effect the removal. The twin hull catamaran is now ready to sail the seas.

But just tell that to the fishermen on Sri Lanka's beaches and they will laugh in your face and scoff at the very idea of a boat with two hulls of equal size being able to weather the storms of the sea. They will tell you that those vessels may be suitable for the placid waters of rivers, canals and lagoons but not for the choppy sea. Here, on the seashore, men who use boats to earn their livelihood place their lives on the line to bring home the mackerel and will swear by their Gods that what they have—which is a single hulled vessel with an outrigger they call a 'kollaywe'—is the one and only original catamaran. These men's forefathers used these vessels from time immemorial to traverse the seas, and in their view no other imposter with two hulls of equal length can raise a oar to the wonder and virtues of Sri Lanka's indigenous catamarans. It may topple but it won't go under, they say.

Of course there is one difference. The hull, once made out of wood, is now made out of fibre. These standard hulls are produced by the ship building dockyards,

and today the great majority of the boats come from the same standard mold and are of the same length and size. But though they have lost their individuality in the process, the great advantages gained have been faster speeds and less maintenance. Only the outrigger is still made of wood. Though this too can be made from fibre, fishermen say that, being lighter, they don't have sufficient ballast to perform the great balancing act on the water and keep the boats afloat as they meet the swells and falls of the ocean waves. Wood, being heavier, is thus preferred.

But, in the good old sea days of their grand fathers when fibre was totally unheard of, building a catamaran using wood was an art form their very lives depended upon. An old sea dog on the beach, with his fishing days still with him, explained to me the fine art of creating a catamaran and ensuring its seaworthiness.

First a suitable log of desired length and size is chosen. The wood is generally jak, though mango or *mara* may also be used. *Kumbuk*, known for its water resistance properties, can be used but due to its high cost is usually not utilised.

Once the log has been selected, a hollow is carved out. Two planks of the same length as the trunk, approximately two feet in height are then fixed on to the log. This is carved by frilling holes both on the log and the planks. Coconut branch stem is then weaved into the holes, binding the hull and the planks together. Then a special substance called '*dhum mala*', incense obtained from tree sap, is melted and the resulting thick liquid is applied as a gum to bond the planks and the log together. A sort of multi bond glue that is strong enough to weather the demands of the stormy seas.

Then work begins on making the all important outrigger, the '*kollaywe*', which provides the hull the vital buoyancy to stay afloat and the necessary prop to go underwater and pop back again to keep the boat on even keel. For this the preferred wood is the Albizia tree, found in Hawaii and the South Sea Islands. Generally it is cut to approximately half the length of the main hull. The ends of the log are also chiselled to make it pointed, giving it a streamlined shape to cut and whisk through the waters. The log is attached to the hull with two curving branches from the domba tree.

The catamaran is now ready to ride the crest of the waves and take on the

demons of the sea, but for the maintenance. Sri Lanka's fishing forefathers had never forgot that important aspect either. Coconut oil is mixed with turmeric powder and is boiled. The oil is then applied to the entire vessel. This has to be done while the oil is still burning hot. The vessel is then sun dried. This form of wood seasoning must be performed at regular intervals to prevent the wood from decaying.

Today in America there are massive 90 foot long catamarans reaching speeds of over 50 mph. These new sleek and fast catamarans are the descendents of the old *Kattumarams* that were put out to sea from a South Indian jetty, thousands of years ago; the forebears of Sri Lanka's own catamarans that plough the seas in search of fish.

