The mold:
No part that comes from the mold can be better than the mold itself. It is a truism. And by the same token no mold can be better than the "plug" from which it was made. Here is the sequence:

From the architect’s drawing board comes the finished yacht design from which an exact full scale model or "plug" is built. Months go into its preparation. Every mark, every unevenness must be sanded and buffed until a perfectly smooth high gloss finish is achieved. There can only be one criterion in this stage—the best! Hang the cost—for everything that comes after is only as good as what is done now. Then and only then is the mold begun. Over the waxed plug there is added layer upon careful layer of fiberglass to create the mold. To avoid distortion in the final product each layer must be hard and cure for a specific period of time and then carefully be ground and sanded. Then a welded steel framework is glassed into place. Now the mold is ready to begin turning out parts.

The more perfect it is, the more perfect will be the parts it produces. In order to carry out this whole process it takes many months and the tender loving care of a very cranky yard who won’t let us stop or hurry up any part of the process until it is exactly right.

When production begins it is very important to build up the laminates gradually and to allow time for each to set. When they have set, each laminate is ground and sanded smooth before the next layer is applied. Time and care are the secret. A properly laid up hull cannot be rushed. Time is money. You can layup the same laminate in 2 days or in 5. The difference is quality.

The Laminations:
No mold can be any better than the amount of care and time that is spent to properly clean and wax it between the production of one part and the next one.

Too little wax or wax unevenly applied can spell disaster for a new hull or the mold itself.

This is another truism and a very important one.

The first layer to go into the mold is the gel coat. There are 2 types of gel coat, organic and inorganic. The latter, which CSY uses, is 1/2 more expensive. It dries harder, and it holds its color and high gloss longer. It’s so easy for a manufacturer to skimp here but you won’t discover it for at least a couple of years.

The gel coat is laid down carefully from 18 to 25 thousandths of an inch thick. If it is too thick it will cure unevenly, if it is too thin it will ‘craze’ or ‘alligator’. Care and precision are essential, as in every other part of the production of anything, including a boat.

Next comes the layering or laminating of the fiberglass in the form of roving and mat, carefully rolled out in resin. The right way to create these layers is the slow way. Step by step, layer by layer with plenty of time between applications for the laminate to set and to be sanded smooth.

At the CSY Yacht Corporation we use twice the number of layers of mat and roving than is recognized by the industry as an “adequate” layup. At the turn of the bilge, our layup approaches two inches.

Why so thick? For that once-in-a-lifetime moment when a stronger hull can save the boat—and your life. A hull is the foundation of a boat like it is with a house. A thick hull is a strong foundation which translates into bulkheads, doors and engine beds that don’t shift and always fit.

Guidelines set by the Society of Naval Architects consider acceptable flexural strength for a fiberglass hull to be between 25 and 20 thousand pounds per square inch (psi). CSY’s hulls test to an average of almost 36 thousand psi because of the time and care and additional materials that go into the layup.

The Deck:
The decking on all CSY yachts is solid glass laid up to the thickness of most hulls. This is a great deal stronger than any sandwich type construction of balsa or foam or plywood squares. Exceptionally durable. It won’t rot, it won’t mildew, it won’t leak.

Joining the deck to the hull is a crucial operation because no matter how durable both pieces are, if the joint is weak or improperly prepared you’re in for trouble. What has to be remembered about a hull-to-deck joint is that it has to 1. be flexible, 2. it has to have a mechanical hold to keep the deck and the hull together as the flexural
stresses of each differ. 3. If possible and most important is that the joint can accommodate 1, 2, and 3, and still keep your boat together, forever and still keep the boat dry.

Here is how CSY does it. First, a flexible sealant, 5200 by 3M, is placed in the joint when the deck is placed on the hull. Then #4 stainless steel screws are set every 8 inches to keep the alignment of the deck and the hull. Next, heavy 5/16" stainless steel bolts with lock washers and nuts, secure the deck to the hull on 8" centers. Over this a teak toe rail is placed which is also screwed through the joint every 12 inches. If there is a better hull deck bond in the industry, we don't know about it.

Hatches: All CSY decks are designed with high 4" coamings to receive all hatches. Then we build heavy hatches which rest on gaskets on top of the coamings to make a seal. Even if the gasket doesn't seal or deteriorates there has to be 4 inches of standing water on the deck before a leak can begin even if the hatch is not dogged down.

Thought has gone into the design of the CSY deck. And it pays off. It pays off in safety, and it pays off in dryness which has to be the most important element in comfort on any boat.

The Final Check:

Constant quality control is the most crucial consideration in the process of building a boat to a high standard.

Our boats are built on nine stations with four days on each station. At the end of each day there is a quality inspection to assure everything is being done to our standards. Then when the boat is ready to go out the door it is held up for an entire day for its final pre-launch inspection.

In the old days, no self-respecting boat builder would ever consider delivering a boat that had not been given a thorough series of in-the-water boat trials or which the Germans called probefahrts.

Today a boat buyer is lucky if his boat is even put in the water, let alone sea-tested and checked out before it is delivered to him.

At CSY we're old fashioned.

Prior to delivery we take every yacht we build through a comprehensive battery of probefahrts, tuning the rigging, checking the sails, inspecting for misalignments and discontinuities. We give the engine a 24 hour check. We take her out for a test run under full sail and under power. When all systems have been checked and re-checked and the yacht is deemed ready for delivery, the boat is turned over to the owner.

At this stage, back in the good old days, the owner would conduct his own "Owners Trial" or "Acceptance Trial" taking the boat out, subjecting it to his own scrutiny and returning with any criticisms he had for correction.

We welcome this old fashioned concern for excellence and encourage all new owners to conduct their own personal trials.

It assures us we are delivering a quality product and assures you of the same thing.

The Auxiliary Engine:

CSY uses Westerbeke engines on all of our yachts. Westerbeke is a small family firm who can afford to take the time to customize our engines to meet the exacting specifications that CSY has learned over the years are needed to make the engines as trouble free and as maintenance free as possible.

The Hardware Blocks, Spars and Rigging:

We have tested hardware from A to Z in all conditions. We never standardize on anything unless it works. We have everybody knocking on our door to sell us their wares.

Our laboratory is our charter business. If it works there we know it will work on your boat. We only buy what we know will work and will last and that which we have tested.

Unlike most other manufacturers we don't buy because of price. We buy the best regardless of price.

The Steering:

Edson steering systems are standard aboard all CSY yachts. Edson uses stainless steel chains as a driving mechanism, and then it changes over to wire around sheaves to a quadrant attached to the rudder post. CSY extends the rudder post and machines the top of it so an emergency tiller can be attached if one of the steering cables should let go. Edson equipment uses steel needle bearings which give a smooth, good "feel" in steering. For the wheel we prefer the Edson smooth, all stainless steel destroyer wheel because it is corrosion proof and trouble-free. A quality product like Edson is the first important step to a trouble-free system. But the final and most crucial step is in the design and the care in the installation of the system.
CSY Quality: The Essence

Storage:

Good storage can make or break a boat for whoever has the job of keeping things neat below. Here are just some of the storage facilities aboard all CSY yachts. For each one on board: 12'-18' of linear space in the hanging lockers, 2 large bunk-side drawers, a private drawer in the head, bunk-side shelves. For keeping things together — dry storage for bedclothes and pillows, instrument, book and chart storage, clothes hampers in each head, a drawer for each person in each head, extra linen storage, dry shoe storage, tool storage drawer, odds and ends drawer, 4 or 5 galley drawers, space under the sink for storage, a pots and pans locker, dish locker, a glasses and bowls locker, bug and odor-free garbage storage. Spice rack, liquor cabinet, cockpit cubbyholes (for winch handles, etc.). Big, big sail locker to hold extra sails, fenders, cushions, lines, outboard, anchors, everything. An on-deck ‘dirty’ locker. A beer cooler next to the helmsman in the cockpit. Vented propane storage (3 month supply). Split anchor rode storage (250' of line plus chain per bin). There is room aboard to store 3 full weeks of provisions (3 weeks of perishables, 3 weeks worth of ice, 3 weeks of frozen food — in a mechanical refrigerator. The list goes on and on. Planning ample storage means a comfortable home afloat.

Liveability:

All CSY yachts are designed to be lived aboard for long periods of time. Even forever, in comfort and privacy. Just what is comfort aboard a yacht? 6′ cushions instead of the usual 3′ or 4′ ones. Hatches with high lips. Means a dry boat. Can you think of anything more important? Oversized beds, not bunks, designed fore and aft not athwartships. A minimum of 6′ 4″ headroom going to 6′ 7″. A slow running diesel, insulated and out of the living areas, with a quiet exhaust system. A large, convenient, safe galley. Big heads. Ample showers with hot and cold pressure water. Fuel and water tankage so you don’t have to worry about it for weeks at a time. Broad uncluttered decks. Battery condition gauges. An electric windlass for hauling in the anchor. A circuit breaker panel for all electrics. An electric bilge pump backed by a big hand pump that doesn’t require the endurance of Charles Atlas to pump it. Liveability, in short, comfort, is one of the things that makes you really love your boat. She’s designed and built to live aboard for extended periods away from any base of supply.
Sailability:

Because sailability is the ultimate proof of a successful cruising yacht, CSY has every new yacht design thoroughly tank tested. Our 44 and 37 were tested against a modern, one-ton racing machine and the results were almost identical.

CSY yachts are designed to be stiff sailors. Their heel in 35 knots of apparent wind or about 28 knots of true wind speed under full sail is only 30°. Only then is the rail barely under.

As a practical matter, at 28 knots of true wind speed the one-tonner would be reefed way down with a crew of deck monkeys working like hell. At that point the one-man crew on the CSY yacht would just need to start to think about reducing sail.

CSY yachts are fast, safe, stiff, dry sailors with superior windward ability. Over powered self tailing Barient winches are standard making sail tending a breeze. These yachts can take anything the sea can dish up. They have around the world capabilities. That's not an advertising slogan. That's the truth.

Low Maintenance & Durability:

Low maintenance and durability are determined by the quality and kind of construction and the selection of equipment that go into a yacht. But design plays its role too.

A totally accessible engine area is fundamental — so the engine can be easily worked on or removed without tearing the boat apart.

Electrical wiring should be out of the bilge, accessible and coded to know what goes to which.

Water tanks should be designed with large cleanout and access plates. The bilge should be deep with a large capacity and gel coat for easy cleaning. Chain plates should be easily accessible for inspection and repair. All bolts through the deck easily accessible from both sides and with back-up plates.

Let's face it. As the world’s largest charter boat organization we have to care about maintenance. And we build for it.

Convenience:

With convenience a yacht can be a dream. Without it, absolute pandemonium. We put a lot of time into planning for convenience. All living and working spaces inside a CSY yacht are conveniently related one to another. The galley to the cockpit and to the dining salon, the heads to the sleeping areas, etc. We have made it a short and convenient climb from the inside of our yachts to the cockpit. The engine is totally accessible and can be easily reached in and out of the weather. The place for the electronics is convenient to the chart table. A fully insulated beer cooler is next to the helmsman's seat. And for convenience and flexibility of handling our yachts are ketch or cutter rigged which is why they are the preferred rigs for cruising yachts.

Safety:

CSY has put a lot of thought into the design of safety features. We have eliminated steep, high ladders at the companionways. No matter where you stand in a CSY yacht there is a handhold within arms reach. In addition to effective, restorable non-skid surfaces CSY yachts feature deep bulwarks forward to prevent sliding off the deck in high seas and good deck and cockpit lighting for night cruising. Plus a well designed quick draining cockpit.
CSY 44 WALK THROUGH

LOA 44'3" (13.49 m)
LWL 36'4" (11.07 m)
Beam 13'4" (4.06 m)
Draft 6'6" (1.98 m)
Sail Area 905 sq. ft. (84.07 sq. m)
Hull Fiberglass
Spars Aluminum
Displacement 37,000 lbs. (16,783 kg)
Berths 8
Auxiliary Perkins 4-154 diesel
Designer Peter Schmitt

CSY Yacht Corp.
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We have stated many times our preference of no walk-through in the mid-cockpit configuration and have so stated in our book, the CSY Guide to Buying a Yacht, with our reasons. However, we aren’t everybody and everybody should have a choice. Heretofore, we have only offered the alternative. Now we offer the choice of a walk-through model which corrects what we object to the most in a walk-through, an ugly, ungainly boat. Peter Schmitt has managed to come up with a really beautiful design by raising the saloon, minimizing the long climb to and from the cockpit. It also adds the extra dimension of large windows in the saloon which add the light and airiness rarely found in this configuration.

To be sure, some storage and tankage has been sacrificed as in any walk-through. But this is traded for an extra-large galley and chart table, and the inside connection of the aft and forward sections of the boat. This is for those who spend a lot of time living inside their boat.

The CSY 44 Walk-Through sails well. We know that because she is built on exactly the same proven hull as our other CSY 44 models. She is built to the same heavy specifications as her sisters, with bronze ports, bronze hardware below, stainless steel propane stoves, stainless steel hardware on deck, extra-heavy rigging and the Perkins 4-154 diesel—everything that places a CSY yacht head and shoulders above any other yacht.

If you prefer the walk-through configuration, place your order now. The tooling for the prototype is underway and should be available for viewing by year’s end. We expect production to begin early next year. If you have a walk-through in mind, you can’t afford to miss seeing this great yacht before you buy.