CONSTRUCTION DETAILS

aine Cat takes a semi-custom approach to each hull it delivers from its plant in Bremen, Maine. Production manager Roscoe Ryan and his 18-man crew have launched 12 MECat41s in the past 18 months.

Hulls: The hull laminate is built up using vinylester resin and 1.5-oz. random mat. Inside that is a sewn quadraxial cloth (3508). Computer-cut Corecell comes next. "It's the most expensive coring you can buy, almost impossible to crush, "Vermeulen says. Three-quarter-inch coring is laid up throughout the topsides except in the bows where, Vermeulen says, the shape forces laminators to use solid material. The hulls are then reinforced with a "keel" of unidirectional fibers on the centerline.

Deck: The flat expanse of bridgedeck gets one-inch coring for added stiffness. Next comes a layer of slightly lighter quadraxial cloth (2608). This is followed by a peel-ply of nylon. The layup is by hand and wetted out with squeegees before being "dry-bagged" together. "No other production catamaran builder in the world uses Corecell in every component," Vermeulen says.

Hulls and Deck: The peel-ply is removed from the interior and gelcoat is applied by hand. The hull-to-deck joint is a ship-lap (3½-inch overlap) that is bonded with urethane adhesive-sealant and fiberglassed on the interior with 1708 triaxial tape. Faired bow and stern to a seamless finish, the exterior seam is covered with a rigid vinyl rubrail with a protective stainless steel insert. The hulls are joined by a custom aluminum compression beam with properly isolated stainless steel brackets.

Mast and Boom: Made of clear, anodized, Series 60 aluminum, the Selden spar has single spreaders and stands 60 feet above the design waterline. Halyards and a wiring conduit are internal. Antal mainsail track and a batten car system are included. The aluminum boom is 20 feet long.

Rudders: Balanced, fixed under-body with 12 percent thickness of maximum chord fiberglass foils filled with high-density foam on 1½-inch 316 L stainless steel rudder posts.

Daggerboards: Similarly shaped foils of fiberglass filled with Corecell.