HUDSON BOAT WORKS

April 2, 2007

Innovation is alive and well at Hudson during the most concentrated and science based R&D phase in company history. Collaboration between Jack Coughlan, Head of Hudson R&D, Britt Chance, U.S Naval Architect, Glen Burston P.Eng, Hudson Manufacturing Manager, Luis Tarrataca, Hudson Design Engineer, has created a wonderful blend of science, technology, and experience.

The new GREAT WHITE Ix and HAMMERHEAD 8+ mark the arrival of the Shark Series. This phase of Hudson hull evolution has been designed to increase hull speed, create a stable rowing platform, and improve comfort characteristics. As the official boat supplier of the Canadian and U.S national teams; valuable feedback from some of the world's best athletes and coaches was used to create this new line of boats that by design are unusually fast and forgiving. Recent testing and feedback has confirmed improved hull speed, ease of set, and crew comfort.

The brain trust behind the Hudson hull evolution gives their unique vantage on the creation of the new Shark Series;

'The racing shell design process at Hudson always starts with a set of goals for the new design. We knew what we came up with was a stretch; increase the speed and stability to match or exceed perceived standards and reduce drag to lower levels than the current world record holding Hudson eight.

Knowing the magnitude of the challenge, we enlisted the help of world renowned experts in both naval architecture and computational fluid dynamics (CFD). By utilizing these experts and our experience as North America's only significant boat builder at International and Olympic level competition, we have developed a line of boats with an outstanding blend of performance and 'row-ability'. Strategic placement of the maximum waterline beam and hull volume resulted in decreased drag and increased stability, making the shells very responsive and easy to row.

Utilizing CFD, our design team was able to tune the ends of the shell to produce an exceptionally smooth entry at the bow and the cleanest release at the stern we have seen yet. The end treatment is a major contributor to the shells ability to resist longitudinal pitching. The athletes will feel this as a greatly reduced load at the catch.

Hudson Boat Works, 2519 Fanshawe Park RD East, N5X 4A1, London, Ontario, Canada
P: 519-473-9864 F: 519-473-2861 E: hbw@hudsonboatworks.com

The end result of this design work is a shell that is surprisingly easy to tap along at rate and runs…and runs…and runs.'

- Glen Burston P.Eng, Manufacturing Manager, Hudson Boat Works

'The design process begins with the base boat, the standard of comparison. Hudson Boat Works (HBW) provided the best existing H8+, its Olympic & World Gold Medal winner, Big Blue, and priceless information concerning her strong points & vulnerabilities. The design charge was to improve speed, ease of set, and crew comfort - no easy task.

Fortunately, much of shell design can be mathematically modeled and thus optimised - that is determine the optimal length & hull shape which meets desirable pitch & ease of set characteristics. While hull drag is mostly caused by frictional effects, it is wave making drag & pitch characteristics which drive length - and a short form will tend to increase drag at the catch leading to a heavy feel.

The modeling is complicated by the variation of shell speed & attitude during the stroke cycle & requires the latest in CFD to model these unsteady frictional & wave effects. Our optimisation program raced thousands of candidate designs against Big Blue & found several which promise to be both faster & more forgiving. After detailed discussions with HBW concerning their virtues, the best boat was chosen. Initial trials indicate that we have achieved our goals - faster & more forgiving than Big Blue.'

- Britt Chance, Naval Architect, Chance & Company, Inc.

'The question was posed, can we design a faster, more stable, and more comfortable racing shell than our current model; which set a new World's Best time (5:19.85) on route to a U.S victory in the Men's 8+ at the '04 Athens Olympics.

A year ago we began the journey to design a new eight that will win races, and the hearts of rowers and coaches alike. It was a long journey designing and redesigning hull shapes using state of the art CFD and Hydrostatic software, which raced our current hull against hundreds of other possibilities with an optimisation program. Once the best option was selected we spent considerable time looking at design features that incorporate athlete comfort -- feet stance, width, and depth, seat and track width, rudder and fin shape.

After satisfying all of the pre requisites we ensured hull design integrity and symmetry by machining the plug on our CNC machine. The decks were also CNC machined to support aerodynamics and the cockpit was designed with features that supported the goal of improving rower comfort. A winner was born--Never Stop Dreaming'

- Luis Tarrataca, Design Engineer, Hudson Boat Works

‘Our new shark series hull designs are a wonderful blend of science, technology, and experience. They seem to have the athletes and coaches smiling’

- Jack Coughlan, President and Head of R&D, Hudson Boat Works

Hugh Hudson, General Manager, says that the move into a new state of the art, 24,000 sq ft, facility which unifies production under one roof and creates operational efficiencies as the business grows will be important to the growing customer base across North America and around the World.
Customer Service and Customization are at our core and we would love the opportunity to discuss your individual or program needs. If you have never tried a Hudson or want to take one of the new Sharks for a spin we can organize a test row at any regatta our support team is planning to attend. If you have any questions, want a quote, or just need more information please give one of our sales team a call (519) 473-9864, send us an email hbw@hudsonboatworks.com or visit our website www.hudsonboatworks.com

Sincerely,

The Hudson Crew
‘Join the Evolution’

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