

CUSTOM SOLUTIONS

In a relatively short time, we have established a strong position in the very competitive world of high performance sailing. Designers, project managers and other professionals turn to us for solutions when they need something beyond what has been done before. We respond to the racing sailor's need for the competitive edge that comes from top-level engineering and attention to detail; to the cruising sailor who demands no-compromise performance and functionality with a clean, elegant design aspect. We have proven time and again that we can meet the challenge - we deliver solutions.

Custom Solutions

Large diameter composite wheel mounted below deck provides total power ratio of 80:1 and greater

Secondary control line

Backstay

4:1 block cascade

Primary control line

Magic wheel with variable hub diameter provides increasing power ratio as system reaches maximum trim position



Magic Wheel

Faster, more precise and intuitive than hydraulics for backstay control on modern high performance rigs, our Magic Wheels were first developed for X-Yachts' progressive new designs. Many other boats in the 12-15m (40-50ft) range have since adopted the same highly efficient system with the Frederiksen Magic Wheel.

- Mounted below deck, the Magic Wheel has a highly efficient ball bearing hub for spooling the primary control line, which leads in from an external 3:1 or 4:1 block cascade.
- The hub unit is coupled to a large diameter composite wheel, which spools the secondary control line.
- Trimming the secondary control line (usually led through to a cockpit console) turns the large wheel, in turn driving the Magic Wheel to trim the backstay at power ratios of 80:1 or greater, depending on the diameter of the composite wheel.
- There are currently two models available, including one with a variable hub diameter that provides increasing power ratio as the system reaches maximum trim position.