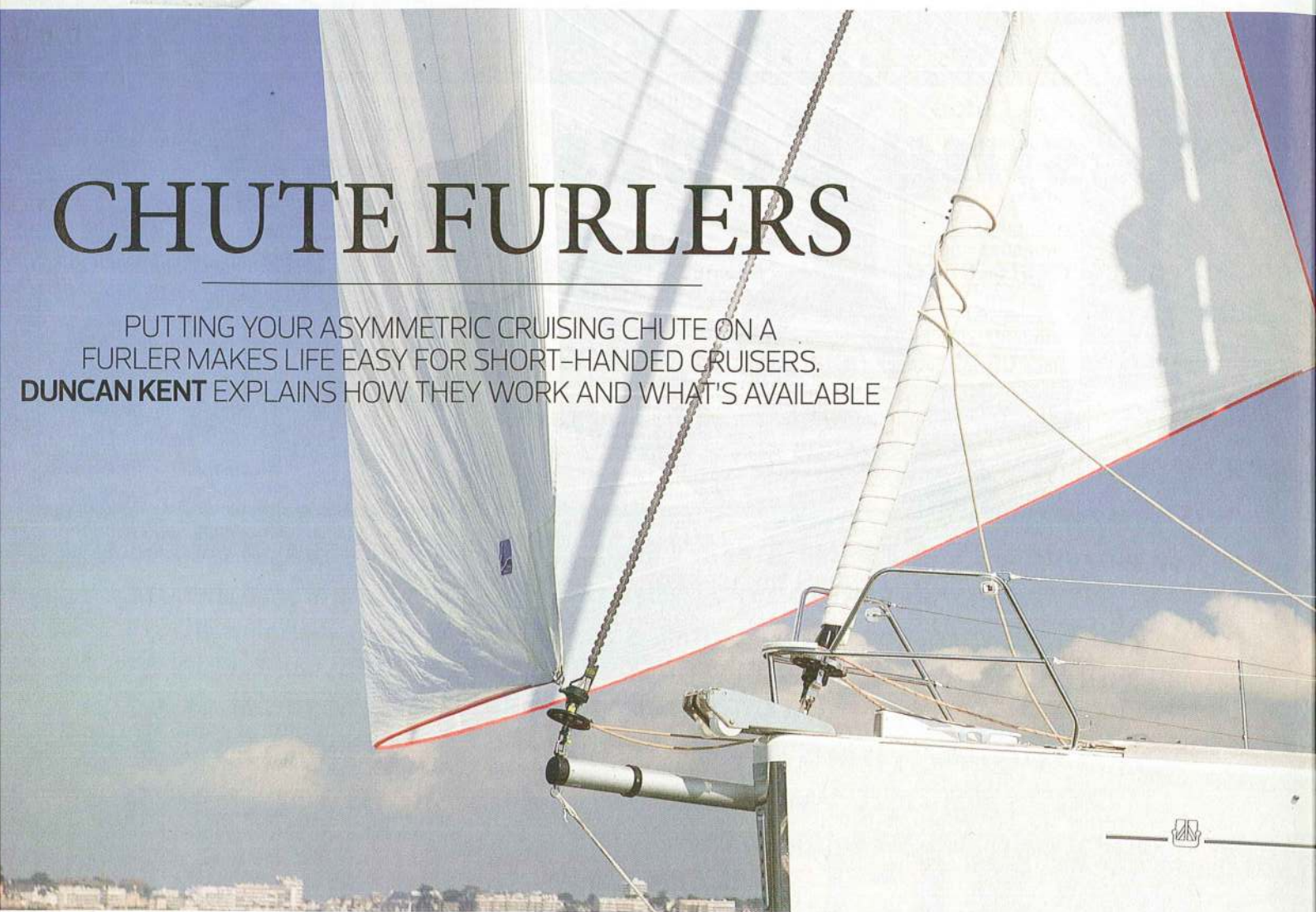


CHUTE FURLERS

PUTTING YOUR ASYMMETRIC CRUISING CHUTE ON A FURLER MAKES LIFE EASY FOR SHORT-HANDED CRUISERS. **DUNCAN KENT** EXPLAINS HOW THEY WORK AND WHAT'S AVAILABLE



The recent introduction of continuous-line cruising chute furlers has encouraged sailors to make more use of these versatile downwind sails. They make it possible to hoist and furl them away singlehandedly, from the safety of the cockpit.

There are two types available, generally known as top-down or bottom-up furlers. Both have a compact drum and continuous furling line, but unlike a genoa furler there is no solid foil with luff groove, as the entire furler and sail needs to be flexible enough to pack away into a sail bag. Instead they use a form of torsion cable around which the sail furls.

BOTTOM-UP FURLERS

With bottom-up furlers the torsion cable is enclosed in a pocket that runs up the luff of the sail and is lashed

to thimbles at the tack and head. To deploy it, the thimbles are attached to the furling drum and head swivel, then the whole ensemble is hoisted like a long sausage. The sheet is then pulled and the drum allowed to spin freely until the sail is fully unfurled.

When the sail is furled away using the continuous line drum it starts to wrap the bottom of the sail around the cable first, gradually working its way up the luff of the sail until fully furled.

TOP-DOWN FURLERS

Top-down furlers are a more recent invention, initially inspired by yacht racing crews wanting to furl a free-flying gennaker or spinnaker, rather than a straight-luffed Code 0 sail. As this type of sail is cut with greater draft for a more downwind sailing angle, and usually has a curved luff, using a bottom-up furler can create problems due to trapped

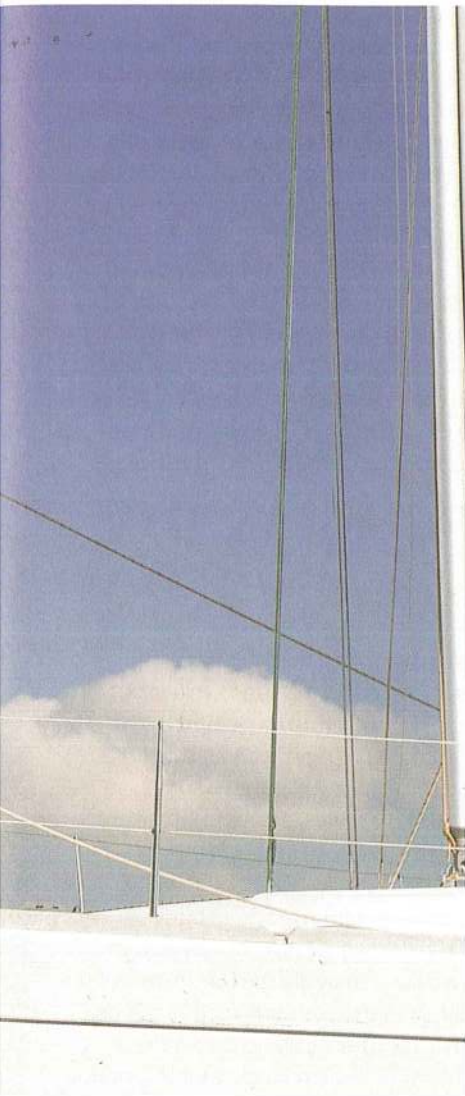
ABOVE
Furlers take much of the stress out of dealing with cruising chutes short-handed. This is a Profurl Spinex

air causing the sail to 'balloon' in the middle when half-furled.

The solution is to furl downwards from the head, leaving the tack of the sail free to rotate on a swivel at the bottom drum, thus squeezing the air out of the sail as the furl descends. Keen racers can even speed up Code 0 retrieval by pre-winding the torsion rope and then releasing the sheet when ready to dump the sail.

With top-down furlers being more expensive due to the need for a 'stiff' torsion cable, a viable alternative is to add a top-down adapter to a bottom-up furler. This is simply a stand-alone tack swivel with an eye to connect into the fork of the bottom-up furling drum and an upper fork to which the torsion cable connects.

The top-down adapter can be left permanently on the sail with the cable connected and tack lashing in place. When hoisting your gennaker, you simply attach



the top-down adapter into the jaw of the drum, attached the halyard to the swivel and hoist it out of the bag. An adaptor will allow you to use the same furler for both a Code 0 and a gennaker.

PROS

Sail can be stowed in the bag with everything necessary connected, ready for rapid deployment
Sail can be furled singlehandedly, even from the cockpit, and left hoisted until you're back in port.

CONS

A lightweight, flexible headboard is required for neat furling, meaning the user must be aware of putting excessive strain on the sail by leaving it up in high winds. It is not possible to add a heavy-duty anti-UV strip to such a lightweight sail, so it should not be left hoisted when the yacht is unattended.

PRODUCTS

Profurl Nex

Profurl makes a bottom-up furler (Nex) and a top-down model (SpiNex) for cruising yachts, as well as a wide range for racing and superyacht use.

The bottom-up NEX range is dedicated to furling staysails, storm jibs and Code 0 (straight luffed) sails, whereas the Spinex models are top-down furlers and have been designed for use with spinnakers and gennakers. The spool/drum and swivel are the same for both systems, however, in the case of the Spinex the torsion cable is fitted with balls and a swivelling tack point to enable furling to start from the top.

● profurl.com

Facnor FX+

The Facnor range of gennaker/Code 0/staysail furlers are lightweight, easy to fit and can be supplied with an optional reversible ratchet if required. A 2:1 block is optional, but all models are supplied with a swivel mast protector and quick-release sail connections.

With the addition of a 'Fast Thimble' (top-down adaptor), the FX+ bottom-down furler can be used with asymmetric spinnakers as well. The anti-twist tension rope simply rotates up to the top end and then transmits the rotation from the head down to the tack of sail.

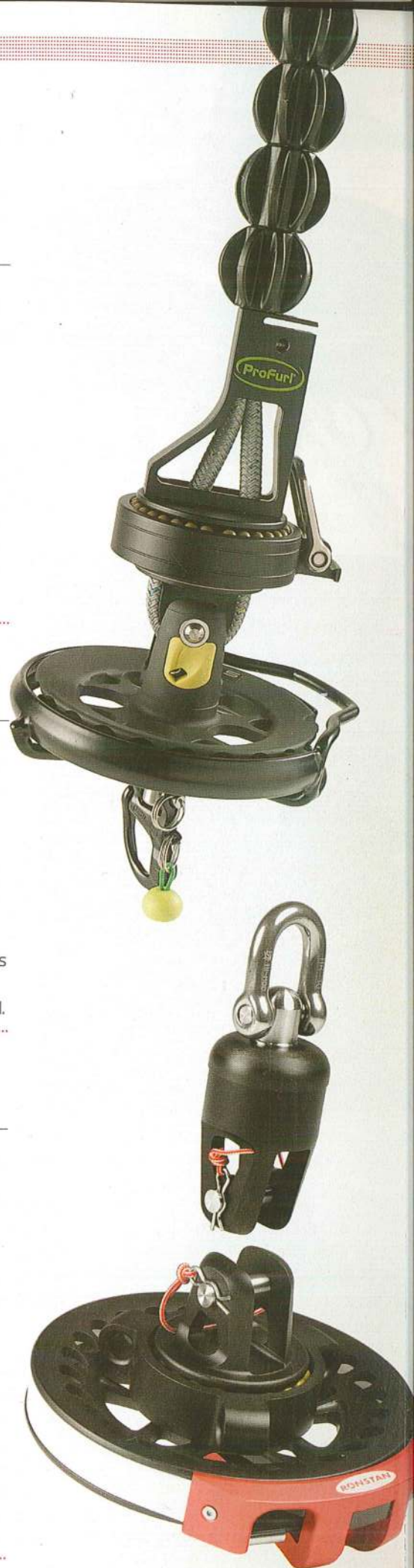
● eurospars.com

Ronstan

The R-series of Ronstan continuous-line furlers and adaptors are well known and popular with cruising and racing yachtsmen alike. Incorporating an aluminium drum, jaws, swivel ring and line guide, together with factory-sealed Torlon ball bearings and top-grade stainless steel shaft, pins and fasteners, these furlers are built to survive and perform in all conditions.

Ronstan furlers are available with top-down adapters or as dedicated top-down models. Its top-down furling gears for soft luff sails ensure simplicity, safety and speed for easy handling of sails such as asymmetric spinnakers and gennakers, allowing cruisers to store, deploy and retrieve them as easily as they would a regular furling genoa.

● improducts.co.uk





Karver K-F

With a sound reputation for top-quality deck gear, Karver produces beautifully-engineered and lightweight furlers for Code 0 sails and spinnakers.

An elastic impact-resistant plastic cover encloses the spool to protect the spool, decks and sails when stowed. The continuous furling line is easily and quickly fed into the spool via a notch on the drum.

Karver utilizes high-resistance stainless steel ball bearings in its swivels to ensure smooth rotation under the most extreme loads. Simple attachment systems provide for a conventional snap shackle or a 2:1 block, either on top of the swivel or below the spool. Shackles and special thimbles (aluminium or stainless steel) are also available for each furler.

● allspars.co.uk

Harken Reflex

The Harken Reflex furling system is suitable for free-flying spinnakers, gennakers and Code 0 sails. Pulling on the furling line and the drive unit rotates the torsion cable, transferring the rotary torque to the head swivel, resulting in a fast, smooth, super-tight furl.

A unique, quick-release modular T-fitting allows a single drive unit to handle a range of sails. Each sail has its own torsion cable, with head and tack swivels permanently fitted. The rolled sail easily disconnects by pulling a spring-loaded pin and a new, furled sail can be slid and locked into the T-slot. The drive unit's large diameter provides powerful furling, while its extreme low profile maximises the sail's luff length.

A hardcoat-anodized 6061-T6 aluminium sheave spins on Torlon ball bearings to reduce friction.

● harken.co.uk

Seldén CX/GX

Rig maker Seldén offers both bottom-up (CX) and top-down (GX) systems, plus an adaptor for the former for a low-cost solution to flying spinnakers and sails with a curved luff. Both are operated using an endless furling line on a toothed drum, which can be led back to the cockpit, with or without the optional double fairlead, twin-cam jam-cleat block. A wedge in the line guide separates the line from the drum when the sail is unfurling, allowing the drum to spin freely. A purpose-made, high-tension torsion cable is also provided as the smooth performance of top-down furling

is dependent on the rigidity of this cable.

On the CX the cable is integrated into the luff of the sail and thimbles connect the sail to the drum and halyard swivel. A dedicated halyard is required for Code 0 sails and a 2:1 purchase is recommended to obtain the desired luff tension and reduce the load on the halyard sheave. As an alternative to GX furler, the CX drum can be combined with a Free Tack Adapter and a GX halyard swivel. The furled sail with the adapter is then connected to the drum and the sail hoisted. The drum and the furling line can be left mounted to the bow and along the stanchions. With the GX, the drum and halyard swivel are permanently fitted to the sail with the line lock.

● seldenmast.com

Bamar Rollgen

The latest system for furling sails with a free-flying luff from Bamar is an evolution of its well-proven Rollgen device. It offers high performance load capacity without sacrificing operation smoothness, plus it is considerably lighter than some furlers, thanks to its use of materials such as Ergal and 17-4PH steel.

Although the tack swivel on the new RLG Evo is independent from the drum by being integrated in the special stay, the same drum and halyard swivel may also be used to furl a sail with an integrated torsion stay such as a Code 0, as with a free-flying sail such as gennaker.

A 'Luff Control' device completes the system. Incorporating a double swivel with the Rollgen stay allows you to adjust a gennaker's luff tension via a line from the cockpit. When furling the sail, this control enables you to shorten the luff to bring it closer for simpler, faster furling.

● improducts.co.uk

Crusader Magic Furl

The Magic Furl was to enable simple, safe and economic furling for cruising chutes, asymmetrics and spinnakers on any point of sail. Incorporating a Kevlar torsion rope with independent head and tack swivels and a long continuous furling line.

For use with straight luffed sails, the torsion rope threads up through a luff pocket and is attached at the head and foot of the sail. However, for spinnakers and other sails with longer luffs the Magic Furl works differently to the normal top-down furler. Because of its unique design (it uses grab lines to furl the draft out of the sail from the centre of the luff) the system can be easily retrofitted.

● crusadersails.com

