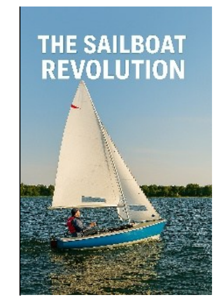
3DFurler.com

Take One Free



Derek Steele

Re-Writing the Rules

For decades, sailors have been stuck choosing between expensive metal furlers, fragile plastic foils, or going without a furling system altogether.

But a quiet revolution is happening in workshops around the globe—one powered not by aluminum extrusions or complex - failure prone designs, but by advanced 3D-printed engineering and common sense.

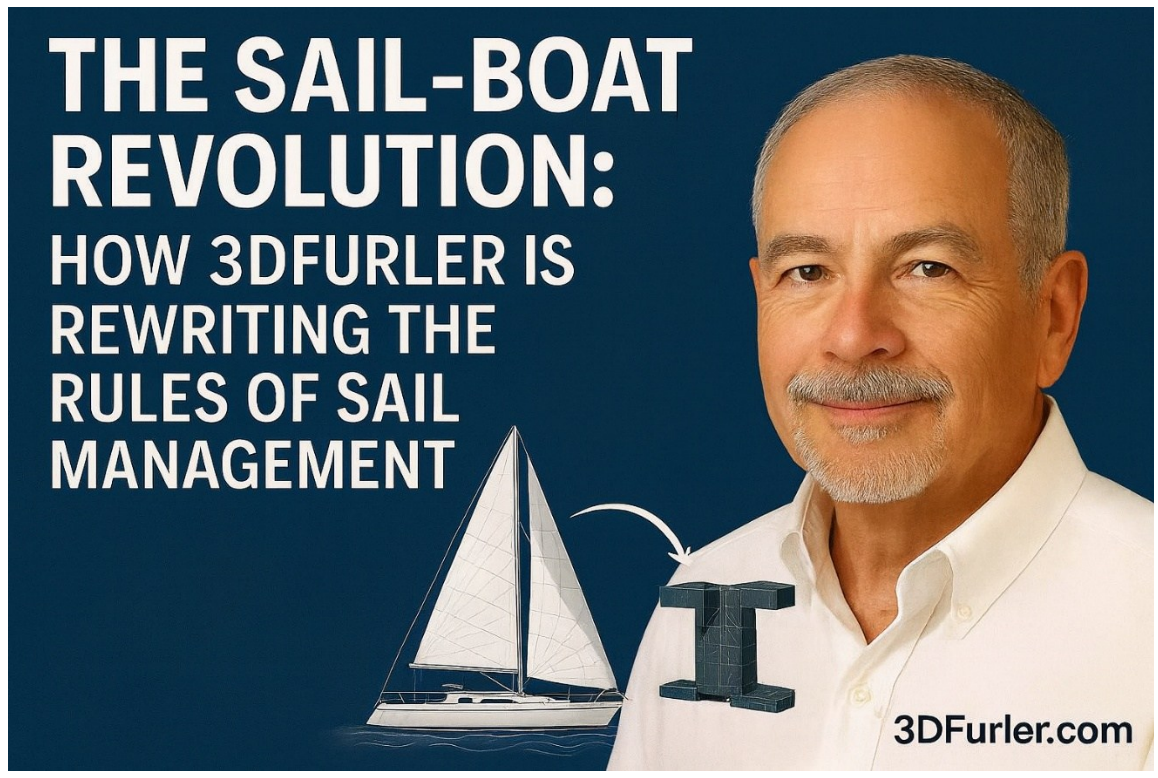
At the center of this shift is Shane Mummery, Owner and Creator of 3Dfurler.com, a modular roller-furling system that's rapidly becoming the go-to upgrade for today's sailboats.

"Most sailboat owners I meet all say the same thing: they don't want to spend a small fortune on their boat for Roller Furling— and now, they don't have to."

"Most people accept the idea of a roller-furler system made entirely from 3D-printed co-polymer plastic. It's different than back in the 1960s when fiberglass boats first appeared.

To compensate, they over-built them for public acceptance, whereas 3D Printing has already been publicly accepted." says Mummery

With continued annual growth—especially in consumer and entry-level printers—the worldwide installed base in 2026 is widely estimated at 3.7–4.0 million active printers.



The Sail Lofts of 3D Building

By 3DFurler.com

3DFurler is expanding its production model with a distributor network of certified 3D-printing partners. Instead of a centralized factory, we've built a flexible system that offers us Global Production through Local Community Partners.

Each partner follows our Engineering Standards and Best Practices, ensuring consistent quality and performance in every component in every location.

To maintain professional-grade output, our team synchronizes design files, testing protocols, and documentation across the network.

For example, when a part design is released, every certified partner receives the update instantly, Ready to build with no delays.

This distribution approach enhances our fulfillment. By producing parts closer to the customer, we shorten delivery distances, reduce shipping times, and lower freight costs. Customers receive components faster, and builders avoid delays caused by long-haul logistics.

In international markets, localization adds even more value. Instead of shipping parts across tariff zones, we manufacture within the destination country, eliminating import duties, customs delays, and added regulatory friction.

3DFurler's distributed manufacturing system delivers speed, savings, and simplicity—mirroring the independent-loft model used by major sailmakers, now applied to modern marine hardware.

The Vision of a 3D Future

Long before 3D printers hummed on workbenches or produced precision marine hardware, science fiction had already imagined the idea.

Shows like Star Trek introduced the "replicator," a device that could fabricate objects on demand—meals, tools, spare parts—materializing exactly what the crew needed at the push of a button.

The Jetsons played with the same concept through their Foodarackacycle, a cheerful machine that instantly produced whatever the family ordered. These fictional devices weren't described as "3D printers," but the underlying idea was unmistakable: a world where creation is digital, manufacturing is local, and objects appear when and where they're needed.

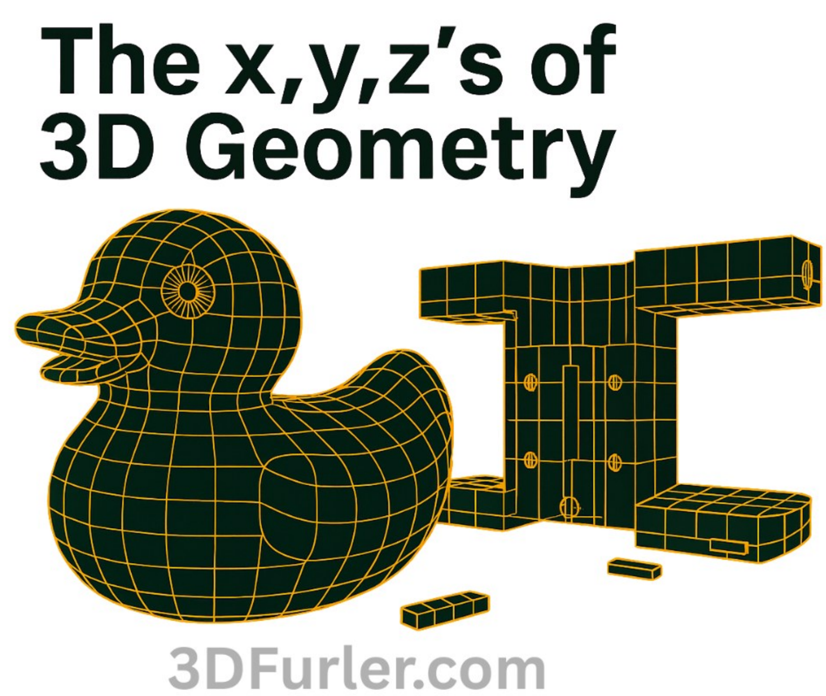
That vision is no longer fantasy. It's the foundation of modern additive manufacturing—and its reshaping industries that depend on reliability, customization, and rapid innovation.

The journey from science-fiction replicators to real-world 3D printers began in the early 1980s, when engineer Chuck Hull invented stereolithography—using ultraviolet light to solidify thin layers of resin into physical objects. His first machine was slow, expensive, and limited to prototyping, but it proved the core idea: objects could be built additively, layer by layer, directly from digital designs.

Everything changed in the late 2000s and early 2010s when patents expired and open-source projects like RepRap ignited a wave of innovation.

3D printing is no longer just a tool for corporations; it's a practical, affordable technology that empowers individuals to solve real-world problems.

The SciFi show of earlier times was insiring ,but in interviews and biographies, Chuck Hull credits engineering curiosity—not pop culture—as the driving force behind his invention.



Picture Caption: To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other.

Vertices, Edges and Faces

Yes, Ducky has geometric roots.

You have an idea for something cool, and you want to create a model of it, but you are not an artist. sculptor and or engineer.

Many products you use or see on a daily basis are based on geometric thinking.

Designs are based on a defined coordinate system of shapes—essentially a physical x, y, z grid.

Even Mr. Ducky and his many cousins in the 3D world.

The next step in the process is called prototyping, and this is where 3D Printing has great advantages for fast, relatively inexpensive samples which are often made on a much smaller scale to confirm the products before fully blown production.

3DFurler.com products are proven and tested in real world sailing applications.

Did you know? There are over 300 variations of Ducky in the world, but only one 3DFurler.

What is infill in 3D Printing?

Knowledge Base

Infill is the internal lattice structure inside a 3D-printed part, and it quietly determines almost everything about how that part performs. While the outer walls create the visible shape, the infill acts as the skeleton—balancing strength, weight, material use, and print time.

Different geometric patterns—such as grid, honeycomb, and gyroid—change how a part handles stress, vibration, and load, making infill selection a true engineering decision rather than a cosmetic one.

For manufacturers, sailors, and hobbyists alike, understanding infill unlocks smarter printing: lighter components, stronger brackets, and faster production.

In a world where 3D printing is reshaping how parts are made, infill is the quiet technology doing the heavy lifting.

Ducky shows the various infill rates that can be used for strength and flexibility.

Beware. The Deadly Halyard Wrap

The latest updates

Halyard Wrap and Chafe are the leading casuses of halyard and rigging failures.

You're sailing along with 15-20 knot winds, a little sporty and life is good...

Suddenly the head sail comes sliding down, its leech and panels draped over the bow and now dragging in the water...

You are single-handed and your first reaction is to rush forward and secure the sail... This story can start and end in many different scenarios.... none of which are good.

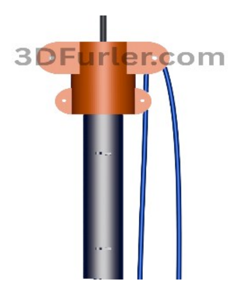
Simply summarized...halyard wrap is the result of a flawed designed concept.

Using a rotational device (aka "swivel") situated on a metal wire, then surrounded by a resistance of force by a rope is ... absurd.

You will find many articles from the so-called "experts" with workarounds for the problem but let's address the real issue.

The best way to prevent Halyard Wrap is to not use a system that causes it.

The Real Solution



We wish we could say it's rocket science or that we invented this....

BUT we did improve on an old idea.

The Halyard rotates with the Sail!

How We Roll

3DFurler.com

1. Clamp On Top Assembly with two halyards – One for the Primary sail and one for a Spinnaker or Pole.
2. The 3DFurler.com system has one moving part: Top, Foils & Drum.
3. Halyards tuck seamlessly between the sail luff and the foils.

External Halyards supplied by Installer. ¼: Double Braid.

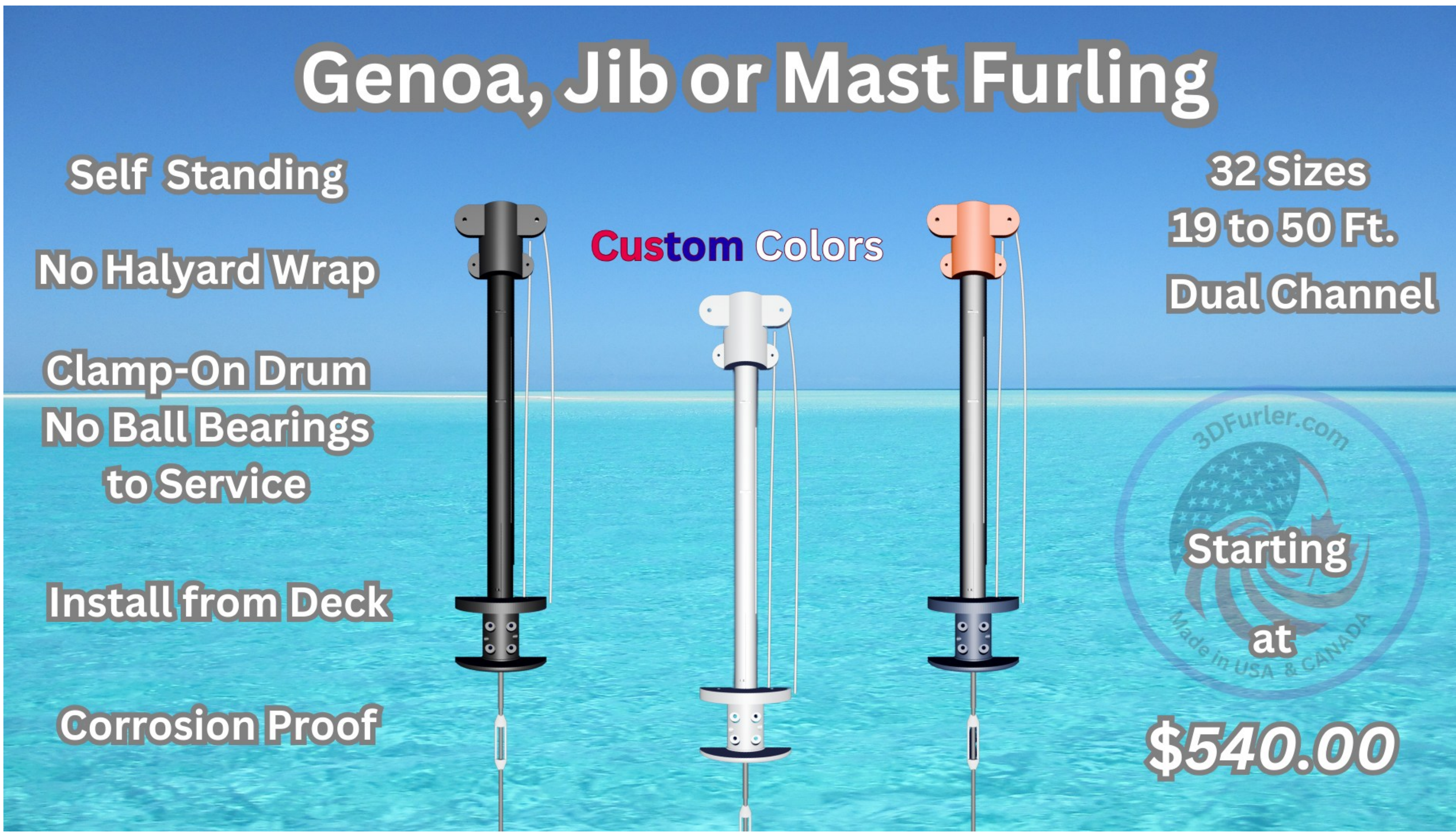
3DFurler.com offers a licensed, royalty based oppportunity to print 3DFurler.com's proprietary systems.

Becoming a Print Loft Partner

Vertically Integrate your Business by Making 3DFurlers

Whether you have an existing business such as Sail Loft, Rigging Services or Marine Services 3DFurler.com has the perfect way for you to easily upsell your business by making and selling the Roller Furling too!

With no upfront Franchise Fees, you only pay for what you print. Our team will guide you to which 3D Printer & materials you need to have, and our Cloud Based Technology will take care of the actual printing in your shop, house, office.



3DFurler.com is owned and operated by The Shane Agency, Bel Air. MD

About 3DFurlers

This isn't your Grandfather's Roller Furler

Ships in a 14 x 14 x14 Box weighing 30lbs.

3DFurler.com has pioneered the world's first commercially 3D printed roller furling system, offering a lightweight, durable, and innovative alternative to conventional designs.

Our website contains Knowledge Base Articles such as Installation Manual, Sizing Charts and Videos.

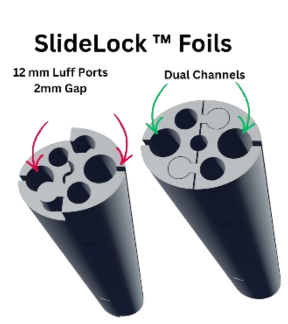
Our Technical Team is Yours.

Roller furling systems have long been a cornerstone of modern sailing, enabling sailors to reef and deploy headsails with efficiency and safety.

Traditionally, available systems have relied on either Aluminum, Resin and PVC foils with complex drum assemblies to handle the loads and stress.

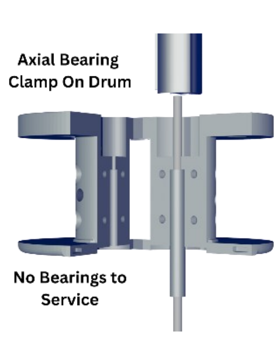
Co-Polymers vs PVC vs Resin Vs Metals

SlideLock™ Technology



Our exclusive SlideLock™ Technology Foils are 12 inches long and interlocking, allowing you to expand the system up tp 50 feet.

Axially Stabilized Bearing Free Drum



3D Furler Co-Polymer Foils: Made from advanced co-polymers, our foils are significantly lighter and immune to nicks and denting. Their modular 12-inch segments allow for easier installation and improved resilience.

Comparison Guide

Feature	3D Furler	CDI	Harken
Material	✓ CoPoly	PVC	Resin
Torsional	✓ High	Low	High
Rigidity	✓ High	Med	High
Heat	✓ High	Med	High
Impact	✓ High	Med	High
Replacement	✓ 1 ft.	Entire 7 ft.	Cut Length