

As strong as fibreglass. Without the forever.

rComposite® is a patented high-performance composite — same strength, same machines, no landfill. A true drop-in you simply swap in. At end of life, we take it back to be reborn.

THE OPPORTUNITY

A composite that performs like fibreglass — and never becomes waste.

Composites are everywhere high performance matters — boats, blades, boards, helmets. But traditional fibreglass lives forever in landfill. rComposite® matches the performance you build with today, then returns to raw material to be reborn.

1

THE BENEFIT

Same strength. Same machines. No landfill.

The exact performance you build with today — same strength, same waterproofing, same tooling — but it never becomes landfill. Zero compromise, zero hassle.

2

THE DIFFERENCE

Drop it in. Swap it out. We take it back.

Built on a thermoplastic matrix instead of a thermoset resin — that's what lets it melt back to raw material in 24 hours and be reborn, while staying a true drop-in for your tooling and process.

3

THE PROOF

Proven where it matters most.

Won the Italian Sailing Championship in a boat built from it. World Sailing Technology Award. European Yacht of the Year. If it survives racing, it'll survive your product.

4

THIRD-PARTY VERIFIED

Independently certified by DNV.

Recyclability environmental claim verified to ISO 14021 by DNV — an independent, accredited certification body. Third-party assessed, not self-declared.

APPLICATIONS

One material. Every form.
Reborn again and again.



Marine

VALIDATED

High-performance hulls, vessels and marine components — resistant to saltwater corrosion and fatigue, with a fully sustainable end-of-life plan.



Sport Equipment

VALIDATED

Lightweight, high-performance surfboards, helmets and sports gear. Designed for safety and flexibility, leaving no environmental burden.



Architecture & Design

VALIDATED

Façades, panels and structural elements for contemporary construction — aesthetics, durability and sustainability in one material.



Wind Blades

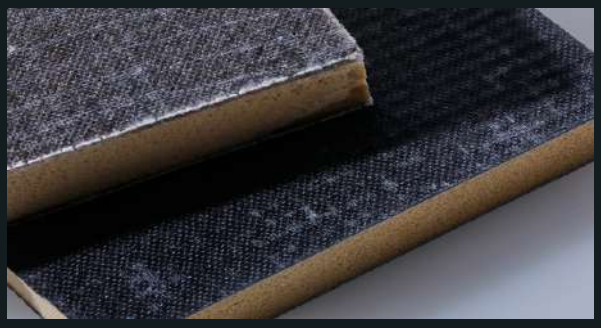
IN PROGRESS

Durable, lightweight turbine blades that maximise energy efficiency — built to be fully recycled after their lifecycle.

THE MATERIAL UP CLOSE

Up close: the patented high-performance composite.

Real rComposite® laminate — the same sandwich structure that races, surfs and protects. Engineered to perform like fibreglass or carbon, but built around a thermoplastic matrix instead of thermoset resin.



rComposite® Sandwich

Fibre skins bonded to a lightweight structural core — maximum stiffness at minimum weight.



rComposite® Single Skin

Solid fibre-reinforced laminate for thin, durable, high-strength parts and surfaces.

MATRIX	BACK TO RAW	TOOLING	RECYCLABILITY
Thermoplastic	24 hours	No retooling	ISO 14021

PERFORMANCE DATA

Performance vs. conventional resin systems

FRACTURE TOUGHNESS

+40%

vs. epoxy resin at equal fibre volume fraction — peer-reviewed data (VARTM carbon fibre laminates)

STATIC STRENGTH

On par

Flexural and tensile strength equivalent to epoxy — no structural trade-off

CURE PROCESS

Room temp.

No post-cure oven required — faster cycle times vs. epoxy and vinylester

IMPACT RESISTANCE

higher peak load and damage energy absorption vs. epoxy under low-velocity impact testing

MARINE AGEING

flexural properties after hydrothermal ageing comparable to epoxy — within ISO marine allowances

Performance data based on published peer-reviewed studies on thermoplastic acrylic resin composites at equivalent fibre volume fraction.



CIRCULARITY

Nothing wasted. Everything reborn.

You don’t deal with end of life — we just pick it up. One call. In 24 hours the material separates back to raw, ready to live again as the next product.

01

Chemical recycling

The acrylic matrix is dissolved and the polymer is recovered in its original form, ready to be re-polymerised into new resin.

02

Mechanical recycling

Fibres and matrix are ground and reprocessed into a compound for injection molding and 3D printing.

24h

Full recovery cycle

100%

Material recovered

REASON TO BELIEVE

If it survives racing, it'll survive your product.

Winners of the 2022 Italian Sailing Championship in a boat built from rComposite® — independently validated to the strictest standards.



ecoracer® during European Yacht of the Year trials, Barcelona.

Winner

Italian Sailing Championship, won in a boat built from rComposite®.

Awarded

World Sailing Technology Award, European Yacht of the Year & Boat Builder Awards.

Verified

Recyclability independently validated against the ISO 14021 standard.

BUILT WITH INDUSTRY LEADERS



GRAND SOLEIL

Grand Soleil Blue

A fully recyclable performance cruiser — rComposite® proven at full hull scale.



SCANDURRA · MILANO DESIGN WEEK

CORPO

A sculptural installation by architect Alessandro Scandurra — rComposite® in art and design.

EVERY REASON NOT TO SWITCH — ANSWERED

No compromise. No catch. No retooling.

Every hesitation we hear from manufacturers, answered straight — with proof behind each one. Performance, cost and process all stay on your side.

"I'd have to re-tool my whole factory."

✓ Nothing changes but the material. rComposite® is a true drop-in for your existing moulds, layup and curing — same machines, same crew, same workflow.

"Switching to an unknown material is risky."

✓ It's already proven where failure isn't an option: superyachts, championship-winning race boats and award-winning production yachts. Validated, not promised.

"Recycling sounds like a hassle for me."

✓ You never handle end-of-life. One call and we collect the parts, then return them to raw material in 24 hours — a closed loop you don't have to manage.

"Is it more expensive?"

✓ Comparable material cost with zero retooling investment. With no landfill or disposal liability, the total lifecycle cost works in your favour.

"Is it actually strong and safe enough?"

✓ As strong as — or stronger than — fibreglass, with equivalent flexural and impact performance. Full mechanical data is ready for your engineering team.

"Sounds like greenwashing."

✓ The recyclability claim is independently verified to ISO 14021 by DNV — third-party assessed, not self-declared. Provable, certified circularity.

hello@rcomposite.eu

LET'S BUILD SOMETHING

Let's build something that lasts.

We partner with manufacturers and brands to bring rComposite® into their products — through a simple, proven collaboration model.

01

Prototyping

We co-develop the first prototypes with your team — adapting rComposite® to your product, geometry and existing process. No new machines required.

02

Validation

We test and independently validate performance, durability and recyclability against your standards and the use cases that matter to you.

03

Licensing

We grant a licence for the rComposite® technology and brand, so you can manufacture at scale with your own tooling — backed by our take-back loop.

hello@rcomposite.eu

rComposite®

Talk to us

Let’s bring rComposite® into your next product.

EMAIL
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rComposite® is an ingredient brand by nlcomp®. Registered trademark, patent protected.