

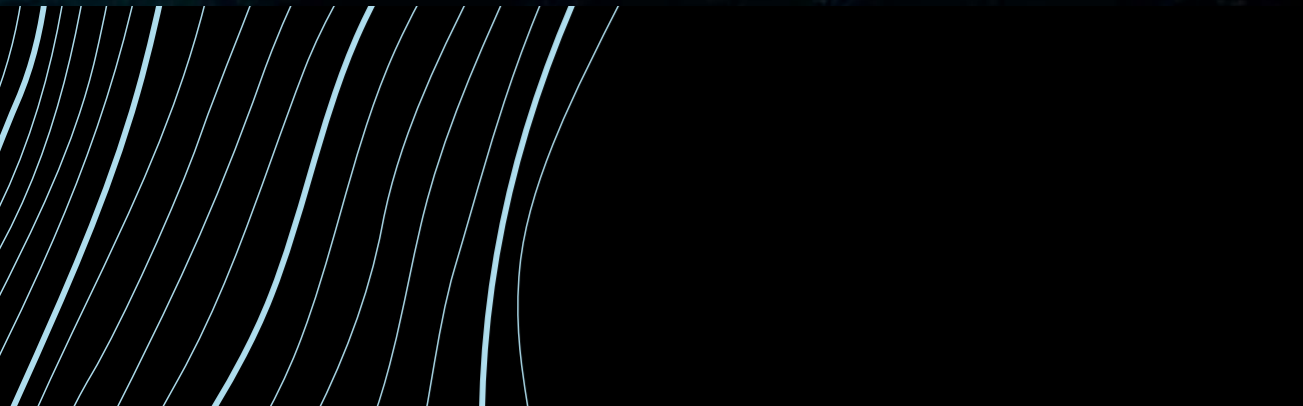
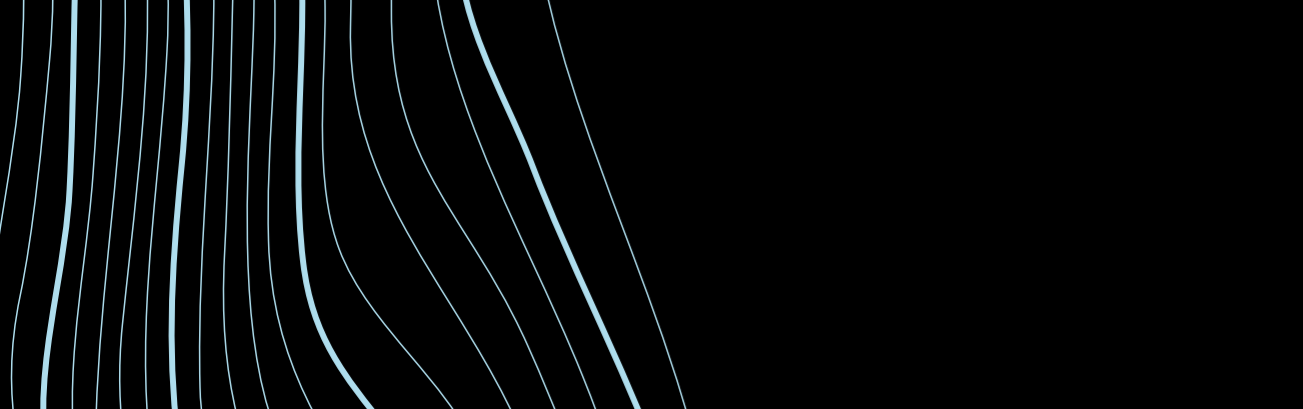
A large yacht is shown from a low angle, focusing on the deck area. A mooring winch is mounted on the deck, with a rope extending from it. The yacht's hull is white, and the deck is dark. The background shows the upper levels of the yacht with railings.

MOORING WINCHES

RONDAL
ULTIMATE RELIABILITY

PLAN FOR THE UNEXPECTED





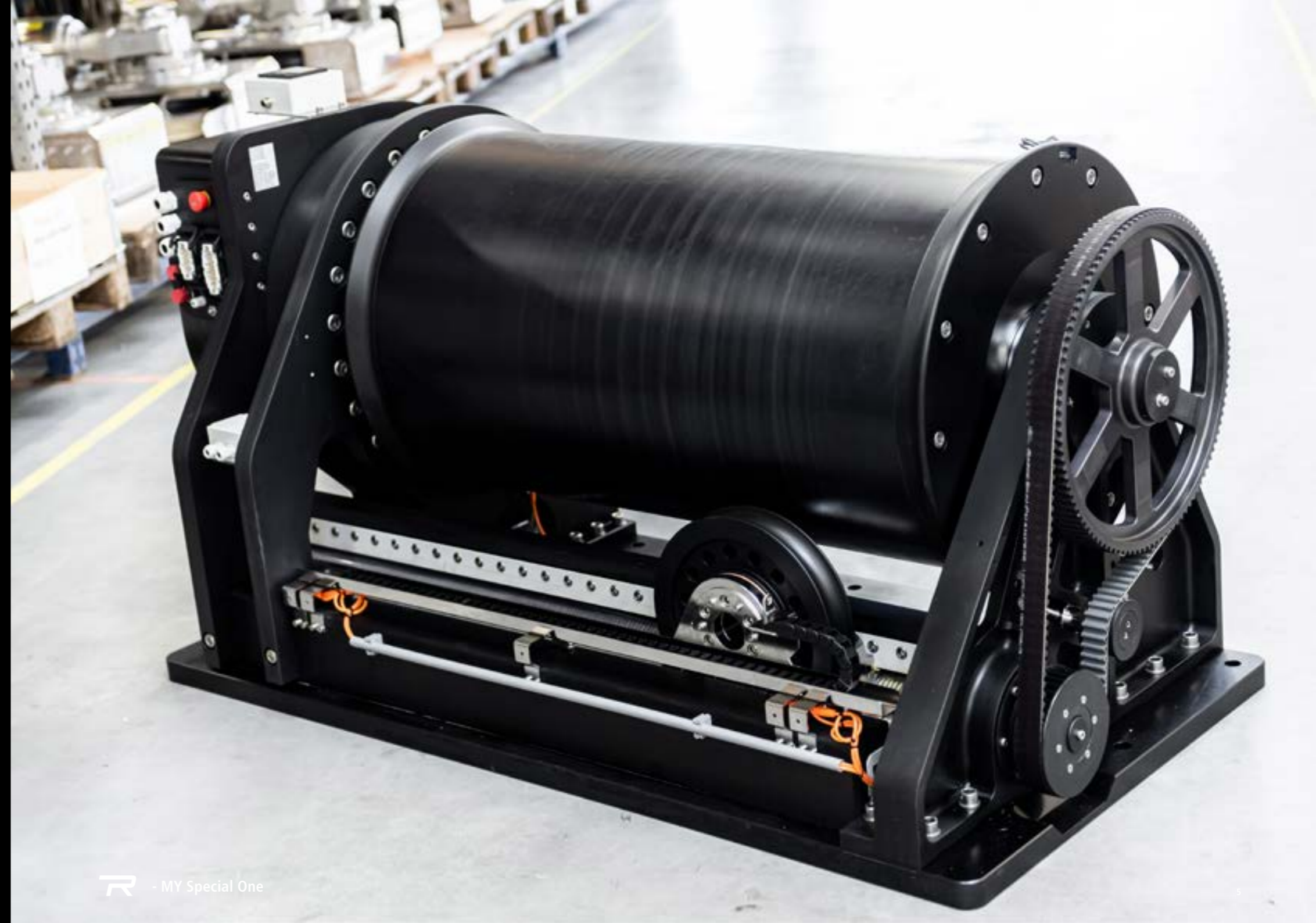
PRODUCTS THAT ENSURE ULTIMATE RELIABILITY IN ANY SITUATION

Rondal designs and manufactures high-performance sailing systems and equipment for superyachts. Rondal is recognized as the best for its unrivalled Dutch build quality and innovative technical solutions, achieved through a dedicated focus on continuous improvement in both products and services.

As a building partner, Rondal leverages decades of experience and relieves the client by taking on turnkey projects. The products of Rondal ensure ultimate reliability in any situation.

The Rondal team consists of approximately 75 professionals, including highly qualified engineers, composite workers, CNC machine operators, welders, and mechanics, as well as a host of complementary specialists.

With decades of experience in composite and aluminum engineering and manufacturing, Rondal serves the market with specialized products for both sailing yachts and motor yachts.

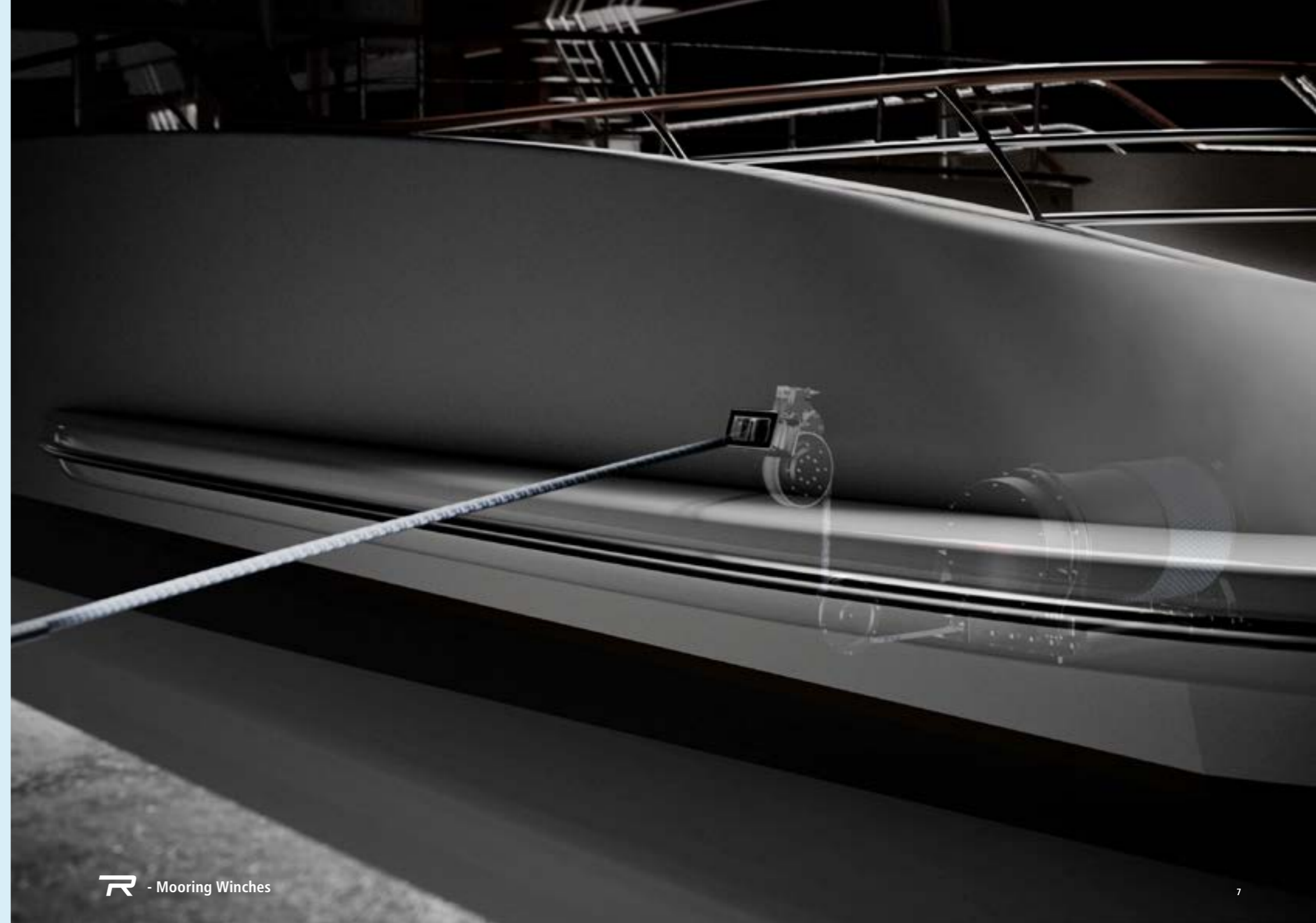




RONDAL MOORING WINCHES

Rondal offers a revolutionary approach to mooring with its advanced mooring winches, designed to reduce safety risks and increase efficiency. Imagine the ease of operating mooring winches via a wireless remote control unit, allowing a single watchkeeper to select, check, and trim each line with precision.

This game-changing technology transforms the mooring process, making it safer and more streamlined.



CAPTIVE REEL WINCH PRINCIPLE

The reel winch, available in carbon and aluminium, stores the line in a single layer to prevent a second layer from jamming in the first layer. The calculation for the drum length is based on the line diameter and the length of line to be stored, i.e. the retrieving length.

Next to the drum is a spindle-driven slider to ensure that the line turns are stored properly. Spindle is driven by pulleys which are interchangeable enabling adjustments to the line diameter if necessary. End switches safeguard the use of the winch. The winch will stop as soon as all but the (e.g. 3) safety windings of line have been paid out and it will also stop as soon as the drum is full.

Underneath the drum, there are sensors that detect slack in the line, resulting in the drum stopping when slack is detected.

To prevent slack in the line, all Rondal winches are equipped with an optical sensor. This sensor transmits a light beam underneath, close to the drum. If the line slackens, the turns around the drum will drop and interrupt the beam, generating an electrical signal that will stop the winch. At the same time, a signal indicating failure of the winch operation is dispatched to the steering position. The reel winch is available with the spindle on either the left- or right-hand side of the drum. The gearbox and brake are located inside the drum, and connected to the motor right next to the drum.

PROVEN TECHNOLOGY FOR OVER 30+ YEARS

CUTTING-EDGE TECHNOLOGY FOR SUPERIOR MOORING SOLUTIONS

At Rondal, we are committed to delivering comprehensive mooring systems that integrate seamlessly with yacht builders' specifications. Our winches, available in both electric and hydraulic options, push the boundaries of efficiency and safety in line management. With nearly hands-free operation, our winches significantly reduce the risk of accidents,

making the mooring process cleaner, more precise, and free from the need for manual line handling or cleating.





REMOTE CONTROL
OPERATE FREELY
ON DECK



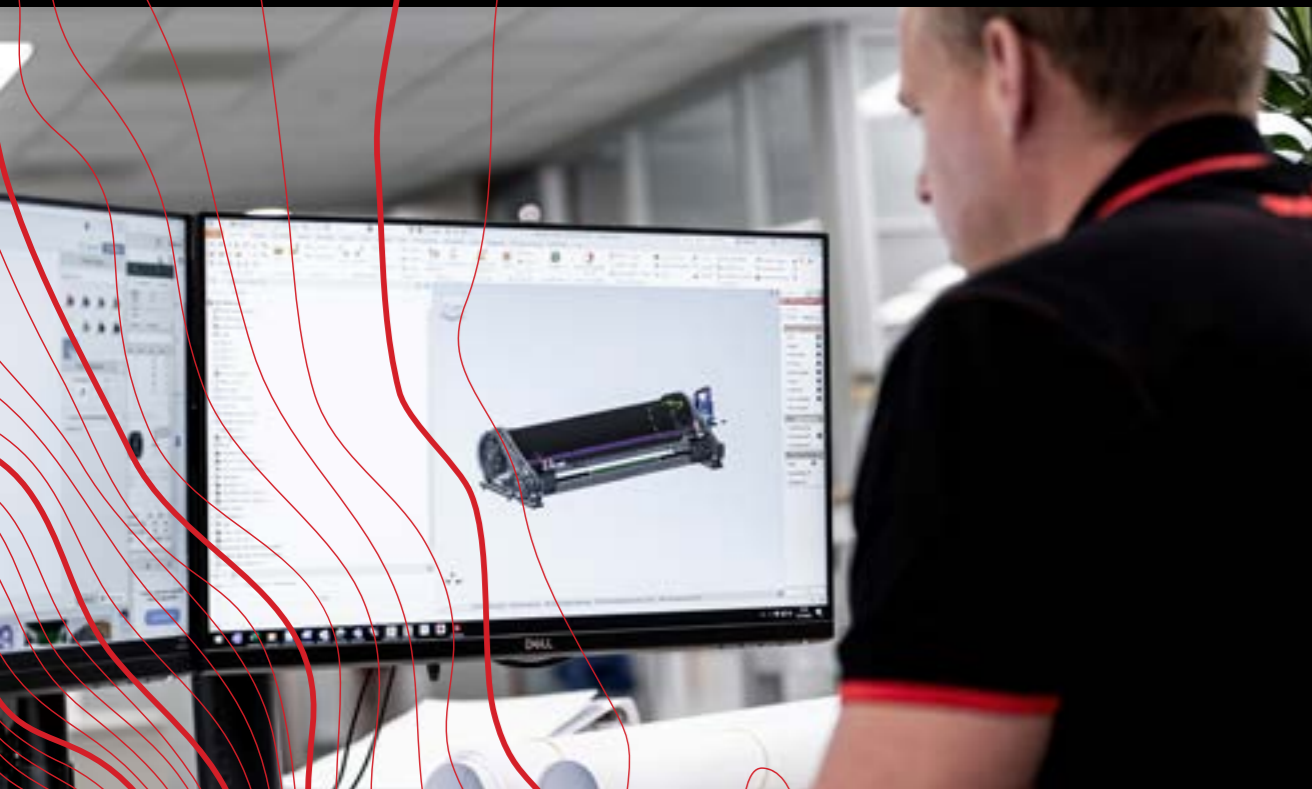
**HOW IT WORKS:
PRECISION AND SAFETY COMBINED**

Rondal's mooring winches are designed for maximum efficiency. Two crew members, each equipped with a control unit, can share responsibilities for quicker adjustments. The system continuously monitors loads on all winch sheaves, which are integrated with the ship's AMS system. Our winches comply with the latest classification requirements, ensuring that your vessel meets the highest standards of safety and performance.

See how it works



	RW4000HW	RW6000HW	RW8000HW	RW12000HW	RW18000HW	RW24000HW
PULL LOAD [kg]	4000	6000	8000	12000	18000	24000
HOLD LOAD [kg]	6000	9000	12000	18000	27000	36000
LINE DIAM. RANGE [mm]	14 - 20	14 - 24	18 - 28	22 - 32	30 - 36	34 - 44
MAX. RETRIEVING LENGTHS AT SMALLEST LINE DIAM. [mm]	58	85	128	128	126	120
MAX. RETRIEVING LENGTHS AT LARGEST LINE DIAM. [mm]	53	50	86	89	101	83
HYDRAULICS						
- [L/min]	60 (fixed disp)	45	53	60	82	100
- [BAR]	300	275	310	305	300	300



COMPLIANT WITH THE LATEST SOLAS REGULATIONS

From 2024, the latest SOLAS regulations require hands-off mooring procedures for vessels over 3000 GT and recommend them for those below 3000 GT. Rondal's captive winches, already trusted in the sailing yacht industry, are now also perfectly suited for handling mooring lines on motor yachts.

We have already supplied the first sets for a 100m+ motor yacht, underscoring our commitment to staying ahead of regulatory changes. This expansion into the motor yacht market reflects Rondal's dedication to innovation and safety, providing solutions that meet the industry's highest standards. Our technology ensures efficient and secure mooring operations that comply with the new SOLAS requirements, reinforcing our role as leader in the yachting industry.

A DISCREET DESIGN FOR UNCLUTTERED DECK SPACES

Rondal's captive reel winches provide more than safety and functionality. With below-deck installation, they keep your superyacht's aesthetics pristine.

By removing clutter and 'de-industrializing' deck spaces, our winches preserve the yacht's sleek design. Your yacht stays as refined in appearance as it is in performance.





GO
WHERE
YOU
FEEL
MOST
ALIVE

Rondal

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