



ROLLIX SPARES & SERVICES

World leader
for blade bearings
design & manufacturing



Defontaine Group was founded in 1946. The group designs and manufactures complex mechanical parts and sub-assemblies. With three production sites, Defontaine Group is recognised for the quality of its products and services, as well as for its loyalty and proximity to its customers and partners.



Rollix brand was created in 1969 to design and manufacture slewing rings and special bearings with diameters ranging from 100 mm to 6,200 mm, with or without gear. Since its inception, Rollix has manufactured and sold over one million slewing rings for machine tool, transport, marine, medical and wind turbine applications, among others. 77% of Rollix production is exported to 70 countries.



Rollix has a unique expertise in renewable energy with more than 50 years of experience and 250,000 bearings delivered, corresponding to 21% of the installed wind turbines worldwide. Rollix is approved by all major offshore and onshore IPPs. Our clients benefit from the latest innovations validated thanks to our internal test benches (from components to full scaled bearing) confirming directly our FEA models. The Rollix improvement culture provides continuous process and product quality upgrades for the lowest TCO in the market.



We act for the environment protection

Rollix is aware of its activity impacting the environment. Our actions are based on key aspects:

- Avoid polluting emissions. We optimize our manufacturing processes to achieve sustainable growth, we reduce our packaging consumption and we adopt a circular economy approach.
- Reduce emissions. We improve the energy efficiency of our facilities using 100% renewable electricity and minimising the CO₂ emissions from our supply chain.



Blade bearings stock availability

- Spares for 95% of wind turbines
- 80% of our spare parts in stock.



Blade bearings packaging

- Suitable packaging for long term storage, sea transport & temporary outdoor storage
- Packaging on pallets, in crates, or customised (stillage, tarpaulin...).



Rollix provides spares & services for onshore and offshore wind turbines respecting ISO certifications.

Rollix is a spare parts leader. To answer our customers' needs, Rollix provides not only bearings but also the corresponding components. We can offer pitch bearings for all the wind turbines below:

	AW 1500	AW 3000		
	EC074 / EC080 / EC086	EC0100 / EC0110	EC0122	
	E30	E58	E82 - E2	E92
	E40	E66	E82 - E4	E101
	E48	E70	E90	E115
	G42 / G47	G90	SG126	G10X
	G52	G97	SG132	G11X
	G58	G114 2MW	SG145	SG5X
	G80 / G87	G114 2.5 MW		
	GE 1.5 MW	GE 2.5 MW	GE Haliade 150-6 MW	GE Haliade X
	DF100	DF113		
	LW 50	LW 250	LW 750	
	MWT 2.4			
	N80	N100	N149	
	N90	N117		
	MM82	3,4M	MD77	
	MM92	5M		
	SWT 1.3	SWT 3.0	3DD	
	SWT 2.3	SWT 3.6	D6 / D7 / D8	
	S88	S97 - 2100	S111	
	T 48	T 600		
	GEV 15	GEV 26	GEV MP	
	V27 / V29	NM82 - V82	V117 / V126	V163
	V39 / V42 / V47	V80 / V90	V136	V164
	V52 / V60	V100 / V110	V150	V174
	V66	V112	V162	
	500			

Fasteners

Fastening components for bearing assembly on blade and hub side:

Studs, washers, nuts, screws, plastic caps...

Standards used to supply our fasteners kits are:
ISO 898, ISO 4014, ISO 4032, ISO 7416, DIN 934...



Sealings

The seals protect the bearing raceways from external contamination. They also keep the grease in the raceway during the rotation of the bearing.

- Internal & external seals
- Unique 3 lips tight seal design field-proven over decades
- Can be replaced on site
- All components (glue, seal assembly tools...) can be provided as a kit.



Grease containers

- Rollix patented grease containers to recover old grease during the life of the bearing and avoid grease over-pressure inside the raceway.
- Limitation of grease leakage and less consuming time for cleaning operation.
- Grease containers can be mounted on all bearings types thanks to special adaptors.



Short term delivery

Interchangeability

2-in-1 supplier (bearing & fasteners)

Worldwide logistics with in-house customs office

Recognised by field technicians for best efficiency on the market



Services on-site (worldwide)

Our services and maintenance team can support you on your onshore/offshore wind farms, wherever in the world.

Videoscopy

Give your bearing a non-destructive inspection of areas beyond eyeshot.

We do

- Raceways, cages and balls' status checking
- Internal damages detection & identification
- Complete illustrated report provided after the visit.



Seal Replacement

Get a seal renewal to avoid contamination of raceway system & uncontrolled leakage.

We do

- Old sealing removal
- Sealing groove cleaning
- New sealing provision
- Installation of new seal.



On-site bearing inspection of your installed bearing

Find out the exact status of your bearing.

We do

- Bearing's visual inspection
- Deflection measurement
- Grease sampling for contamination analysis
- Gearing inspection
- Complete report provided after the visit.



**GWO certified & experienced technicians
(onshore & offshore)**
Reduced unplanned downtimes
Longer bearing lifetime

Warranty extension under request
Long term packaging
Safety

Services at Rollix

When services cannot be done on site, our services and maintenance team can assist you at Rollix facilities with less restrictions than uptower. These services can be offered for any bearing brand.

Lubricant analysis

Assess bearing condition based on lubricant analysis.

We do

- Grease analysis
- Report & recommendations for further operation.



Bearing retrofit

Get a like-new bearing.

We do

- Preloading verification (torque and deflection measurement)
- Internal inspection
- Assembly with new seals and lubricant
- New surface treatment
- Packaging adapted to customer request



Root cause analysis

Optimize operating conditions.

We do

- Outer contours and seals visual inspection
- Torque and deflection measurement
- Bearing disassembly and cleaning
- Lubricant analysis
- Detailed examination: lubrication, raceways, rolling elements, gears inspection
- Complete report including offer for retrofit if possible.



Sustainable solution

Cost saving

Feedback concerning design & operation

Preventive actions

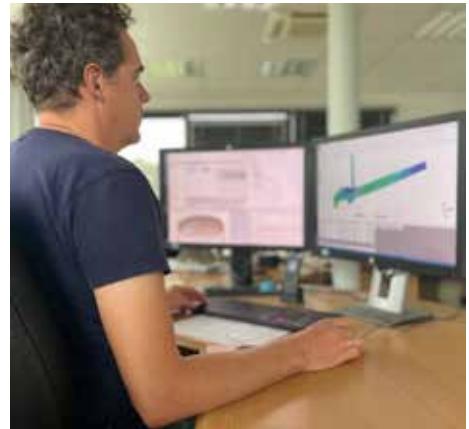
Engineering

Get an expert view on your bearings maintenance.

Our Rollix experts provide specific trainings, both theoretical and practical to allow you to be autonomous on bearings maintenance.

Our engineers can provide you with technical recommendations to ensure the best future for your bearings:

- Maintenance
- Grease quantities
- Bearing installation
- Technical expertise: failure analysis of various parts
- Help with assembly / disassembly...



WE ARE

AT THE HEART OF YOUR PROJECT

You benefit from our advice and experience from the moment your needs are expressed. Our technical collaboration optimizes project management and guarantees quality results.

PERFORMERS & DOERS

For over 50 years, Rollix has been developing its slewing ring expertise applied to onshore and offshore wind turbines. Our constant quest to achieve excellence is recognised by the world's leading companies in these sectors. At Rollix, there are no small clients. We look after our clients. They are important to us.



ROLLIX DEPARTMENT
RUE SAINT-ELOI
85530 LA BRUFFIÈRE
FRANCE

PHONE: +33 (0)2 51 45 94 94
EMAIL: wind-spares@rollix.com
www.defontaine.com

