

Thermo Scientific Rotor Warranty Protection

► *Improve lab safety* ► *Maximize your investment* ► *Extend equipment life*

Rotors are subject to high levels of stress due to the centrifugal force created by high rotational speeds, and repeated cycles cause rotors to stretch and change in size. Depending on how close to the elastic limit the rotor is operated, and how many alternating stress cycles it experiences, these small changes may eventually become microscopic cracks. Since these tiny flaws can become exacerbated under centrifugal forces, metal rotors have a limited useful life. For maximum safety to lab personnel and equipment, rotors should be retired when their lifetime is reached.

For metal rotors, when the recommended retirement period has expired, consideration should be given to the retirement of the rotor.

Thermo Scientific Fiberlite Rotor Warranty Protection 15-year in all centrifuges

Thermo Scientific Fiberlite carbon fiber rotors are a secure investment, backed by the most comprehensive warranty coverage available.

Fiberlite composite rotors are manufactured to be direct replacements of conventional rotors. Compatible with a vast range of centrifuges, Fiberlite rotors provide the benefits of carbon fiber without requiring a capital investment in a new centrifuge system.

Warranty coverage¹ includes:

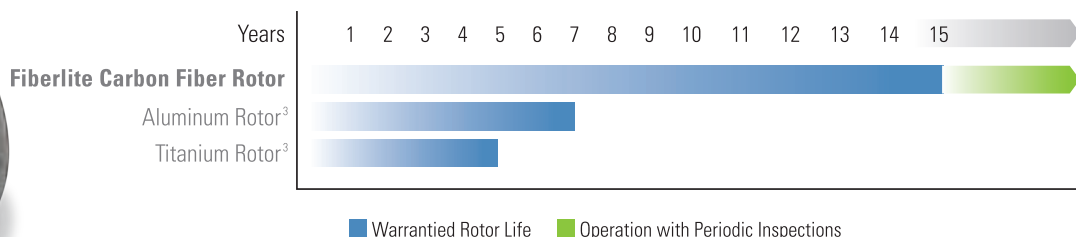
- When Fiberlite rotor is used in a Thermo Scientific centrifuge
- When Fiberlite rotor is used in a centrifuge from another manufacturer

1 Restrictions apply. Please see www.thermoscientific.com/fiberlitewarranty for complete Fiberlite rotor warranty coverage details.



ROTOR LIFE MANAGEMENT

Average Warranty Periods² for Metal Rotors Compared with Fiberlite Carbon Fiber Rotors



Contact your sales representative for more details.

2 Average warranty periods were calculated based on industry average of years an aluminum or titanium rotor may be covered under warranty.
3 Warranty coverage may vary by rotor. Please refer to manufacturer for specific warranty coverage for each rotor.

Thermo Scientific Rotor Life Management

Standard rotor life differs for each class and type of rotor.

Centrifuge Type	Rotor		Recommended Retirement Cycles	Recommended Retirement ⁴
	Material	Type		
Ultra	Fiberlite Carbon Fiber	Fixed Angle	Unlimited cycles	None ⁵
	Aluminum	Fixed Angle	1000 cycles	10 years
			Another 1000 cycles at 90% of maximum speed	
	Titanium	Fixed Angle or Vertical	5000 cycles	10 years
Aluminum	Swinging Bucket	1000 cycles	10 years	
		Another 1000 cycles at 90% of maximum speed		
Microultra	Titanium or Aluminum	Fixed Angle	See respective manual	10 years
Superspeed	Fiberlite Carbon Fiber	Fixed Angle	Unlimited cycles	None ⁵
	Aluminum	Fixed Angle	See respective manual	15 years
	Titanium	Continuous Flow	See respective manual	15 years
Large Capacity	Fiberlite Carbon Fiber	Fixed Angle	Unlimited cycles	None ⁵
	Aluminum	Swinging Bucket or Fixed Angle	See respective manual	14 years
Benchtop	Fiberlite Carbon Fiber	Fixed Angle	Unlimited cycles	None ⁵
	Aluminum	Fixed Angle	See respective manual	7 years
	Aluminum	Swinging Bucket	See respective manual	7 years

⁴ Recommended retirement may vary by rotor. Please refer to manual for complete details.

⁵ After 15-year warranty expires on Fiberlite carbon fiber rotors, conduct periodic inspections to ensure safe operation.

tip  The retirement or expiration date may be engraved on the rotor buckets or canisters.

For more information on Thermo Scientific rotors, please visit www.thermoscientific.com/rotors.

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