

Engineered for Strength

CLOSURES WITH HIGH TORQUE PERFORMANCE

Blue Ocean Closures High Density Fiber™ closures are not only sustainable – they are engineered for strength. By harnessing the natural stiffness of cellulose and applying advanced press forming techniques, the closures are created to perform reliably in real-world use.



Strength in the Structure

Cellulose fibers form dense hydrogen bonds. During production, we momentarily loosen these bonds to reshape the fibers, then rebind them in place. This process locks in strength and precision. The smooth, high-density thread design ensures consistent performance during repeated opening and closing.

Proven Torque Performance

Torque is a key indicator of closure strength. We use automated torque testing to ensure accuracy. Results consistently show values that exceed the demands of packaging and matching conventional screw caps.



Torque Test Results

Sample	Start Torque (Nm)	End Torque (Nm)
1	4.15	4.72
2	4.07	4.35
3	3.85	3.94
4	3.93	4.15
5	4.16	3.66
Average	4.03	4.16

Measured after 100 open–close cycles.

Shape Stability Over Time

Dimensional changes are tested after extended use. Even after 100+ open and close cycles, the closures retain their original shape and fit.

Feature	Start (mm)	100+ Cycles (mm)	Standard Deviation
Body Diameter	39.61	39.55	0.07
Height (H ₀)	10.63	10.67	0.06
Headplate Thickness	0.99	1.00	0.05

Measured after 100 open–close cycles.

Durability You Can Trust

From torque strength to long-term fit, the fiber-based closures from Blue Ocean Closures deliver performance that supports product protection, brand reliability and sustainability targets.

Powered by Blue Ocean Closures

