THOMPSON COUPLINGS | TECHNICAL NEWSLETTER

(longer version available on request).

THE BEARING FAILED. BUT WAS THE BEARING REALLY THE PROBLEM?

When a bearing or mechanical seal repeatedly fails on a pump, motor or gearbox, replacing it solves the immediate problem…

But what caused it to fail?

One factor that should always be considered is shaft misalignment.

Alignment Doesn't Stop at Installation

Laser alignment is an excellent maintenance practice — but accurately aligned equipment doesn't necessarily stay aligned.

Once machinery is operating, alignment can change due to thermal growth, pipe strain, soft foot, foundation movement, vibration and load changes.

Even small movements can introduce additional forces into bearings, seals and connected equipment.

The Hidden Cost

The bearing or seal may be relatively inexpensive. The real cost can be:

Unplanned downtime • Lost production • Emergency maintenance • Repeated alignment • Secondary equipment damage

That's why repeatedly replacing the failed component may be treating the symptom rather than the cause.

What If the Coupling Could Accommodate the Movement?

Thompson Couplings are designed to accommodate operational misalignment while minimising reaction forces transmitted back into connected equipment.

Depending on model and application, Thompson Couplings can accommodate up to 5° misalignment either side.

This can help reduce bearing and seal loads, vibration and maintenance intervention — while protecting connected equipment and improving reliability.

A Question for Your Customers

When a customer says:

“We keep replacing that bearing.”
“That seal never lasts.”
“We are constantly realigning this pump.”
“This drive keeps vibrating.”

Ask:

“What is causing the failure?”

It could uncover an application where a Thompson Coupling provides the longer-term solution.

Look for opportunities on pumps, motors, gearboxes, conveyors, fans, crushers and compressors — particularly where there are repeated failures, difficult alignment, vibration or costly downtime.

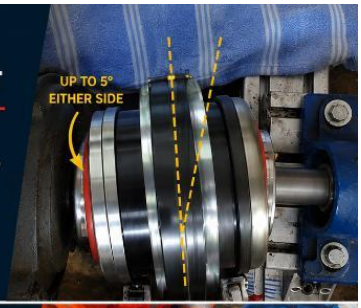
ENGINEERING TIP

Don't just replace the failed component. Find out why it failed.

Sometimes the bearing isn't the problem — it's where the problem shows up.

TCAE-ST

Self-aligning in operation – up to 5° misalignment either side



TCAE-E-2

Installed in a leather manufacturing application

TCAE-V5

Installed in 2025 and still running reliably. Ordering more now test is complete.

ACCOMMODATES MISALIGNMENT | REDUCES LOADS | PROTECTS EQUIPMENT | EXTENDS LIFE