



Avoiding Failure. Even in Failure Scenarios.

Our seals are used in critical applications where failure isn't an option. But that doesn't mean compressors always run optimally. And small failures can have large-scale consequences. The Type 93AX coaxial separation seal is designed and engineered to operate, even in the event of failure scenarios.

Cost of Failure

42%

For global process industries, equipment failure is responsible for 42% of unplanned downtime.

£42m

In energy and process applications, unplanned downtime can result in losses of up to £42 million per facility per year, on average.

£50bn

Unplanned downtime costs the global process industries an estimated £50 billion.

Statistics courtesy of Deloitte

Three Operating Modes for Reliable Operation in all Scenarios



1. Standard Operation

Installed between the dry gas seal and bearings, separation gas is injected from the back of the face, creating the lift-off force required to separate the face and seal. This results in a high stiffness film with high exit gas velocity.



2. Separation Gas Failure

In the event of separation gas failure, the seal maintains its non-contacting operation in both static and dynamic conditions. Low-pressure gas is drawn from either the remaining gas on the inlet line or from the dry gas seal side to create flow towards the bearing side. The gap is sufficient to ensure a non-contacting regime and to prevent oil migration.



3. Dry Gas Seal Failure

If the compressor experiences a dry gas seal failure, the seal is designed to create a controlled flow of high-pressure process gas towards the bearing side. This maintains a positive restriction in this catastrophic event and prevents extreme leakage of pressurised gas into the atmosphere.

**Reduce Risk.
Reduce Downtime.
Enhance Efficiency.**

Discover how the Type 93AX coaxial separation seal can benefit your operations

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