

ES5007 Compressor barrier seal retrofit

Addition of buffered separation seal prevents lubrication oil migration to dry seal

energy

Engineered solution purpose

This engineered solution reduces the risk of oil migration into the dry seal.

Applicability

All Rolls-Royce supplied compressors with dry gas seals that do not currently have segmented barrier seals.

Benefits

The barrier seal provides a positive means of preventing bearing oil migration into the dry seal during operation which keeps the seal clean and functioning as intended. By helping to prolong the life of the seal, unit availability is increased.

Experience

Gas seals with dry barriers have been supplied for over 10 years.

Scope of work

A barrier or separation seal is added to the dry gas face seal existing in the compressor. The separation seal serves to separate the nearly atmospheric vent gas from the bearing oil drain and prevent lube oil migration into the dry seal. The separation seal is typically a buffered seal utilising either air or nitrogen as the sealing medium. The customer typically supplies the air or nitrogen gas from a plant source.



Bill of materials

Barrier seal and buffer air components as agreed.
Bearing housing rework or replacement may be required.

Undertaken

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