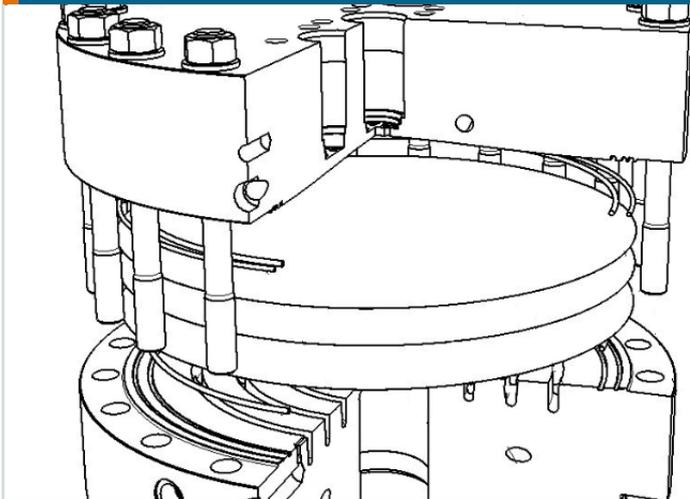


# OEM Diaphragms Diaphragm Compressors



## IMPORTANT STRESSES

Diaphragms are designed to sustain important mechanical, chemical and temperature stresses generated by gases under pressure.

Diaphragm sets are activated several hundred times per minute/ Their quality finish must :

- Preserve your compressor components
- Reduce frequency of maintenance operation
- Avoid production losses
- Reduce the installations maintenance costs.

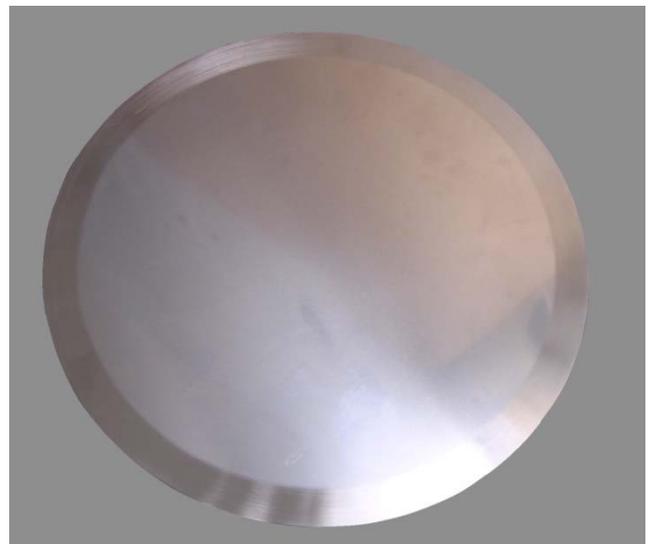
**Howden diaphragm for Burton Corblin® compressors. The performance of a critical component through a selective material choice and high quality manufacturing process.**

Material grade of your original diaphragm is selected to match your operating conditions. Diaphragm performances can be reached thanks to a specific industrial manufacturing process.

With 400 bent per minute at high or very high pressures, diaphragms are part of the most stressed components of your compressor.

Gas leakage is avoided when precise positioning of diaphragms between compressor head plates is respected. Accurate clearances have to be respected. Howden support compressor users to optimise original diaphragms life time.

The use of original diaphragm is the guaranty of the highest quality level possible for this critical component.



### Plates maintenance and preservation

A plastic film protects the diaphragms during all manufacturing operations and storage period. This film must be removed only before diaphragm installation. Intermediate diaphragms are packed in a protection envelope. Intermediate diaphragm surface is covered by a self lubricating deposit to keep when installed.

Diaphragm have to be replaced by sets

- Gas side diaphragm
- Intermediate diaphragm
- Oil side diaphragm

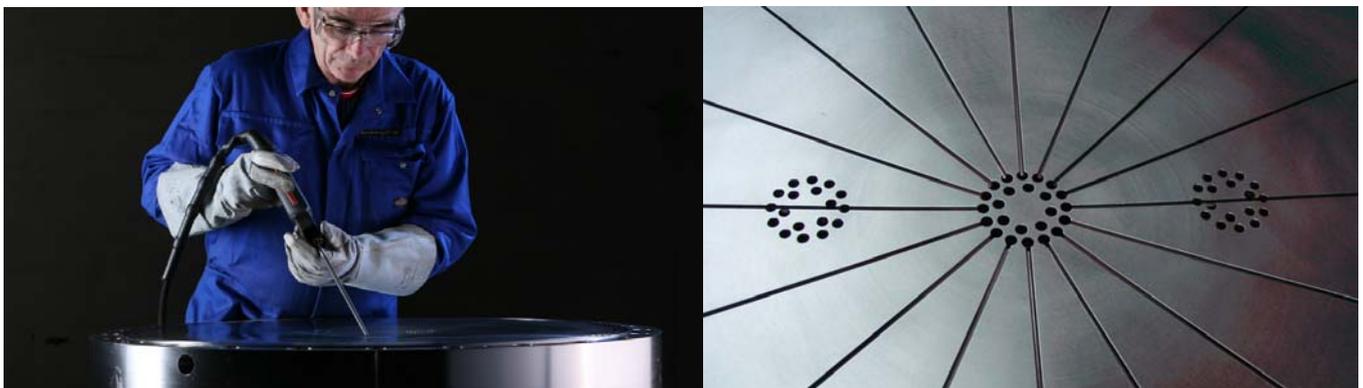
Plate o'rings have to be replaced together with diaphragm sets

- Gas plate o'ring
- Oil plate o'ring
- Detection o'ring

Howden support goes beyond curing the troubles. Specific solutions on your compression package can overcome troubles by treating their origins with solutions such as filter or back pressure valve integration, specific maintenance operations definition and the hydraulic circuit monitoring.

To get a better life time on diaphragms, plates profile should keep the perfect original curve. On head curves, no defect are accepted, no inclusion, no shocks, no holes. Tightening areas have to be correct because after several mounting and dismantling operations and excessive tightening torques. Some deformation may be the origin of diaphragm rupture. Curve re machining erase these defects.

Plate curves must have profiles as originally delivered from the shop to ensure good lifetime of diaphragm sets. Howden propose plate curve re-profiling operation.



Contact Howden for any additional information:

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