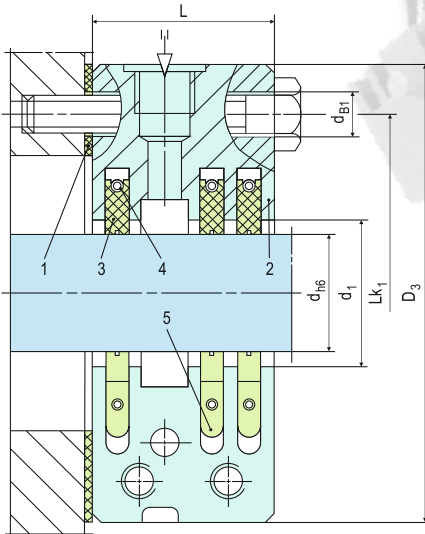




sealmatic®

Sealmatic Delivers Facing & Bushing Seal For Ammonia Compressor To Siemens For A Fertiliser Plant

Ammonia is a compound of nitrogen and hydrogen with the formula NH_3 . A stable binary hydride, and the simplest pnictogen hydride, ammonia is a colourless gas with a characteristic pungent smell. Ammonia is the second largest chemical product produced in the world, behind sulfuric acid. The demand for ammonia is driven by the demand for fertilizers. Of the world's nitrogen demand, 85% is for fertilizer primarily derived from ammonia in the form of Urea, Ammonium nitrate, Phosphate and Sulfate. Fertilizer production continues to increase as food producers struggle to keep pace with the world's expanding population. Fertilizer production plants require large air compressors, nitrogen compressors and ammonia (NH_3) refrigeration systems. Required gas flow rates for these processes is increasing and the applications throw demanding challenges for the sealing equipments.



Sealmatic has extensive experience in engineering and manufacturing mechanical shaft seals for air and gas compressors for fertilizer processes with large centrifugal compressors.

Performance Capabilities

Shaft diameter:
 $d = 40 \dots 340 \text{ mm} (1.57" \dots 13.39")$
 Operating pressure: $p = \text{vacuum} \dots 20 \text{ bar} (290 \text{ PSI}) \text{ abs.}$
 Operating temperature: $t = -120 \text{ }^\circ\text{C} \dots +800 \text{ }^\circ\text{C} (-184 \text{ }^\circ\text{F} \dots +1,472 \text{ }^\circ\text{F})$ for carbon,
 max. $225 \text{ }^\circ\text{C} (437 \text{ }^\circ\text{F})$ for PTFE compound

Speed = max. $150 \text{ m/s} (492 \text{ ft/s})$
 for carbon, max. $40 \text{ m/s} (131 \text{ ft/s})$ for PTFE compound
 Radial play: $\pm 1.0 \dots 5.0 \text{ mm} (\pm 0.04" \dots 0.2")$
 Axial movement: theoretically unlimited
 Recommended wear guard: $>300 \text{ HB}$ (low pressure), $>58 \text{ HRC}$ (high pressure)

API SPEC Q1 . API . ISO 9001:2015 . EU 1935:2004 . ATEX - 2014/34/EU . ISO 9001:2015 . ISO 14001:2015 . BS-OHSAS 18001:2007 . PED-CE

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