

Subject

Qualification of Gazguard® HNBR775 for Rapid Gas Decompression (RGD) and H2S aging.

Parts Affected

All Freudenberg Temperature Rated Ram Products

Issue

HNBR775, a proprietary elastomer of FO> used in Freudenberg's Temperature-Rated ram style pressure control products, has recently completed testing for Rapid Gas Decompression (RGD) and H2S aging. The RGD testing was completed per NORSOK M-710 requirements. The sour gas aging in H2S was completed using API 6A (ISO 10423) immersion testing protocol and NORSOK M-710 acceptance criteria. By passing the RGD and Norsok M-710 testing, the elastomer will now carry the Gazguard® brand name.

Results

Rapid Gas Decompression Testing (RGD):

Material	Test Protocol	Acceptance Criteria	Seal Type	Seal Size	Rating	Pass / Fail
HNBR775	NORSOK M-710	NORSOK M-710	O-Ring	BS 326	00000	Pass

H2S Immersion Testing:

Material	Immersion Test Protocol	Immersion Test Acceptance Criteria	Test Temperature (min)	Test Media	Exposure Time	H ₂ S (max)	CO ₂ (max)	CH ₄ (max)
HNBR775	API 6A (ISO 10423)	NORSOK M-710	350°F	#2 Diesel	14 days	10%	80%	10%

Solution

Freudenberg Temperature Rated Ram packers, top seals, connecting rod seals and bonnet seals made with the Gazguard® HNBR775 elastomer are now certified per applicable Norsok M-710 and API 6A standards for both applications containing risk of RGD and in applications with up to 10% H₂S at 350°F.