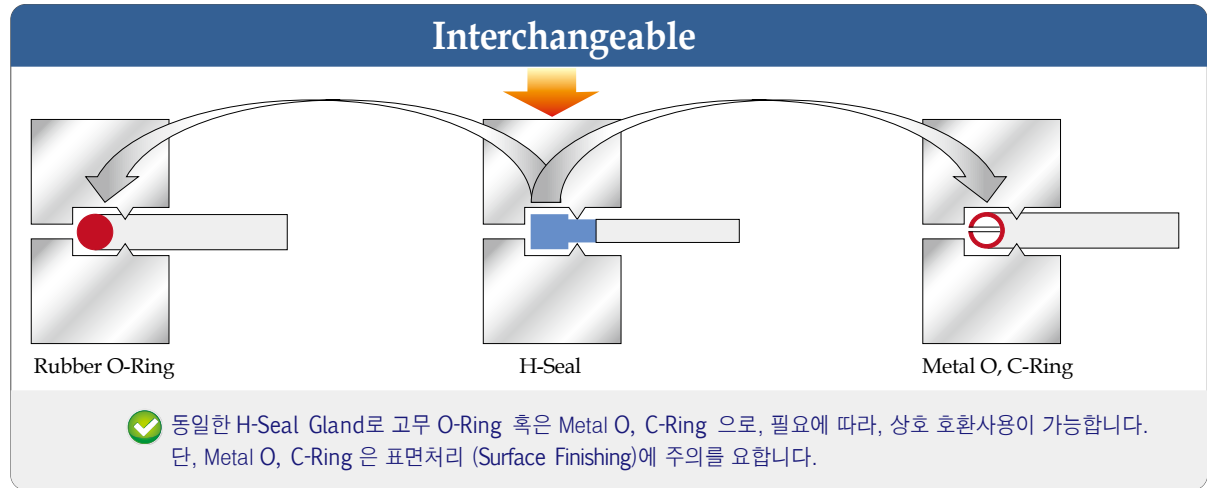
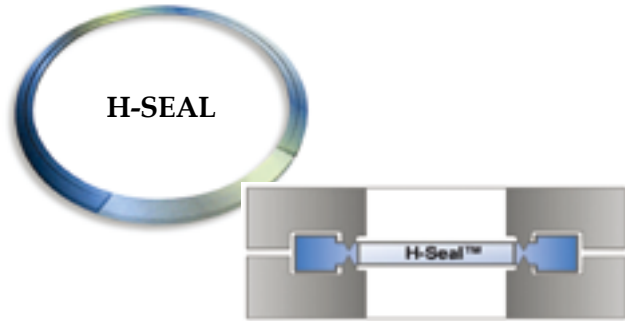


H-SEAL, 일반 메탈씰, 퍼플루오링과의 성능비교

H-SEAL vs. METAL O,C-RING & PERFLUORO (FFPM)



항목별 특성비교		Perfluoro (Perlast, Kalrez)	H-Seal	Metal O,C-RING
Vacuum level	진공도	> 10 ⁻⁷ Torr (중~고진공)	< 10 ⁻¹³ Torr (UHV, 초고진공)	고~초고진공
Pressure resistance	내압력	~ 250 bar (+뺨업링)	~ 1,380 bar (20,000 psi)	~ 6,900 bar
Chemical resistance	내화학성	Good ~ Excellent	Excellent (Nickel 200 : standard)	Excellent
Temperature	최고온도	+ 327 °C	+ 700 °C	+ 700 °C
	최저온도	- 15 °C	- 270 °C (극저온)	- 270 °C (극저온)
Impermeability	내투과성	Fair ~ Good	Excellent	Excellent
Outgassing	아웃개싱	Depending on Compound (?)	No Outgassing	No Outgassing
Purity & Contamination	오염성	Depending on Compound (?)	UHP (Ultra High Purity)	UHP (Ultra High Purity)
Surface Finishing (Polishing)	씰링면 가공조도	-	Polishing 불필요	매우 까다로움 (치명적임)
Required Tightening Load	체결력	Low	Metal O-Ring의 30~50%	High Load
Ease of Installation	조립성	매우 용이	매우용이 (Self Alignment)	많은 주의필요 (실패많음)
Assembly Yield % (Pass)	조립收率 (%)	100%	100%	50~70 %
Price Rating	가격비교	1	1 ~ 2	1 ~ 1.5
Life expectancy & Aging resistance	내구수명, 내노화성	1	5 +	5 +
Performance vs. Cost	성능 對比 가격	1	5 +	5 +
Anti Explosive Decompression	A.E.D	Depending on Compound	Excellent	Excellent
Gland damage after Use	사용후의 Gland 재가공	불필요 (No gland damage)	불필요 (No gland damage)	재가공필요 (Gland damage)