

# Thoroughly tested Totally trusted

SKF wellhead seals for the oil and gas industry



# Making your supply more secure and cost efficient

In the oil and gas industry, the risks and consequences of unplanned downtime are greatest in extreme environments. To avoid expensive delays, you need the highest levels of reliability in your wellhead and its seals.

SKF understands the demands facing this industry. That's why, we now offer a new extended range of wellhead seals, thoroughly tested and qualified to meet your technical challenges.





## Seal performance you can rely on

You can trust our seals to perform in the most challenging conditions, as they've all been through the most rigorous testing program at our own testing facility.

Putting them through extreme examinations means SKF seals meet the highest standards of performance.

If you are concerned about critical failure or the cost and impact of downtime, this is a solution that offers real peace of mind.

## Full product qualification

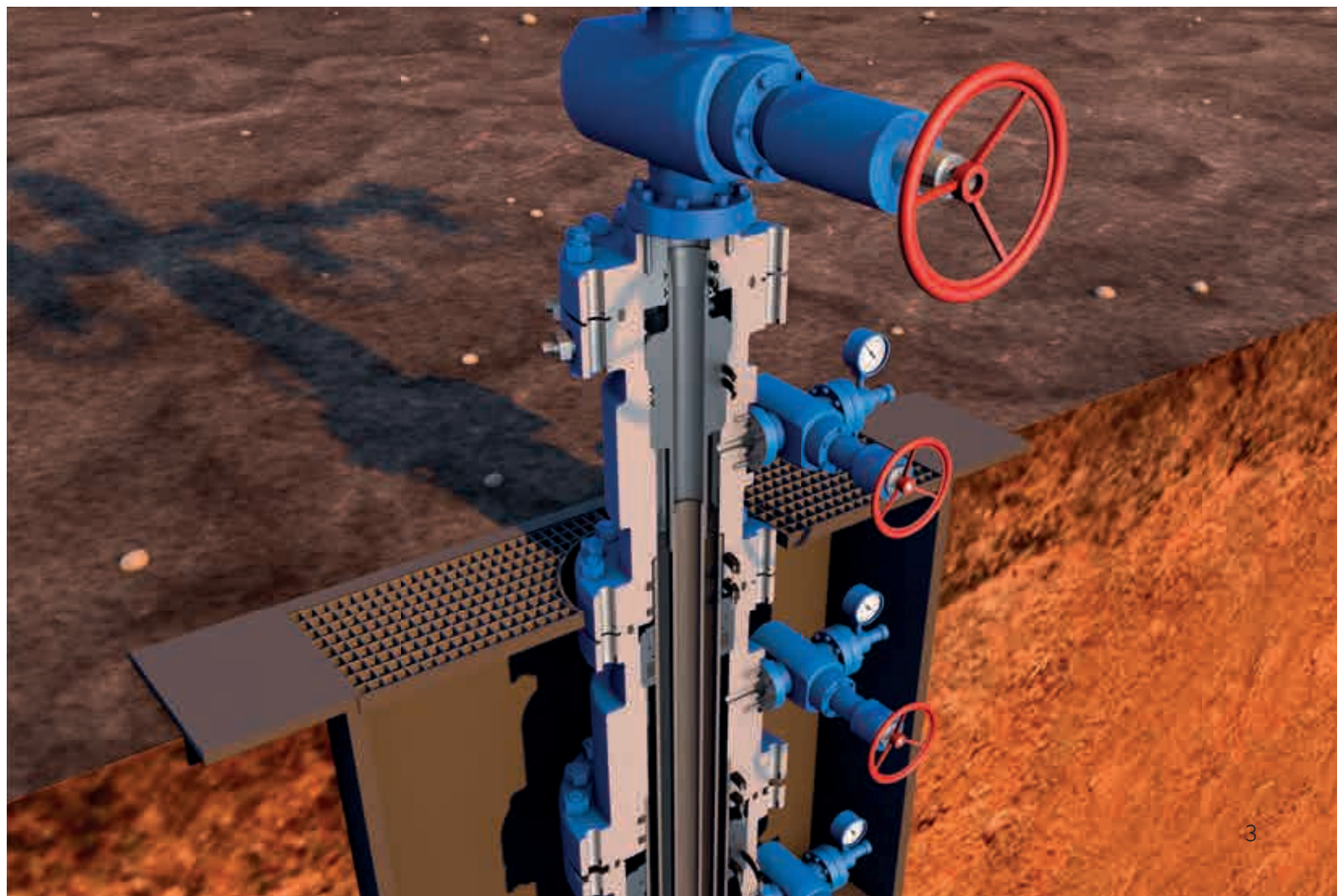
- Materials tested per API 6A annex F1.13.5.2 and NORSOK M710 rev 2
- Seals tested per API 6A annex F PR2 F 1.11
- Manufacturing process verified to highest level of repeatable product quality

## An extended range of SKF Wellhead seals

With the new range of spring energized moulded FS and S seals, we now cover the most common demands for wellhead seal applications.

It complements one of the broadest and already well proven offering of machined T seals.

Together they offer the most flexible wellhead standard seal proposition combining the reliability and cost efficiency of moulded products with the flexibility and fast turnaround of high quality machined seals across the 100 (3/32" height), 200 (1/8"), 300 (3/16") and 400 (1/4") standard gland dimensional series.



# Real world reliability. High pressure, high performance seals

## T and Locking T-seals. Well proven designs

The extreme conditions of the oil and gas industry require high performance materials and the T-seal is a proven design with a long history of service.

SKF produces customizable T-seals from a variety of materials to meet almost any gland size and quantity.

For applications where assembly may be challenging, SKF offers a unique Locking T-seal (LT), proven to be a problem solver when seal installation is challenging.

Innovatively designed ridges snap in place at installation, locking the T-seals' anti-extrusion rings in the right position.

As well as enabling easier installation, the unique design reduces the risk of damage to the seal or other wellhead components.

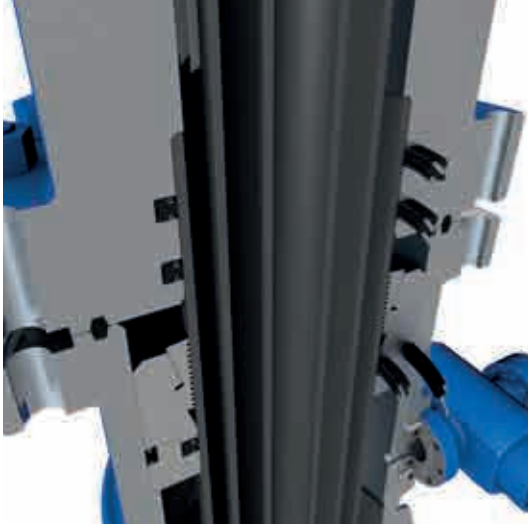
The seal can be used in dynamic reciprocating seal functions as well as high pressure static connections.

## FS- and S-seals. Handling the heat and the pressure

Your wellhead is a critical part of the oil and gas infrastructure. Seals material and design must withstand pressures as high as 1 034 bar (15 000 psi) and temperatures of 149° C (300° F).

From design through to production, SKF FS- and S-seals are made to perform in the toughest situations, delivering reliable high-pressure static sealing.





All our FS seals successfully passed API 6A annex F PR2 testing with no damage

- Gas test pressure: 0 to 690 bar (0 to 10 000 psi)
- Temperature: -18 to 121 °C (0 to 250 °F)
- Test medium: Nitrogen gas



## Benefits

- Extends seal and equipment service life
- Improves equipment reliability
- Reduces installation downtime
- Reduces risk of damage during installation
- Reliable and fast product delivery





Material	DIN / ISO / ASTM	Main properties				O&G standards compliance			
		Temperature, min	Temperature, max	Hardness		Norsok M-710 RGD	Norsok M-710 Sour gas	API 6A/ ISO 10423:2003 Section F.1.13.5.2	
		°C (°F)	°C (°F)	Shore A	Shore D			150°C	200°C
<b>Thermoplastic elastomers</b>									
H-ECOPUR	TPU	-20 (-5)	+110 (+230)	95 ± 2	48 ± 3				
X-ECOPUR H	TPU	-20 (-5)	+110 (+230)	97 ± 1	60 ± 3				
<b>Elastomers</b>									
SKF Ecorubber-H	HNBR	-25 (-15)	+150 (+300)	85 ± 5		-	yes	yes	-
SKF Ecorubber-H-85A-b-ED	HNBR	-25 (-15)	+150 (+300)	85 ± 5		yes	yes	yes	-
SKF Ecorubber-H-93A-b	HNBR	-25 (-15)	+150 (+300)	93 ± 2		-	-	yes	-
SKF Ecorubber-H-85A-b-LT	HNBR	-40 (-40)	+150 (+300)	85 ± 5		-	-	-	-
C-7019	HNBR	-25 (-15)	+150 (+300)	90		-	-	yes	-
C-7018	HNBR	-25 (-15)	+150 (+300)	70		-	-	yes	-
SKF Ecorubber 2	FPM / FKM	-20 (-5)	+200 (+390)	85 ± 5		yes	-	-	-
SKF Ecorubber 2-85A-b-ED	FPM / FKM	-20 (-5)	+200 (+390)	85 ± 5		yes	-	-	-
SKF Ecorubber 2-85A-b-ED-TP	FPM / FKM	-20 (-5)	+200 (+390)	85 ± 5		yes	yes	-	-
SKF Ecorubber-2-90A-b	FPM / FKM	-20 (-5)	+200 (+390)	90 ± 5		-	-	-	yes
SKF Ecorubber-2-95A-b	FPM / FKM	-20 (-5)	+200 (+390)	95 ± 5		-	-	-	yes
V-7521	FPM / FKM	-20 (-5)	+200 (+390)	75		-	-	-	yes
V-7523	FPM / FKM	-20 (-5)	+200 (+390)	90		-	-	-	yes
V-7514	FPM / FKM	-20 (-5)	+200 (+390)	95		-	-	-	yes
SKF Ecoflas	TFE/P	-20 (-5)	+200 (+390)	85		-	-	-	-
<b>Thermoplastics</b>									
SKF Ecopek	PEEK	-100 (-150)	+260 (+500)	n.a.	87	-	yes	-	yes
SKF Ecoflon 2 / 702	PTFE glass filled	-200 (-330)	+260 (+500)	n.a.	62	-	yes	-	yes
SKF Ecoflon 4 / 711	PTFE carbon filled	-200 (-330)	+260 (+500)	n.a.	65	-	yes	-	yes

## Features

Thoroughly qualified material and product high pressure performance that you and your customer can trust

- SKF reliable product quality, you always get the same product that you have validated
- Easier product installation, lower risk of installation downtime, damage and rework
- Trustable SKF delivery service
- Fast turnaround and troubleshoot SKF machining facilities
- Local SKF technical and service presence wherever you need it

## Materials you can rely on

The quality of materials in SKF seals is key to their enduring reliability in the field. The selected elastomers in our wellhead seals fulfil the highest industry standards with third party certifications to NORSOK M710 guidelines.

## Make the secure choice

Made with high grade materials and tested to our own strict standards, you can be sure SKF seals are ready for your toughest challenge. No matter how demanding your working environment, our high quality products won't let you down when it counts.

Find out more. Get in touch with your SKF representative today.

[www.skf.com/wellheadseals](http://www.skf.com/wellheadseals)



NT

DIM: 100 X 250 X 100 CM.  
TAKE WEIGHT: 0.80 MT.  
PRY LOAD: 3.40 MT.

MINI TA MIV



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