



HUTCHINSON®



We make it *possible*

# PRECISION SEALING SYSTEMS

CHEMICAL INDUSTRY



In-house Manufacturing, Safe Sealing



## HUTCHINSON GROUP



**> 44,000**  
collaborators



**25**  
countries



**100**  
sites



**217 M€**  
R&D



**> 4,314 M€**  
turnover

[www.hutchinson.com](http://www.hutchinson.com)

As a leading manufacturer of sealing solutions, Hutchinson provides standard and tailor-made solutions like O-Rings, X-Rings, Bonded Seals and special-shape seals.

From the compounds formulation and production to the conception and production of the parts in small or large series, we do everything in our plants.



## SECURE YOUR PRODUCTION

A key role in the performance of sealing is played by the nature of the rubber compound. Our compounds are designed to withstand harsh operating conditions. They are recommended for use over wide temperature ranges or in contact with chemical agents.

Thanks to their properties, our compounds from the chemical range reduce maintenance and optimize the operation of your installations and production lines in the long term.

For optimal quality, we design sealing solutions adapted to your specifications and produce all our parts in our factories.

The experts of our laboratory are at your disposal for any study or carrying out of ageing tests, as well as analysis on parts coming from your installations.



As a pledge of quality and reliability, our production plants are certified ISO 9001, ISO 14001, ISO 50001 and OHSAS 18001.



# SEALING SOLUTIONS



## O-RINGS

- > Large standard size range in stock
- > Dimensional standards (AS568, BS1806, R...)
- > Available features : surface treatments, cleanliness, micro-engraving for traceability



## TAILOR-MADE SOLUTIONS

- > Development according to your specifications
- > Compounds and solutions optimizing assembly, friction...
- > Characterization & soaking tests in our laboratories
- > Finite elements calculation



## BONDED SEALS

- > Bi-material seals (metal/rubber) used for the sealing of flanges in applications using gases or liquids, up to 2,000 bar
- > Metal washer : many metals and anti-corrosion coatings
- > Rubber : standard and specific compounds

- > Wide range of compounds : NBR, FKM, EPDM, HNBR, ACM, AEM, IIR, CR, VMQ, FVMQ...
- > From 50 to 98 Sh. A
- > Temperatures from -50 °C up to +250 °C
- > Low to high pressure

## SPECIFIC COMPOUNDS FOR THE CHEMICAL INDUSTRY

Resistance to fluids at ordinary temperature	IIR	EPDM	CR	NBR	VMQ	FVMQ	ACM	FKM	HNBR	AEM
Mineral oils and petroleum products	5	5	2	1	5	2	3	1	1	2
Water, diluted bases, non-oxidizing diluted acids	1	1	2	2	1	1	3	1	2	5
Strong acids	1	1	3	4	1	4	4	1	4	5
Strong oxidizing acids	4	4	5	5	5	5	5	1	5	5
Impermeability to gas	1	3	3	1	5	5	3	2	2	3
Glycols	2	1	3	4	3	3	4	3	2	4

1 = Very good to excellent    2 = Good    3 = Fairly good    4 = Poor    5 = Poor to zero

	PC851	EP851	DF651	DF701	7DF2148	7DF2067	7DF2355	DF801
<b>Family</b>	NBR	EPDM	FKM	FKM	FKM	FKM	FKM	FKM
<b>Color</b>	Black	Black	Black	Black	Black	Green	Black	Black
<b>Hardness (Sh.A)</b>	78	80	62	68	74	72	71	79
<b>TR10 (°C)</b>	-25	-46	-15	-14	-28	-15	-17	-14
<b>Compression set (%)</b>	15	12	22	20	23	20	25	18
<b>Min. Temp. (°C)</b>	-30	-50	-25	-25	-35	-25	-25	-25
<b>Max. continuous Temp. (°C)</b>	100	140	200	200	200	200	200	200
<b>Max. peak Temp. (°C)</b>	120	175	250	250	250	250	250	250

\*ISO 815-1 Compression Set Conditions :

EPDM = 24 hrs at 150°C    NBR: 24 hrs at 100°C    FKM: 72 hrs at 200°C





# HUTCHINSON®

## ▶ WORLDWIDE LOCATIONS



## ▶ SALES OFFICES

### ▶ EUROPE

Château-Gontier - FRANCE  
oring@hutchinson.com

Mannheim - GERMANY  
info.mannheim@hutchinson.com

### ▶ NORTH AMERICA

Auburn Hills, Danielson, Houston  
UNITED STATES  
seal@hutchinsonNA.com

### ▶ SOUTH AMERICA

Monte Alto - BRAZIL  
precision@hutchinson.com.br

### ▶ ASIA

Suzhou, Wuhan, Beijing, Chongqing - CHINA  
oring.sales@hutchinson-suzhou.cn

Chennai - INDIA  
oring.india@hutchinson.com

Tokyo - JAPAN  
oring.sales@hutchinsonjapan.com

Bangkok - THAILAND  
oring.thailand@hutchinson.com

www.oring.hutchinson.com  
oring@hutchinson.com