

## PRECISION SEALING

MEDICAL



In-house Manufacturing, Safe Sealing





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**

Working for the health of users, the medical industry needs reliable partners who can meet standards and regulations and guarantee the origin of their products.

Even more critical than in other sectors, sealing must be achieved without any contamination affecting the manufacturing cycle in order to ensure the health and safety of patients.

Our washing equipment and clean rooms (ISO 7 level according to ISO 14644-1 standard) enable us to meet the various levels of cleanliness requirements (e.g. ISO 15001:2010 standard): Clean or UV-resistant packaging, EC regulations  $N^01935/2004$  and FDA21 CFR177-1520.

Our expertise and quality guarantee the optimal sealing of the installations, preventing losses and waste and maximizing the performance and competitiveness of the production lines.







### **SEALING SOLUTIONS**



#### **O-RINGS**

- > Large standard size range in stock
- Dimensional standards (AS568, BS1806, Bague R...)
- Available features: surface treatments, cleanliness, microengraving for traceability
- > Wide range of compounds: NBR, FKM, EPDM, HNBR, ACM, AEM, IIR, CR, VMQ, FVMQ...



#### **TAILOR-MADE SOLUTIONS**

- Development according to your specifications
- Compounds and solutions optimizing assembly, friction etc.
- 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 2000 bar
- Metal washer: many metals and anti-corrosion coatings
- Rubber: standard and specific compounds
- > From 50 to 98 Sh. A
- > Temperatures from -50°C up to +250°C
- > From low to high pressure

#### COMPOUNDS FOR THE MEDICAL INDUSTRY

We offer a range of FDA and USP Class VI approved compounds for non-invasive Class 1 applications (excluding DM Class 2a, 2b and 3).

	6EP1862	7EP1197	EP851	EP856	9EP2094	7PD1612	DF801	6SL2136	6SL2065	7SL1746
Family	EPDM	EPDM	EPDM	EPDM	EPDM	NBR	FKM	Silicone	Silicone	Silicone
Color	Black	Black	Black	Black	Black	Black	Black	White	Tr. blue	Red
Hardness Sh.A	60	70	80	80	91	75	78	63	64	71
TR10 (°C)	-50	-46	-46	-46	-46	-24	-14	-45	-45	-45
DRC* (%)	18	12	12	15	10	15	18	28	22	10
Min temp. (°C)	-55	-50	-50	-50	-45	-30	-25	-50	-50	-50
Max continous temp. (°C)	+130	+140	+140	+140	+140	+100	+200	+200	+200	+200
Max peak temp. (°C)	+175	+175	+175	+175	+170	+130	+250	+225	+225	+225
FDA	<b>/</b>	<b>/</b>		<b>✓</b>		<b>~</b>		<b>/</b>	<b>~</b>	
USP C1. VI		<b>/</b>								

\* ISO 815-1 Compression Set Conditions:

EPDM 24hrs at 150°C, NBR 24hrs at 125°C, Silicone 72hrs at 150°C, FKM 72hrs at 200°C



















# SALES OFFICES

#### **EUROPE**

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