Innovation

Inspiration of Technology

SEALING SOLUTION PROVIDER

O-ring
Rubber Seal
Engineering Plastic Seal

CIL

Creative Innovation Ltd.

CREATIVE INNOVATION LTD.

We are ***seal solution provider.*** We are a company in the Innovation Group, who is specialized in rubber technologies with experience more than 30 years. We are authorized distributor of DuPont Kalrez® the high performance o-ring. We can offer o-ring and sealing solution that meet your requirements with all types of rubber. We also offer engineering plastic seals in both basic shapes and finished parts such as Vespel®, polyimide developed by DuPont, PTFE, PEEK, PVDF.

Our engineering service and polymer research team, with our high precision machine will solve your sealing problem and improve your o-ring and sealing system.

Our key success factors

- Consult and co-develop suitable sealing material, select the right sealing parts for customer's processing condition.
- Analyze current material and offer the replacement with competitive in cost, lead time and performance that meet customer's needs.
- Made to order parts.
- Offer engineering plastic part by CNC processing technology.
- We serve to various industries such as chemicals, refinery, oil & gas, pump & valve, pharmaceutical, beverage, semi-conductor, power generation, paint and adhesive.

TECHNICAL SUPPORT & ENGINEERING TEAM

Our experienced chemists and engineers in R&D and Engineering Centers will work closely will you in co-developing special compounds to make o-ring and seals that fit your sealing applications. We offer various kinds of o-ring and seals made from in-house compounds and high performance rubber part. We provide responsive customer service with expericnced engineering and R&D teams. We aim to substitute imported rubber parts with local high proformance parts for a shorter lead time to the industries.

NSC-TISI-TIS 17025
TESTING 0360

● Technology Research and Development Center to develop high quality rubber products.

O-RING PRODUCTS

Type of materials

High-performance O-ring and Seal

Kalrez®(FFKM) - Perfluoroelastomer

Service temperature range : -29°C to +327°C

Kalrez® is the best elastomer embracing of chemical and high temperature resistance. Kalrez® withstands attack from most of chemicals and resists to temperature up to 327°C. Kalrez® helps stretch service trine, release repair of Kalrez®and maintenance cost. Long-term resistance to the harshest chemicals and high temperature make them resistant to swelling and embrittlement to many fluides, which are the causes of premature seal failure. It offers motion reliable, safety, long service life time. Kalrez® is FDA approved for pharmaceuticals and food industries. Kalrez® offers cleanliness and chemical high temperature resistance with the propertice of resilience of elastomer.

FKM - Fluoroelastomer (Viton®)

Service temperature range : -40°C to +260°C

Viton® has outstanding resistance to high heat; excellent resistance to oil, gasoline, hydraulic fluids and hydrocarbon solvents; gases and vapor; permeability. Viton® is also very good resistant to weather, oxygen, ozone, and sunlight; and flame. Viton o-ring and seals are widely used in petrochemical and chemical industrials.

HNBR – Hydrogenated nitrile rubber

Service temperature range: -48 to +150 °C

HNBR has superior mechanical properties, particularly high strength, better oil and temperature resistance. HNBR resist excellently to oil, hydraulic fluid, steam, ozone and weathering.

Mid-performance

VQM - Silicone

Service temperature range : -101°C to +260°C

VQM has outstanding resistance to high heat weather, ozone, sunlight. Properties and color stability. VQM has excellent flexibility at low temperatures, low compression set, very good electrical insulation.

EPDM - Ethylene Propylene

Service temperature range : -57°C to +150°C

EPDM has excellent resistance to ozone, water and steam, alkalis and acids, salt solutions and oxygenated solvents. EPM and EPDM have very low temperature resiliency and excellent electrical properties.

NBR - Nitrile Rubber

Service temperature range : -57°C to +120°C

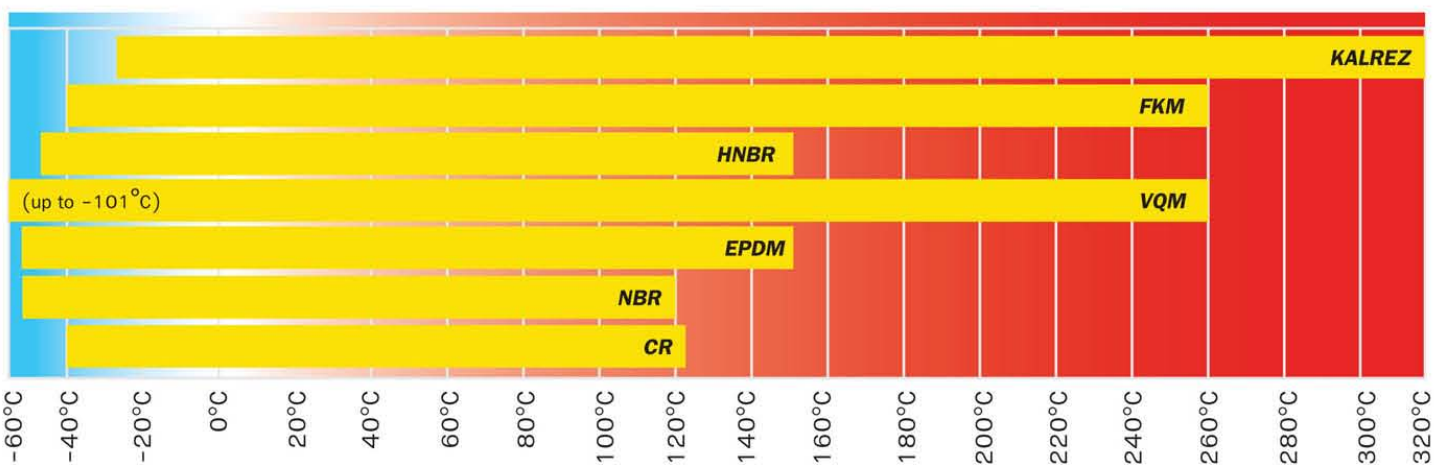
NBR has very good resistance to oil and gasoline, hydrocarbon solvents and alkaline petroleum-based hydraulic fluids. Special NBR can be used in very low temperature (-57°C).

CR - Chloroprene rubber

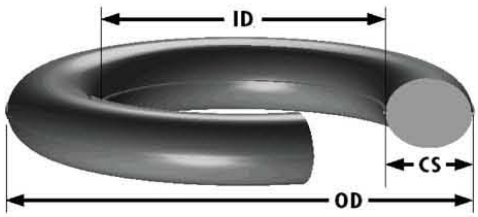
Service temperature range : -40°C to +121°C

Chloroprene has very good resistance to weather oil, silicone oil, grease, refrigerant, ammonia and flex cracking.

ELASTOMER PERFORMANCE CHART



STANDARD SIZE OF O-RING



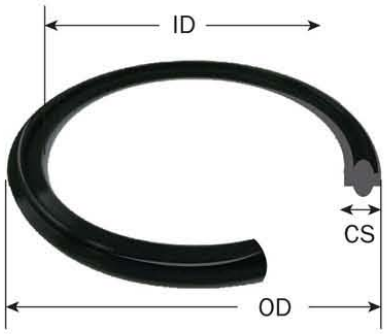
Standard		ID (mm.)	CS (mm.)
AS-568A		1.02 - 658.88	0.74 - 6.99
JIS	G type	24.4 - 399.5	3.1 - 5.7
	P type	2.8 - 399.5	1.9 - 8.4
	S type	2.5 - 149.5	1.5 - 2.0
	V type	14.5 - 1044.0	4.0 - 10.0
Metric		1.15 - 249.10	1.00 - 8.40

SANITARY SEAL

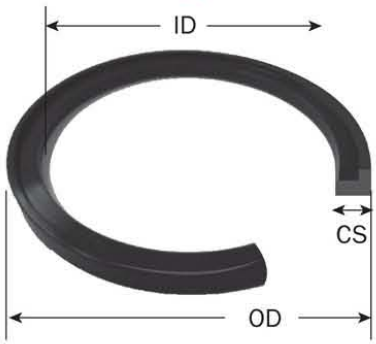
Ferrule Gasket and L-Shaped Gasket Standard sizes (Piping seal)

Ferrule gasket		
Standard	ID (mm.)	OD (mm.)
DIN & SMS	11.0 - 254.0	34.0 - 233.5
IDF flange gasket		
DIN & SMS	23.20 - 97.8	32.5 - 112.5
Union gasket		
DIN & SMS	12.0 - 104.0	24.0 - 114.0

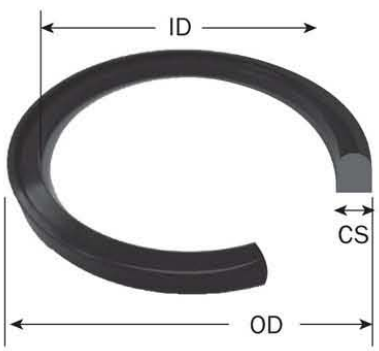
Ferrule Gasket



IDF Flange Gasket



Union gasket



RUBBER PART MADE TO ORDER

Industrial Part

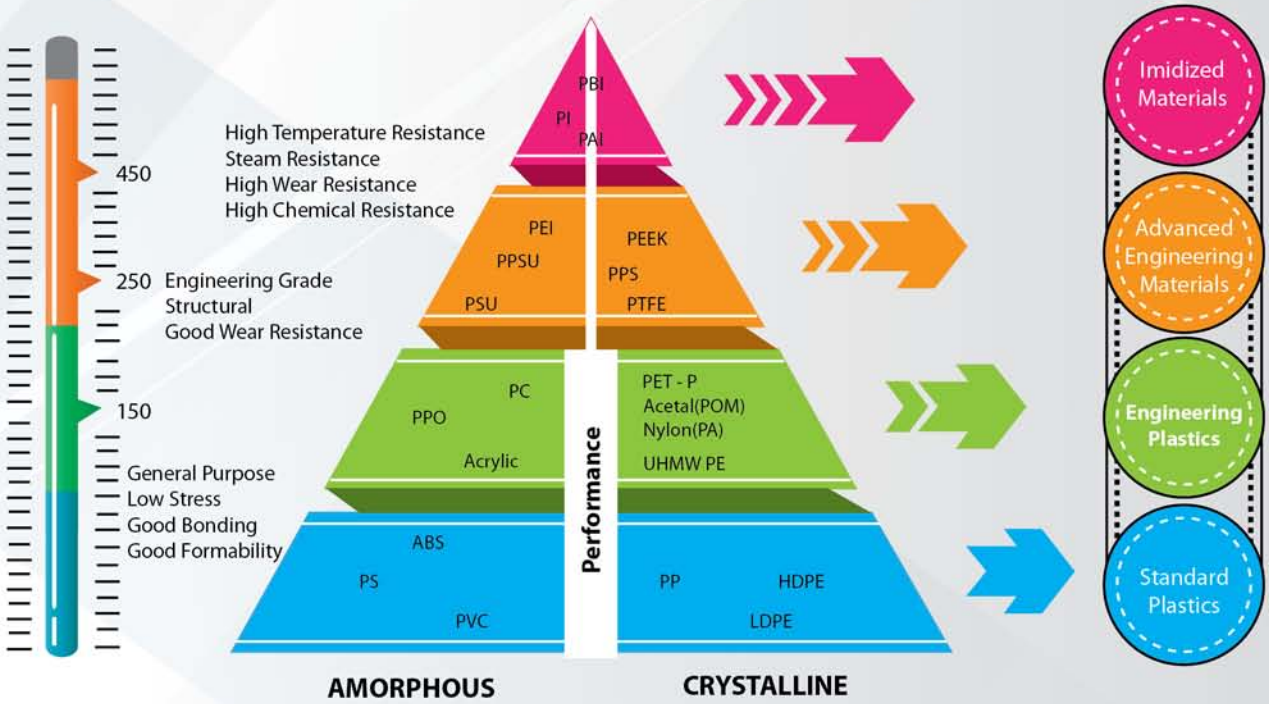
Pump & Valve

O-ring & Seals

Automotive part

ENGINEERING PLASTICS

We deliver engineering plastic made to order. We can select the suitable materials to meet the requirements from customer. Main market are automotive, chemicals, valve & equipment, and other.



Vespel ®(PI)-Polyimide

Service temperature range : -196 to +350 °C

Vespel® polyimide is positioned at the top of the performance polymer because of its ability to maintain physical and mechanical properties under high loads and high temperatures. The Vespel® offers a combination of physical properties capable of replacing metals and ceramics, as well as other high performance engineering polymers such as PEEK and PAI. You can find Vespel® part in aerospace, automotive, farm equipments, semiconductor processing and many more applications.

PTFE – Polytetrafluoroethylene (Teflon)

Service temperature range : -79°C to +327 °C

PTFE offers high chemical resistance, with low and high temperature service capability, and excellent weathering resistancec. It has also excellent thermal and electrical insulation properties and low coefficient of friction.

UHMWPE– Ultra High Molecular Weight Polyethylene

Service temperature range : -150 to +80 °C

UHMWPE offers excellent physical and mechanical properties such as high abrasion resistance, impact strength and low coefficient of friction. These special properties allow UHMWPE to be used in several high performance applications.

Other engineering plastic can available upon your request.

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