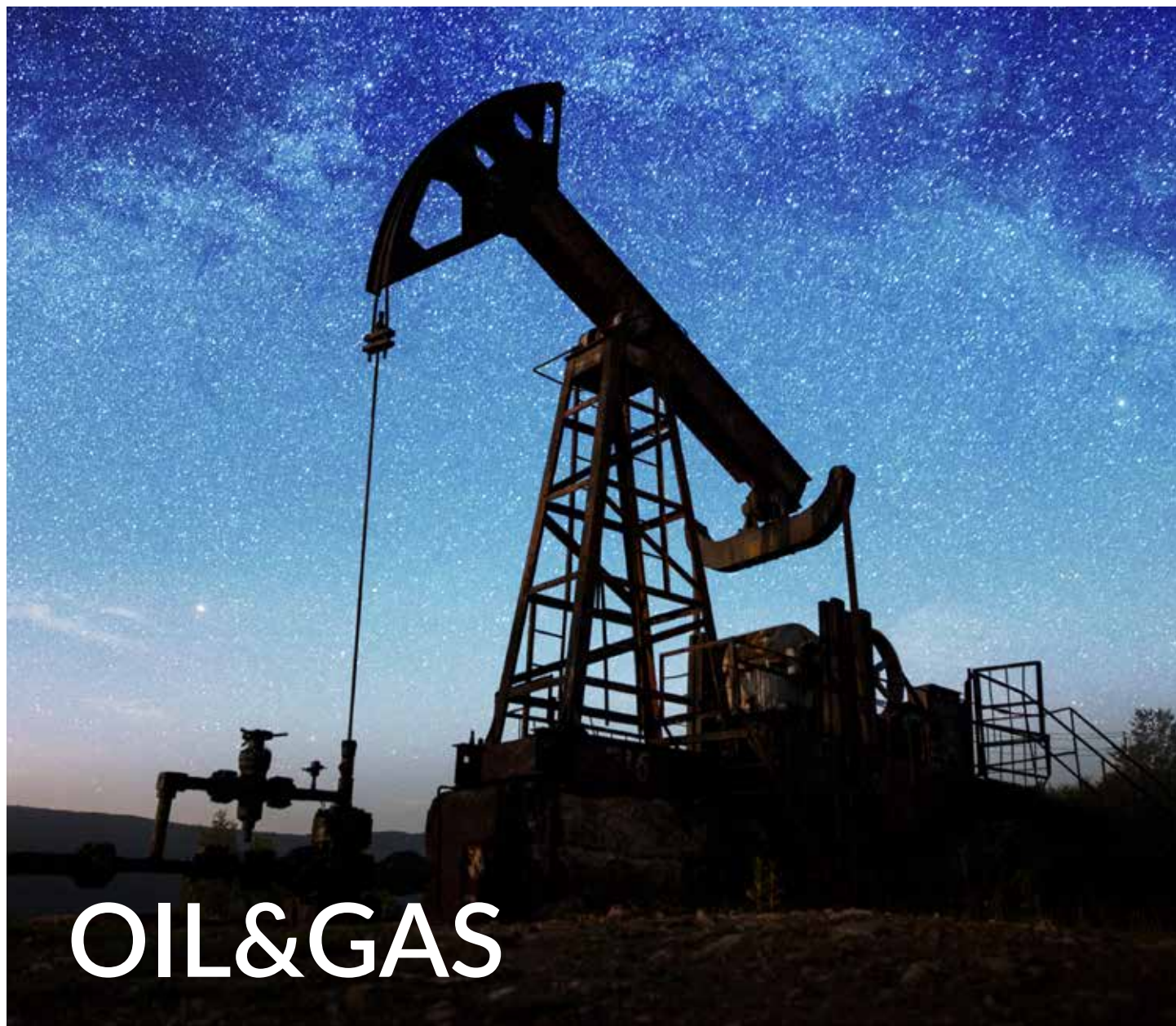
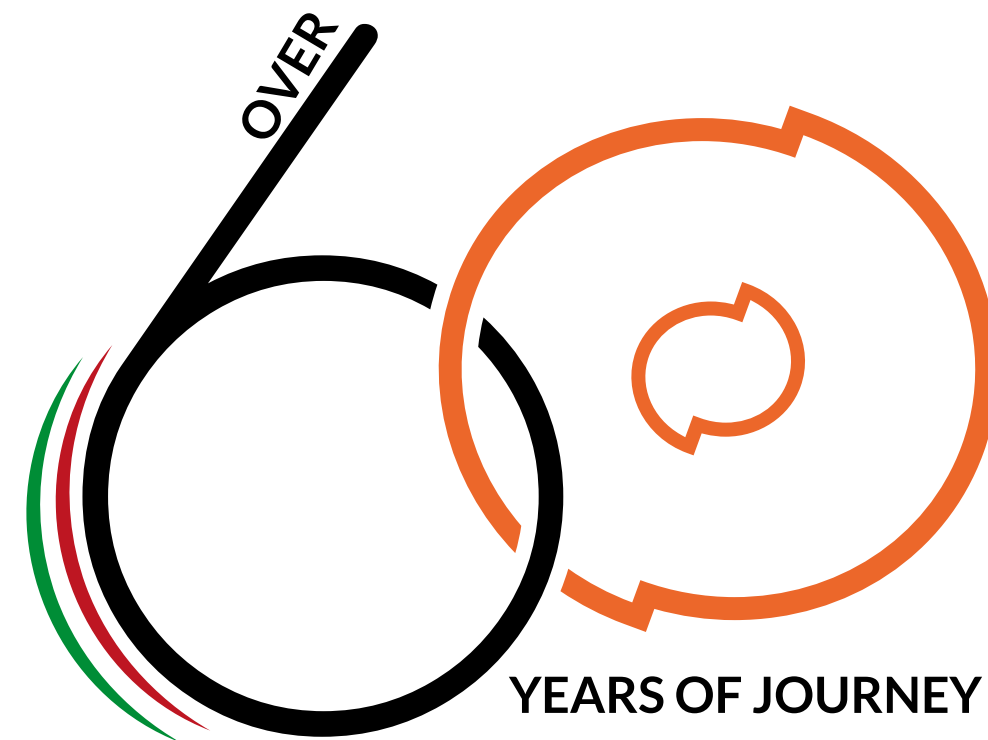




OIL&GAS

OLDRATI,
INTERNATIONAL
LEADER IN THE
POLYMERS WORLD
SINCE 1964



Since 1964,
growing, improving, innovating.
Together.

OLDRATI GROUP



The Oldrati Group has been an industrial excellence for over 60 years in the design and production of technical rubber, plastic, and silicone components, standing out for its vision, approach, and performance.

With 1,400 employees and an aggregate turnover of over 180 million euros, the Group serves various industrial sectors, including Automotive, Oil & Gas, and Heating, as well as consumer sectors such as Sports, Healthcare, and Household.

The Group integrates all production phases in-house, from design and compounding to the final product, distinguishing itself with a unique manufacturing model.

From product co-design to multi-component assembly, Oldrati brings the guiding principle All in One to life, ensuring reliability and quality in every process and production phase.

With production sites in Turkey and Slovakia, in addition to Italy—where its Headquarters are also located—Oldrati strategically addresses an international market composed of major global industry players.

Technological innovation and sustainability drive the Group's continuous development, reflected in projects focused on digitalization, automation, material regeneration (Ogreen), and energy efficiency, along with concrete actions to reduce emissions.

Market focus, material research, and product development are the keys to the future, enabling Oldrati to anticipate market trends with innovative materials and solutions tailored to customer needs.

AGGREGATE TURNOVER



Over

180 M€

GROUP PRODUCTION SITES



Total Area

+220.000 sqm



Total Covered Area

+140.000 sqm

EMPLOYEES



1400

OIL&GAS SOLUTIONS



In view of the ever-increasing extreme specialisation required in the **Oil & Gas** sector, the industry is looking for products with **special characteristics** and **particular conformities**.

These products must be able to work at **particular temperatures**, have **high chemical resistance**, **different hardness ranges** and **long-term reliability**.



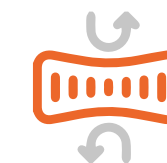
COMPRESSION MOULDING

Thanks to the large number of moulds available, Oldrati is able to compression mould all its articles while maintaining excellent performance compared to alternative types of moulding (jointed extrusions or injection). This type of moulding is the best possible choice for this type of articles, always allowing a high level of performance and design on the entire surface of the technical article.



1200+ MOULDS

Oldrati produces O-Rings from 1.5 mm (0.06") to 2500mm (8,2021 ft) outer diameters and 0.8mm(0.03") to 12 mm (0.47") cross section.



DIFFERENT HARDNESS RANGE

Oldrati produces O-Rings with hardnesses ranging from 70 ShA to 98 ShA allowing to satisfy all customer needs and ensure maximum sealing against a fluid. Items with higher hardness allow a better seal at high working pressures avoiding phenomena of extrusion of the seat seal.

R&D CENTER



R&D Centre is where our engineers create new compounds and study the most advanced technologies of our articles, with a constant attention to **innovation, reliability and environmental sustainability**, with the aim of bring polymeric material solutions to their highest expression. There are **three materials laboratories, two in Italy** (one dedicated exclusively to silicone materials) and **one in Turkey**, which developing innovative solutions to meet the ever-increasing market needs in terms of product performance and customer needs.

Products are subjected to stringent controls and checks on both **mechanical**

and chemical performance, which ensures reliability and durability. **400 new products are developed every every year** that keep committed all our internal R&D departments, alongside collaboration with **universities, R&D laboratories and major raw material suppliers**, the Group has a partnership aimed at the constant search to increase the innovative value of our materials and towards the environment.

The Constant Innovation Programme aimed at perfecting innovative and and sustainable processes led in **September 2021** to create a **New Product Development Team**. In the **New Product Development**

Laboratory the activities are carried out at every stage of the production process, from the dimensional analysis of prototypes to the conditions of use of the finished product, in order to guarantee **reliability technological efficiency and 100% safety**.

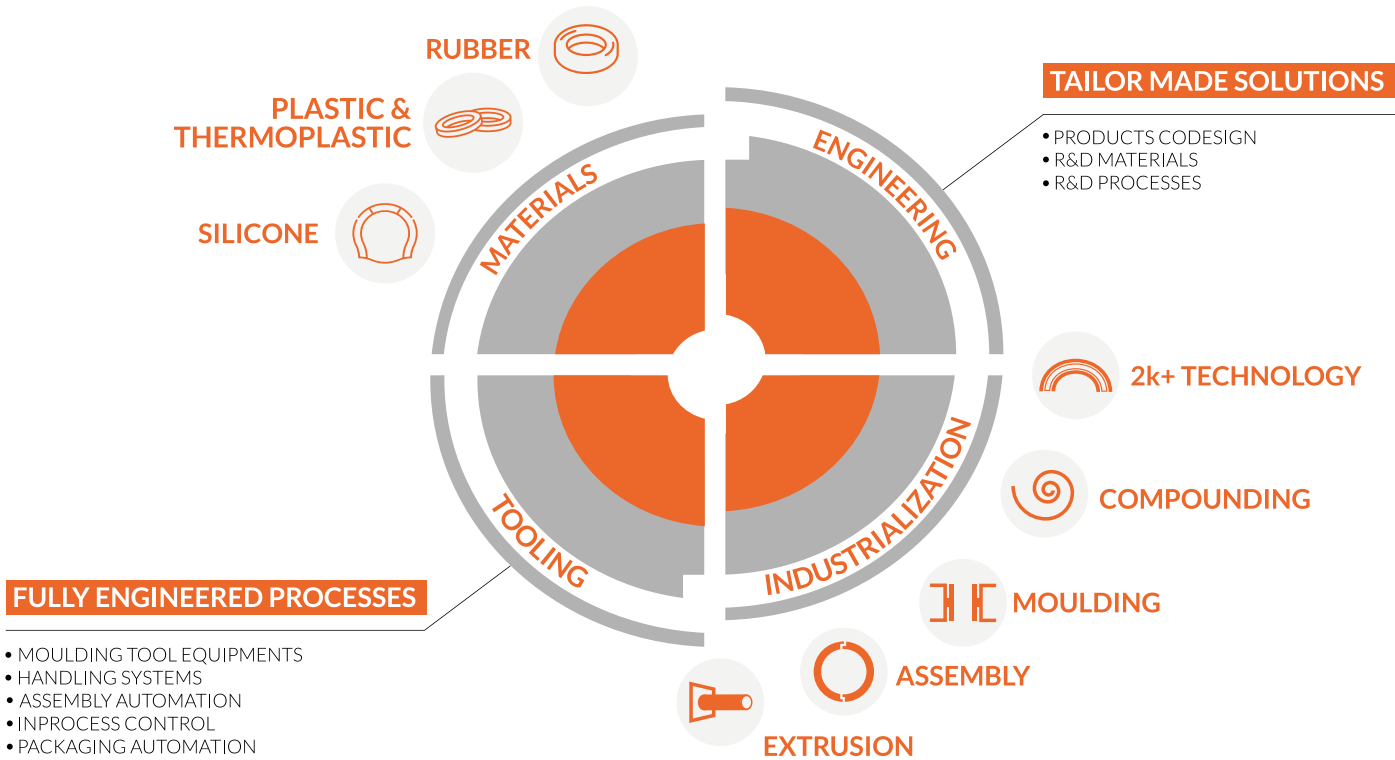
At the end of testing in laboratories, all compounds are sent to the most important **European Certification Institutes**: these certifications attest to the conformity of our internal audits against international standards proof of **quality, safety and compliance with environmental** and certifying our commitment to total satisfaction of customer expectations, both in terms of product design, functionality and performance.





ALL IN ONE TECHNOLOGICAL VERTICALISATION OF ALL PROCESSES

WE REALIZE
ALL YOUR NEEDS



We provide the best-fit solution to your needs: within Oldrati the entire industrialization process is realized, from designing to product assembling. Oldrati team is deployed every day giving concreteness and shape to our customer idea.

ALL IN ONE



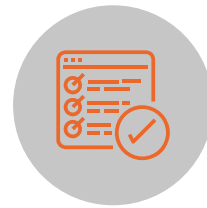
MOULDS AND INTERNAL COMPOUNDS

From the customers design requests, Oldrati is able to manage all the product development processes: from the creation of the compounds to the sampling of the finished articles, Oldrati Group offers a complete and customised service for each request.



CERTIFIED MATERIALS AND GOODS

After passing stringent laboratory tests, all materials can be approved by the most important European Institutes, certifying that the article complies with European standards, directives and regulations. This is tangible proof of quality, safety and absolute respect for environmental laws. In this way, quality becomes a concrete value that responds to the customer's expectations, a seal of guarantee of the product's design, safety and functional characteristics.



100% TESTED

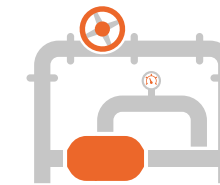
Before leaving the production unit, Oldrati's technical articles are tested with physical and mechanical tests by a team of professionals to ensure maximum reliability and 100% safety at all times.

OIL&GAS PRODUCTION PHASE



UPSTREAM

The upstream of oil refers to the initial phase of the oil production cycle, which includes exploration, extraction, and primary production of crude oil and natural gas.



MIDSTREAM

The midstream of oil refers to the intermediate phase of the oil production and distribution cycle, which includes the transportation, storage, and processing of crude oil and intermediate products (such as condensate) between extraction areas (upstream) and consumption points (downstream).



DOWNSTREAM

The downstream of oil refers to the final phase of the oil production and distribution cycle, which includes the refining of crude oil and the production of finished petroleum products, as well as their distribution and marketing to end consumers.

FOR SIXTY YEARS, OLDRATI HAS BEEN PROVIDING
O-RINGS DESIGNED TO SUPPORT THE **THREE CRITICAL
PHASES** OF THE PRODUCTION PROCESS OF
OIL, NATURAL GAS AND **PETROLEUM DERIVATIVES**.

OLDRATI STANDARD RUBBER COMPOUNDS



MATERIALS	SHORE HARDNESS	OLDRATI CODE	NOTES
EPM/EPDM : EPM COPOLYMER /EPDM TERPOLYMER			
EPDM	65 ÷ 70	OLD ETS70N	sulphur crosslinked
EPDM	70 ÷ 75	OLD ETS75N	
EPDM	70 ÷ 75	OLD ETP75N	
EPM	80 ÷ 85	OLD ECP85N	peroxide crosslinked
EPM	85 ÷ 90	OLD ECP90N	
EPM	90 ÷ 95	OLD ECP95N	
NBR - NITRILE RUBBER			
NBR	75 ÷ 80	OLD N 80N	standard compounds
NBR	80 ÷ 85	OLD N 85N	
NBR	85 ÷ 90	OLD N 90N	
NBR	90 ÷ 95	OLD N 95N	
NBR	95 ÷ 98	OLD N 98N	
HNBR - HYDROGENATED NITRILE RUBBER			
HNBR	70 ÷ 75	OLD NHP 75N	standard compounds
HNBR	80 ÷ 85	OLD NHP 85N	
HNBR	85 ÷ 90	OLD NHP 90N	
HNBR	90 ÷ 95	OLD NHP 95N	
HNBR	95 ÷ 98	OLD NHP 98N	
HNBR	80 ÷ 85	OLD NHPL 85N	low temperature applications
HNBR	85 ÷ 90	OLD NHPL 90N	
HNBR	90 ÷ 95	OLD NHPL 95N	
FLUROSILICONE RUBBER			
FVMQ	80 ÷ 85	OLD FSL 85BL	
TFE/P (FEPM): TETRAFLUOROETHYLENE/PROPYLENE RUBBER (AFLAS)			
TFE/P	85 ÷ 90	OLD AF 90N	standard compounds
TFE/P	90 ÷ 95	OLD AF 95N	
TFE/P	95 ÷ 98	OLD AF 98N	

MATERIALS	SHORE HARDNESS	OLDRATI CODE	NOTES
FKM(FPM): COPOLIMER BISPHENOL CROSSLINKED (VITON A)			
FKM	75 ÷ 80	OLD FCI 80N	standard compounds
FKM	80 ÷ 85	OLD FCI 85N	
FKM	80 ÷ 85	OLD FCI 85V	
FKM	85 ÷ 90	OLD FCI 90N	
FKM	90 ÷ 95	OLD FCI 95N	
FKM	95 ÷ 98	OLD FCI 98N	
FKM (FPM): TERPOLYMER BISPHENOL CROSSLINKED (VITON B)			
FKM	75 ÷ 80	OLD FTI 80N	standard compounds
FKM	80 ÷ 85	OLD FTI 85N	
FKM	85 ÷ 90	OLD FTI 90N	
FKM	90 ÷ 95	OLD FTI 95N	
FKM	95 ÷ 98	OLD FTI 98N	
FKM (FPM): TERPOLYMER PEROXIDE CROSSLINKED (VITON GF)			
FKM	75 ÷ 80	OLD FP 80N	standard compound with high chemical resistance
FKM	80 ÷ 85	OLD FP 85N	
FKM	85 ÷ 90	OLD FP 90N	
FKM	90 ÷ 95	OLD FP 95N	
FKM	95 ÷ 98	OLD FP 98N	
FKM (FPM): TETRAPOLYMER PEROXIDE CROSSLINKED (VITON GFLT,TECNOFLON GRADE PL)			
FKM	85 ÷ 90	OLD FPH 90N	high chemical resistance and low temperature application
FKM	90 ÷ 95	OLD FPH 95N	
FKM (FPM): TETRAPOLYMER PEROXIDE CROSSLINKED (VITON GLT,TECNOFLON GRADE PL AND VPL)			
FKM	75 ÷ 80	OLD FPL 80N	for very low temperature applications
FKM	85 ÷ 90	OLD FPL 90N	
FKM	90 ÷ 95	OLD FPL 95N	
FKM	95 ÷ 98	OLD FPL 98N	
FKM	90 ÷ 95	OLD EDGL 95N	

OLDRATI CERTIFICATED COMPOUNDS

MATERIALS	SHORE HARDNESS	OLDRATI CODE	RANGE OF TEMPERATURE	APPROVAL SPECIFICATION	TEST CONDITION	POLYMER DESCRIPTION
HNBR - HYDROGENATED NITRILE RUBBER						
HNBR	85 ÷ 90	OLD EDNHP 90N	-25°C to 160°C (180°C)	NORSOK M710 rev2	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 10 cicli;5,33mm	Black hydrogeneted nitrile butadiene rubber peroxide cured with good chemical resistance
				TOTAL GS PVV142 03/01 REV.00	CH ₄ /CO ₂ 80/20%; 190Bar;75°C; 5,33mm 6,99mm	
				HYDROGEN	H ₂ 100% ; 150Bar ; 100°C; 8 cicli; 5,33mm CH ₄ /CO ₂ 90/10% ; 150Bar; 100°C; 8 cicli; 5,33mm	
HNBR	85 ÷ 90	OLD ULTRA ED 90N	-25°C to 160°C (180°C)	TOTAL GS PVV154 REV00	CH ₄ /CO ₂ 80/20%; 400Bar;90°C; 6,99mm	Black hydrogeneted nitrile butadiene rubber peroxide cured with improved RGD performance at high pressure
HNBR	85 ÷ 90	OLD NHP ICE 90N	-55°C to 150°C (160°C)	NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	Black hydrogeneted nitrile butadiene rubber peroxide cured for low temperature application
TFE/P (FEPM): TETRAFLUOROETHYLENE/PROPYLENE RUBBER (AFLAS)						
TFE/P (FEPM)	85 ÷ 90	OLD EDAF 90N	-5°C to 250°C	NORSOK M710 rev2	CCH ₄ /CO ₂ 90/10%; 150Bar;100°C, 10 cicli;5,33mm	Black fluocarbon rubber peroxide cured specifically designed in ammine service
FKM(FPM): COPOLIMER BISPHENOL CROSSLINKED (VITON A)						
FKM	90 ÷ 95	OLD EDA 95N	-25°C (-30°C) to 250°C (275°C)	NORSOK M710 rev2	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 10 cicli;5,33mm	Black fluocarbon rubber bisphenolic cured
FKM (FPM): TERPOLYMER BISPHENOL CROSSLINKED (VITON B)						
FKM	90 ÷ 95	OLD EDB 95N	-25°C to 220°C (250°C)	NORSOK M710 rev2	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 10 cicli;5,33mm	Black fluocarbon rubber bisphenolic bisphenolic cured with improved chemical resistance

MATERIALS	SHORE HARDNESS	OLDRATI CODE	RANGE OF TEMPERATURE	APPROVAL SPECIFICATION	TEST CONDITION	POLYMER DESCRIPTION
FKM (FPM): TERPOLYMER PEROXIDE CROSSLINKED (VITON GF)						
FKM	90 ÷ 95	OLD EDFP 95NA	-15°C (-25°C) to 230°C (250°C)	SAUDI ARAMCO 06-SamSS-001	CH ₄ /CO ₂ 95/5% ; 15MPa; 100°C; 5 cicli; 5,33mm 10,82mm	Black fluocarbon rubber peroxide cured with improved chemical resistance
				NORSOK M710 rev3 (ISO 23936- 2)	CO ₂ 100%; 15MPa; 100°C; 5 cicli; 5,33mm	
				HYDROGEN	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	
FKM	90 ÷ 95	OLD EDFP 95N	-15°C (-25°C) to 230°C (250°C)	TOTAL GS PVV 142 03/01 Rev.00	H ₂ 100% ; 150Bar ; 100°C; 8 cicli; 10,82 mm	
FKM (FPM): TETRAPOLYMER PEROXIDE CROSSLINKED (VITON GLT,TECNOFLON GRADE PL AND VPL)						
FKM	85 ÷ 90	OLD EDG 90N	-40°C (-45°C) to 225°C (250°C)	HYDROGEN	H ₂ 100% ; 150Bar ; 100°C; 8 cicli; 5,33mm CH ₄ /H ₂ 90/10% ; 150Bar; 100°C ; 8 cicli; 5,33mm	Black fluocarbon rubber peroxide cured for low temperature application
				NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	
FKM	90 ÷ 95	OLD EDG 95N	-40°C (-45°C) to 225°C (250°C)	NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	Black fluocarbon rubber peroxide cured for low temperature application
				HYDROGEN	H ₂ 100% ; 150Bar ; 100°C; 8 cicli; 10,82 mm	
				TOTAL GS PVV142 03/01 REV.00	CH ₄ /CO ₂ 80/20%; 190Bar;75°C; 5,33mm 6,99mm CH ₄ /CO ₂ 92/8%; 190Bar; 75°C;10,82mm	

OLDRATI CERTIFICATED COMPOUNDS

MATERIALS	SHORE HARDNESS	OLDRATI CODE	RANGE OF TEMPERATURE	APPROVAL SPECIFICATION	TEST CONDITION	POLYMER DESCRIPTION
FKM	95 ÷ 98	OLD EDG 98N	-40°C (-45°C) to 225°C (250°C)	NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	Black fluocarbon rubber peroxide cured for low temperature application
FKM	90 ÷ 95	OLD EDLT 90NL	-40°C (-50°C) to 225°C (250°C)	NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	
				SAUDI ARAMCO 06-SamSS-001	CH ₄ /CO ₂ 95/5% ; 15MPa; 100°C; 5 cicli; 5,33mm 10,82mm	
					CO ₂ 100%; 15MPa; 100°C; 5 cicli; 5,33mm 10,82mm	
FFKM (FFPM): PERFLUOROELASTOMER WITH OUTSTANDING CHEMICAL RESISTANCE						
FFKM	90 ÷ 95	OLD REX P495 N	-5°C (-15°C) to 250°C (260°C)	NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 ci- cli;5,33mm	Black perfluoroelstomer rubber with outstanding chemical resistance
FFKM	90 ÷ 95	OLD REX ICE	-30°C (-40°C) to 250°C	NORSOK M710 rev3 (ISO 23936-2)	CH ₄ /CO ₂ 90/10%; 150Bar;100°C, 8 cicli;5,33mm	Black perfluoroelstomer rubber with outstanding chemical resistance and low temperature applications

OLDRATI SPECIAL COMPOUNDS

MATERIALS	SHORE HARDNESS	OLDRATI CODE	RANGE OF TEMPERATURE	NOTES
HNBR - HYDROGENATED NITRILE RUBBER				
HNBR	90 ÷ 95	OLD EDNHP 95N	-25°C to 160°C (180°C)	Certifiable materials for AED
HNBR	95 ÷ 98	OLD EDNHP 98N		
FKM(FPM): COPOLIMER BISPHENOL CROSSLINKED (VITON A)				
FKM	85 ÷ 90	OLD EDA 90N	-25°C (-30°C) to 250°C (275°C)	Certifiable materials for AED
FKM	95 ÷ 98	OLD EDA 98N		
FKM (FPM): TERPOLYMER BISPHENOL CROSSLINKED (VITON B)				
FKM	85 ÷ 90	OLD EDB 90N	-25°C to 220°C (250°C)	Certifiable materials for AED
FKM	95 ÷ 98	OLD EDB 98N		
FFKM (FFPM): PERFLUOROELASTOMER WITH OUTSTANDING CHEMICAL RESISTANCE				
FFKM	75 ÷ 80	OLD REX P75LTN	-30°C (-40°C) to 250°C	Family P** LT for low temperature
FFKM	70 ÷ 75	OLD REX P475 N	-5°C (-15°C) to 250°C (260°C)	Family P400 for aggressive chemicals
FFKM	75 ÷ 80	OLD REX P480 N		
FFKM	90 ÷ 95	OLD REX P490 N		
FFKM	75 ÷ 80	OLD REX P575 N	-5°C (-15°C) to 270°C (290°C)	Family P500 For high temperature
FFKM	80 ÷ 85	OLD REX P580 N		
FFKM	90 ÷ 95	OLD REX P 595N		
FFKM	75 ÷ 80	OLD REX P575HTN	-5°C (-15°C) to 290°C (335°C)	Family P500 HT for very high temperature
FFKM	85 ÷ 90	OLD REX P590HTN		

WE CREATE ENGINEERING SOLUTIONS WHERE CHALLENGES ARISE

↑ UPSTREAM

→ MIDSTREAM

↓ DOWNSTREAM





Since 1964,
growing, improving, innovating.
Together.

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