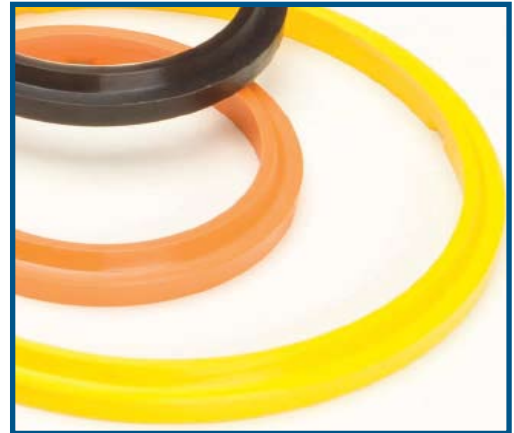


Large Diameter Polymer Products



Complete systems for subsea and land-based drilling and production

In Partnership with



Moulding & Material Capabilities

- Thermoplastic moulding to 62.5" diameter; cast moulding to 144"
- Elastomer moulding to 80" diameter
- PTFE and hard plastic machining to 72" diameter
- Insert & rotational moulding
- Norsok M-710 certified elastomers compatible in CO₂, sour service (H₂S) and sweet service applications
- Rapid gas decompression (RGD) materials available
- Materials compatible with traditional or exotic drilling fluids and muds

Oil & Gas Expertise

Ceetak Ltd (working in partnership with Parker EPS Division) has the technology and expertise to manufacture a vast range of products, including large diameter seals and components, for critical subsea and land-based oil and gas applications. Our products serve all industry applications, including:

- Drilling
- Well Completion
- Production
- Distribution

With a wide range of elastomer and thermoplastic materials engineered to perform at temperatures up to 285°C and pressures above 20,000psi, we can take you to new depths and deliver world class solutions for your oil and gas application.

Proven Material & Product Design Expertise for Subsea and Land-based Applications



In Partnership with



Material Type	Temp range	Min	Max
Nitriles (Buna-N, NBR)		- 37°C	+ 135°C
N4400A75, N4180A80, N9643A90/N9589A80 Excellent compression set resistance, peroxide cure, API 11D1 for packer elements. Applications: Petroleum lubricants, seawater and diesel fuel			
Hydrogenated Nitriles (HNBR)		- 40°C	+ 145°C
N4031A85/KA183A85, N4025A80, N4007A90, N4288A85 NORSOK M710 Certified for H ₂ S and sweet service. Excellent low temp capability, extrusion resistant, abrasion resistant, compression set resistant, NACE TM0 187-98 Standard. Applications: High abrasion, high temperature resistance coupled with low temperature resistance. Good in flex fuels MTBE			
Ethylene Propylene (EPDM, EPR)		- 50°C	+ 260°C
E0962A90 Developed for steam service. Geothermal, high temperature, high pressure steam (intermittent to 285°C) resistant to CO ₂ , H ₂ S, methanol, glycols and explosive decompression.			
Nitroxile™		- 25°C	+ 135°C
N4263A90, N4257A80, N4274A85 Excellent abrasion resistance. Internally lubricated for lower friction, extreme low friction. Applications: Petroleum lubricants, seawater and diesel fuel			
Fluorocarbon (FKM)		- 25°C	+ 200°C
V4205A75, V1238A95, V4208A90, V4266A95 Various general purpose fluorocarbons including NORSOK M-710 certified V1238. Excellent compression set resistance. Maximum extrusion resistance and explosive decompression resistant. Applications: High temperature, high pressure, petroleum oils & fuels, H ₂ S			
Perfluorinated Elastomers (FFKM)		- 25°C	+ 285°C
V8545A75, V8588A90 Parafluor™ High temperature resistant perfluorinated elastomer. Good compression set resistance, extreme chemical resistance and low leachables. Extreme temperatures, chemical mixtures, high concentration H ₂ S, amines, steam polar fluids and solvents.			
Highly Fluorinated Elastomers		- 25°C	+ 200°C
V3819A75, V8534A90 (Hifluor™) Highly fluorinated material. Lower temperature range, cost-effective alternative to perfluorinated materials. Improved compression set and abrasion resistance. Extrusion resistant version available. Resistant to aggressive chemicals, ketones, amines, acids and bases, polar fluids			
AFLAS TFE		- 25°C	+ 230°C
V4461A90, V1041A85 Improved compression set resistance. Applications: Amines, H ₂ S steam, high temperature. Certified to NORSOK M-710. Passses NACE TM0 187-98 Standard			
Elasto-Plastic Materials		- 50°C	+ 135°C
Resilon™ P4300A90, P4301A90, P4700A90, Molythane™ P4615A90 Parker's branded materials include improved blends and high performance polyurethanes. Includes a range of materials with improved compression set and rebound properties, water resistance, and extrusion resistance for increased sealing capabilities			
Plastic Alloy Materials		- 50°C	+ 135°C
Polymyte™ Z4651, Molygard™ W4650, Nylatron™ W4655 High tear strength, abrasion and extrusion resistance. Excellent resistance to petroleum fluids, many phosphate ester fluids, some chlorinated hydraulic fluids, up to 82°C in water, oxygen, common solvents, ketones, alkalis, dilute bases, mineral acids, weak acids. Good resistance to hostile environments.			
PTFE		- 265°C	+ 285°C
0100, 0201, 0204, 0502, 0901 Virgin & various filled PTFE (i.e., carbon, glass, moly, bronze). Many blends available depending upon application parameters for wear resistance, abrasion resistance and speed. UHMWPE (0901) for high wear resistance and H ₂ O based media			
UltraCOMP™ Engineered Thermoplastics		- 50°C	+ 260°C
W4685, W4738 Parker brand of P.E.E.K. Non-filled and filled blends available (carbon, graphite, PTFE)			
Specialty Fillers and Filled Materials			
Natural rubbers enhance elongation properties in oilfield rubber products. Neoprene and FK fibre (non-fabric and fabric) filled elastomers available			

Our experienced application engineers will work with you to develop standard or custom designs. Our expertise includes all sealing systems and polymer products for:

Drilling:

- Drills
- Blow Out Preventers
- Drilling Mud Systems
- LWD & MWD test equipment
- Casing and Pipe Connections
- Control Valves
- Compressors & Pumps
- Drilling Service Expendables

Subsea Riser Management & Connector Systems:

- Box & Pin Connector Seals
- Shims, Fins
- Protectors: Box & Pin, Flange
- Clamps
- Viv Strakes
- Gimbal Bearings & Assemblies
- Flexible Joint Assemblies
- Diverter Joint Assemblies
- Annular Seals
- Flowline Seals

Completion:

- Tubing Head and Hangers
- Packers
- Well Controls and X-Trees
- Cementing Equipment, Expendables
- Well Head Assemblies

Production:

- Packer Elements
- Christmas Trees
- Injection Systems
- Gas Lift Valves
- Well Service Tools, Test Equipment
- Well Servicing Expendables
- Compressors/Pumps
- Production BOP's
- Artificial Lift Systems

Distribution:

- Marine/Offshore Loading Swivels and Turrets
- Railcar Loading Systems
- Pipeline Service Equipment: Pigs & Spheres
- Pipeline Valves, Actuators
- Pumps/Compressors
- Tank Systems
- Tanker (Ship) Loading Systems

Ceetak Ltd Head Office:

Fraser Road, Priory Business Park,
Bedford, MK44 3WH

Tel: 01234 832200 Fax: 01234 832299

www.ceetak.com