

Sales Offices Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai
Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt
Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt
Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku
Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles
Tel: +32 (0)67 280 900
parker.belgium@parker.com

BG – Bulgaria, Sofia
Tel: +359 2 980 1344
parker.bulgaria@parker.com

BY – Belarus, Minsk
Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy
Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany
Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst
Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup
Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid
Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa
Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve
Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens
Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budaörs
Tel: +36 23 885 470
parker.hungary@parker.com

IE – Ireland, Dublin
Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)
Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty
Tel: +7 7273 561 000
parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal
Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker
Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw
Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira
Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest
Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow
Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga
Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica
Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto
Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul
phone +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev
phone +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick
phone +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park
Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario
Tel: +1 905 693 3000

US – USA, Cleveland
Tel: +1 216 896 3000

Asia Pacific

AU – Australia, Castle Hill
Tel: +61 (0)2-9634 7777

CN – China, Shanghai
Tel: +86 21 2899 5000

HK – Hong Kong
Tel: +852 2428 8008

IN – India, Mumbai
Tel: +91 22 6513 7081-85

JP – Japan, Tokyo
Tel: +81 (0)3 6408 3901

KR – South Korea, Seoul
Tel: +82 2 559 0400

MY – Malaysia, Shah Alam
Tel: +60 3 7849 0800

NZ – New Zealand, Mt Wellington
Tel: +64 9 574 1744

SG – Singapore
Tel: +65 6887 6300

TH – Thailand, Bangkok
Tel: +662 186 7000-99

TW – Taiwan, Taipei
Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires
phone +54 3327 44 4129

BR – Brazil, Sao Jose dos Campos
phone +55 800 727 5374

CL – Chile, Santiago
phone +56 2 623 1216

MX – Mexico, Toluca
phone: +52 72 2275 4200



On Shore Drill Rig

Focused on Supporting the Oilfield

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding

DISCLAIMER

The products described herein, including without limitation, product features, specifications, designs. Availability and pricing are subject to change by Parker Hannifin Corp and it's subsidiaries at any time without notice.

© 2014 Parker Hannifin Corporation

On Shore # PS-2040

Date of Issue 10/2014



Parker Hannifin Corporation
Oil & Gas Market Development
6035 Parkland Boulevard
Cleveland, Ohio 44124
phone 1-800-272-7537
www.parker.com



ENGINEERING YOUR SUCCESS.

AVAILABILITY

WORLDWIDE DISTRIBUTION
SALES FORCE AND SERVICE

FLEXIBILITY

SOLUTIONS FOR GLOBAL
AND REGIONAL CHALLENGES

SUSTAINABILITY

PROTECTING PEOPLE
AND ENVIRONMENT

PROFITABILITY

SERVING FOR GREATER VALUE TO YOU
AND YOUR BUSINESS

RELIABILITY

MINIMIZING DOWNTIME
AND OPTIMIZING PERFORMANCE

With annual sales of **\$13 billion** in fiscal year 2014, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. The company employs approximately **57,500 people in 50 countries** around the world. Parker has increased its annual dividends paid to shareholders for 58 consecutive fiscal years, among the top five longest-running dividend-increase records in the S&P 500 index.

For more information, visit the company's website at www.parker.com
or its investor information website at www.phstock.com.



ENGINEERING YOUR SUCCESS.



01 CAT WALK

02 WALKING FEET

03 BOP- BLOW OUT PREVENTER

04 HPU- HYDRAULIC POWER UNIT

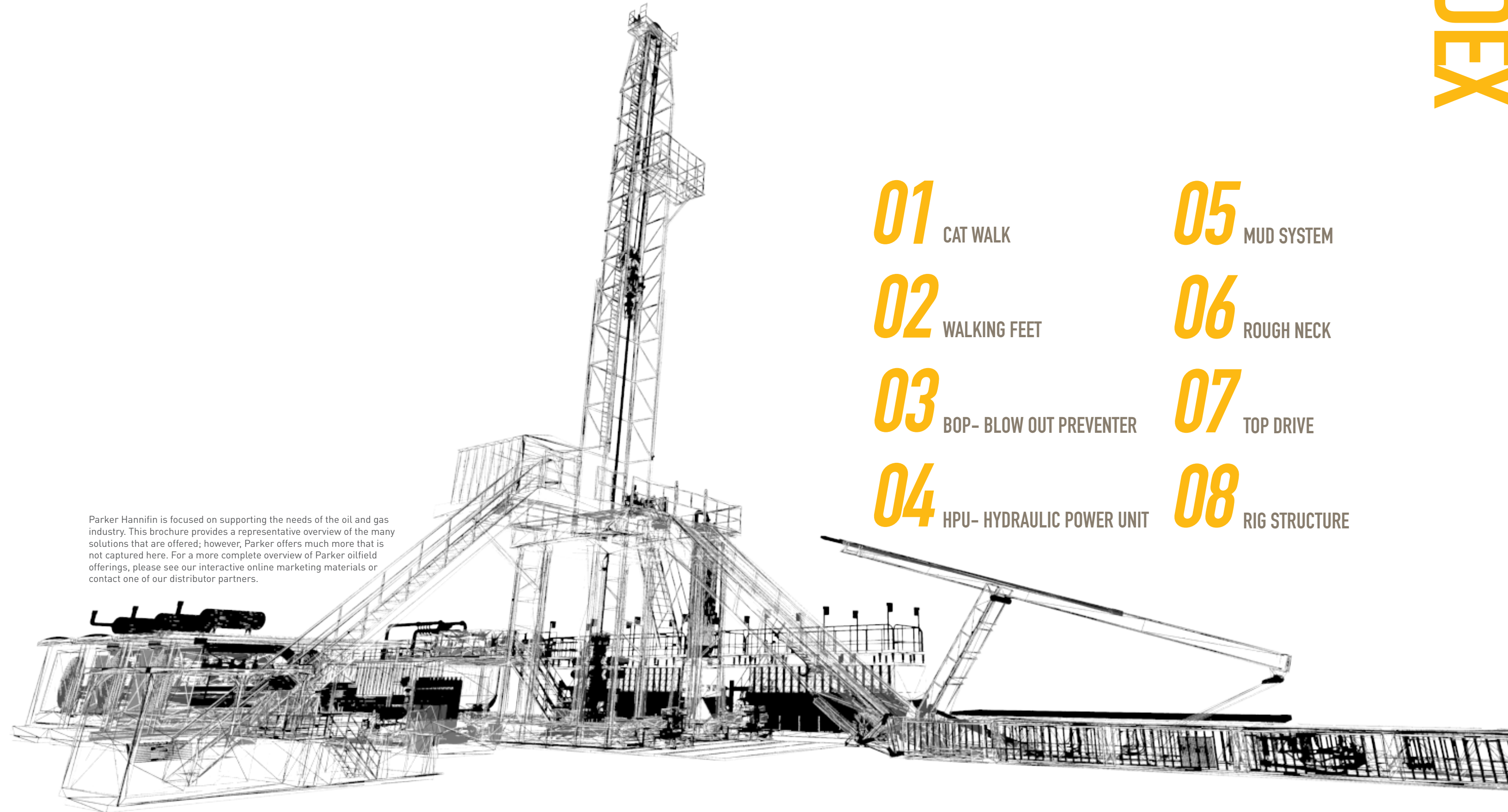
05 MUD SYSTEM

06 ROUGH NECK

07 TOP DRIVE

08 RIG STRUCTURE

Parker Hannifin is focused on supporting the needs of the oil and gas industry. This brochure provides a representative overview of the many solutions that are offered; however, Parker offers much more that is not captured here. For a more complete overview of Parker oilfield offerings, please see our interactive online marketing materials or contact one of our distributor partners.



01

CAT WALK

IQAN – Parker offers a CAN bus modular control system called IQAN. This electronic programmable logic controller allows for customizable control. It is able to electronically monitor: pressure and temperature, position feedback, fault diagnosis, engine speed control and fluid condition monitoring.



1



CARTRIDGE VALVES

Parker is a leader in the cartridge valve and custom manifold industry always innovating to achieve the most efficient and flexible designs.

3



CUSTOM CYLINDERS

With a long history in custom cylinders, Parker can meet any of your unique cylinder design needs up to 48" bore and 876" stroke.

4



TIE-ROD CYLINDERS

Parker tie rod cylinders are available in multiple stroke lengths and bore sizes and are repairable. (2H Heavy Duty shown)

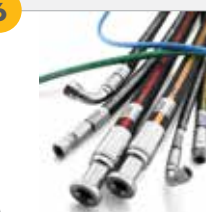
5



WELDED CYLINDERS

Welded cylinders are available in multiple stroke lengths and bore sizes and are repairable. Shown here is the RDH Heavy Duty Roundline.

6



HYDRAULIC HOSE ASSEMBLY

High performance hose, fittings, equipment and accessories necessary to keep your fracking equipment running at peak performance levels.

7



HYDRAULIC FITTINGS

Seal-Lok O-Ring Face Seal Fittings combined with Parker's XTR plating provides for leak free connections and superior resistance to rust.

8



VARIABLE DISPLACEMENT PISTON PUMPS

P2 open circuit pump provides adequate flow for the catwalk's primary and auxiliary functions.

9



LSHT MOTOR

For 50 years, Parker Torqmotors™ have been the "go to" product when a high torque motor is needed for a tough application. Rugged. Dependable. Long life.

10



HYDRAULIC COOLERS

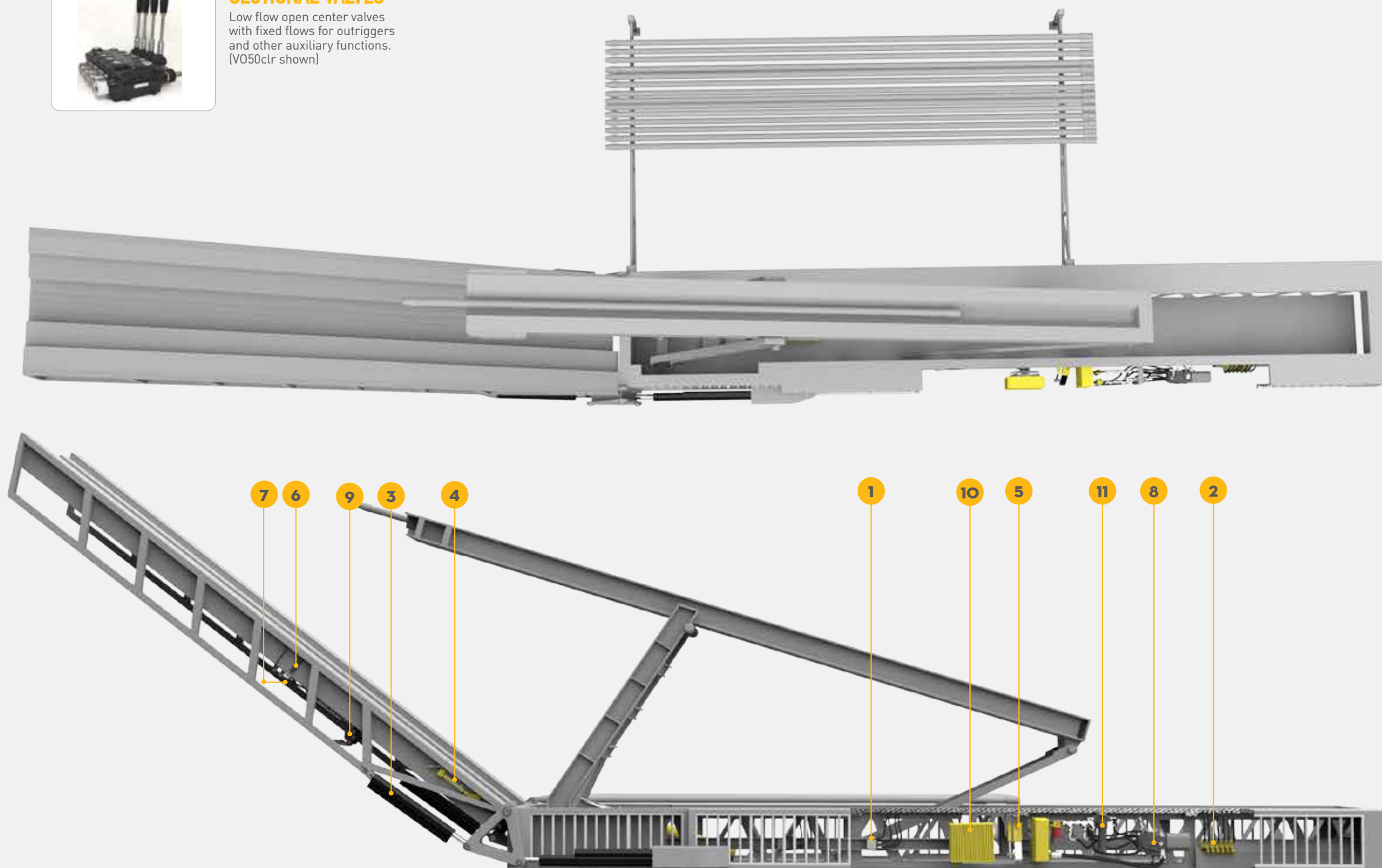
Compact and easy to maintain, Parker's coolers are optimized for the oil and gas environment. The ULDC line is a perfect choice.

11



HYDRAULIC FILTER

WPF series high pressure filters handle up to 7000 PSI with a patented integral bypass element design that provides a new bypass valve with every service.

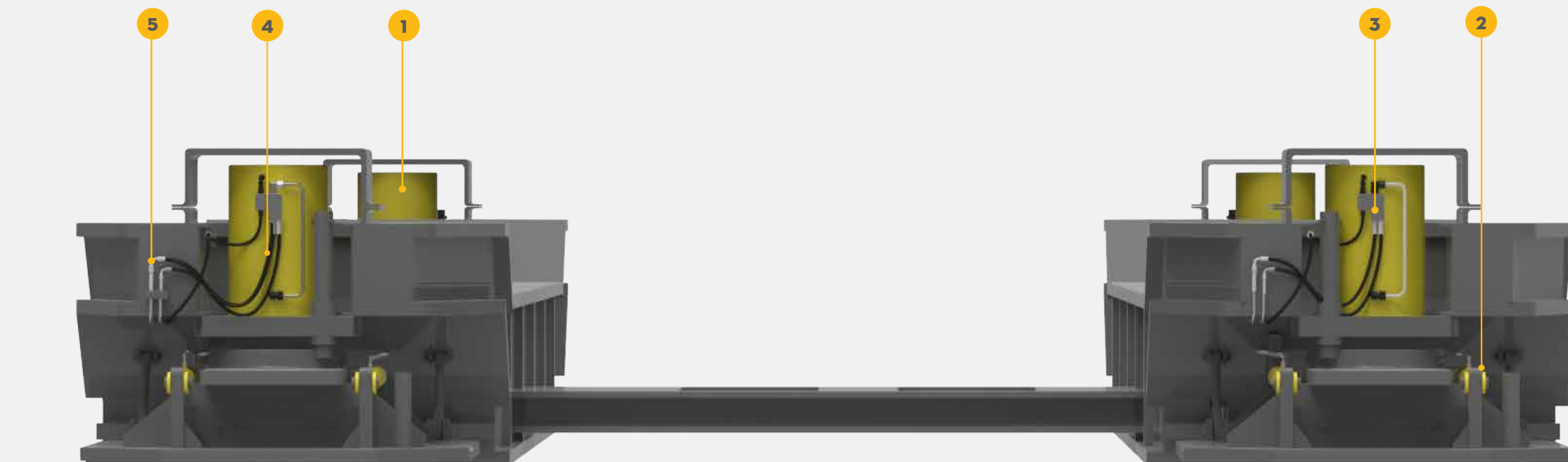


02

WALKING FEET

Parker's Complete Piping Solutions – Combining the best non-welded piping system with a complete engineered services package, CPS offers your project assurance, efficiency and value. CPS centers feature Parker's Parflange F37 technology supported by engineering consultation, design, fabrication and installation.





1



OUTRIGGER CUSTOM CYLINDERS

With a long history in custom cylinders, Parker can meet any of your unique cylinder design needs up to 48" bore and 876" stroke.

2



WELDED CYLINDERS

With a long history in custom cylinders, Parker can meet any of your unique cylinder design needs up to 48" bore and 876" stroke.

3



CARTRIDGE VALVES

Parker is a leader in the cartridge valve and custom manifold industry always innovating to achieve the most efficient and flexible designs.

4



HYDRAULIC HOSE ASSEMBLIES

High performance hose, fittings, equipment and accessories necessary to keep your fracking equipment running at peak performance levels. (R2, R12, R13 are commonly used)

5



HYDRAULIC FITTINGS & ADAPTORS

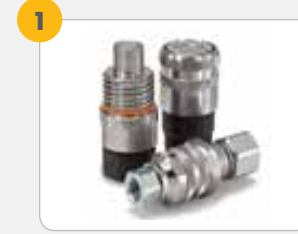
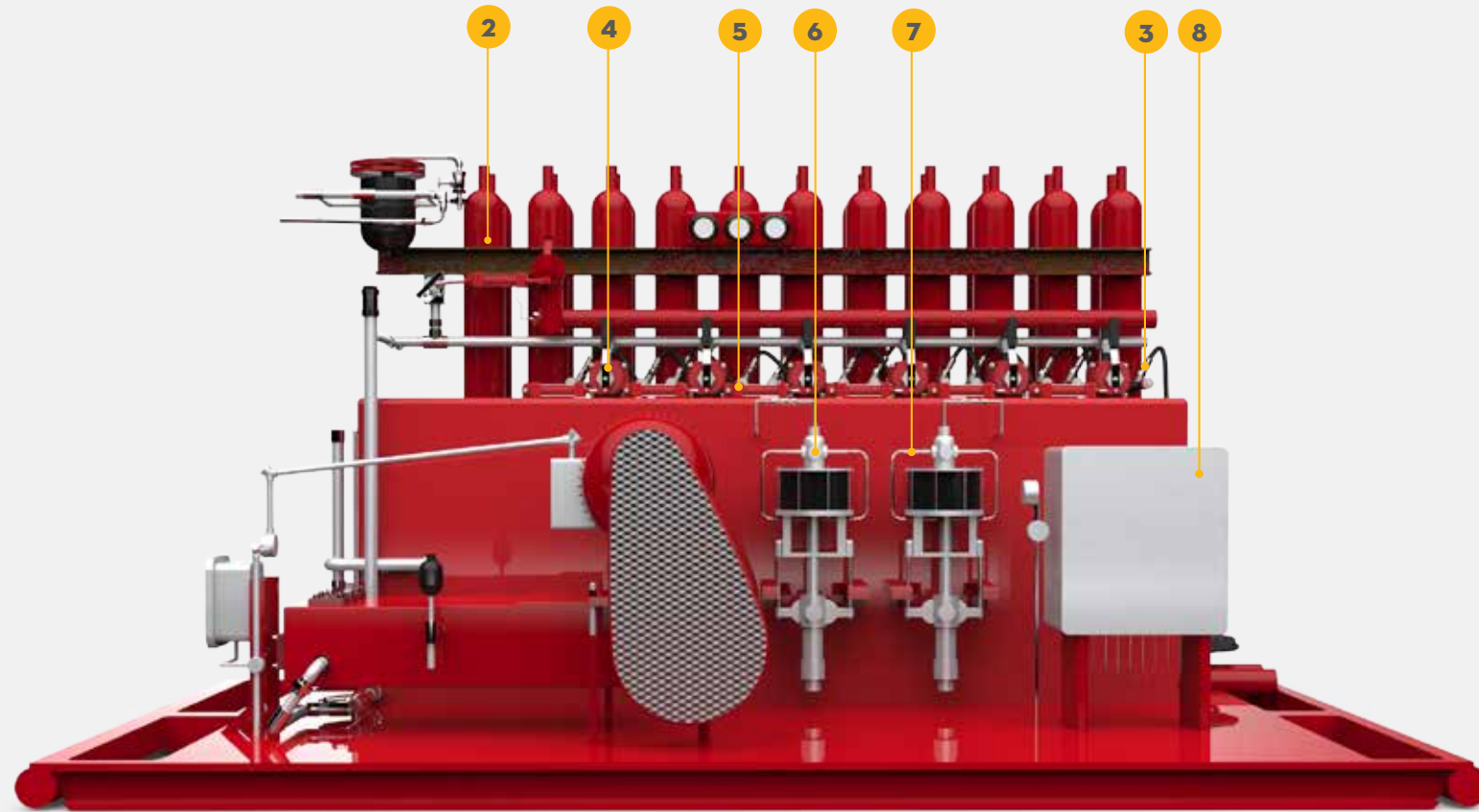
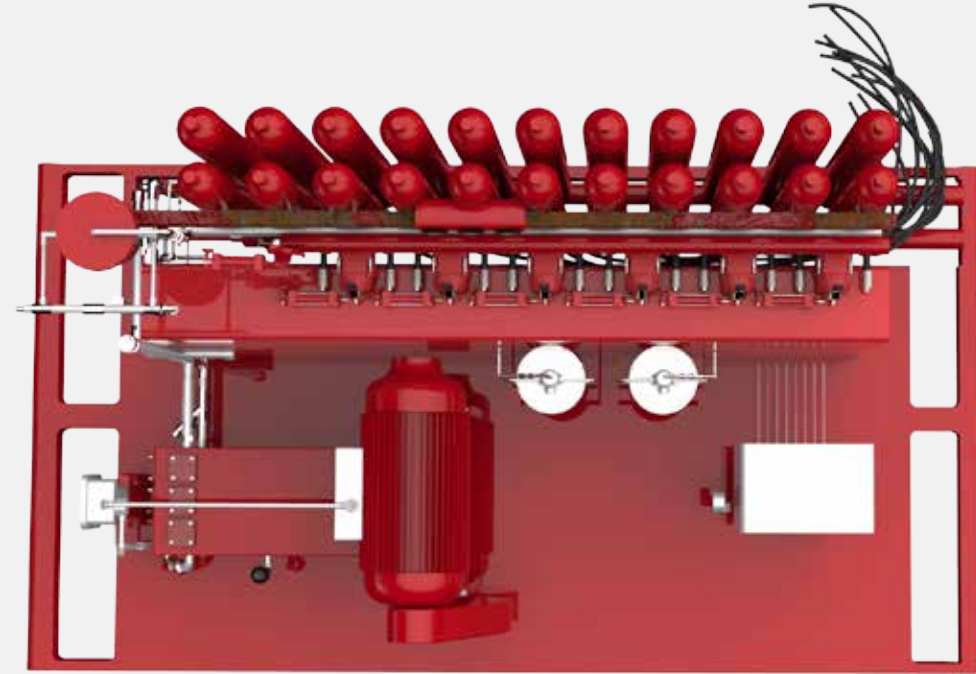
XTR plating provides superior resistance to rust reducing your equipment's downtime and saving you money.

03

BOP

Parker's Engineered Materials Group - An industry leader in the development of compounds, sealing systems, and customized products and services for onshore and offshore applications, Parker has the most comprehensive portfolio of innovative materials, products, and services available to the oil and gas industry.





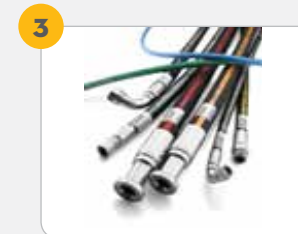
59 SERIES - THREAD TO CONNECT

High pressure, high impulse, thread-to-connect quick coupling. Double-start ACME thread allows full connection in 2 1/2" turns under residual line pressure.



HYDRAULIC ACCUMULATORS

11 and 15 gallon bottom repairable bladder accumulators are two common examples of the bladder and piston accumulators that Parker manufacturers.



HYDRAULIC HOSE ASSEMBLIES

11 and 15 gallon bottom repairable bladder accumulators are two common examples of the bladder and piston accumulators that Parker manufacturers.



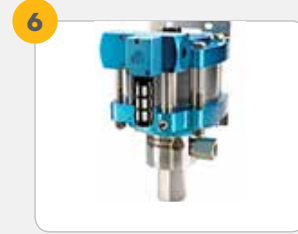
REPUBLIC CONTROL VALVES

Attached to pneumatic cylinders.



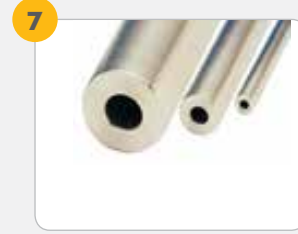
TIE ROD AIR CYLINDERS

Available in a wide selection of sizes, strokes, and diameters, Parker Pneumatic Air Cylinders offer unbeatable reliability, performance, and options.



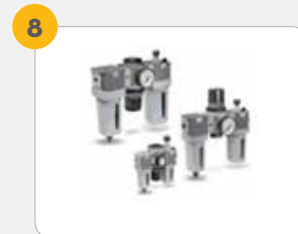
INTENSIFIERS

Parker Autoclave Engineers have developed a broad line of air-driven, high pressure pumps that are efficient to operate and simple in design. These pumps convert simple air pressure into high and ultra-high liquid pressures.



TUBING

Parker Autoclave's high-pressure tubing is capable of operating to 150,000 psi and range in size from 1/4" to 1" tube size. Standard tubing is available in 316 and 304 stainless steel.



PNEUMATIC FILTER, REGULATOR, LUBRICATOR

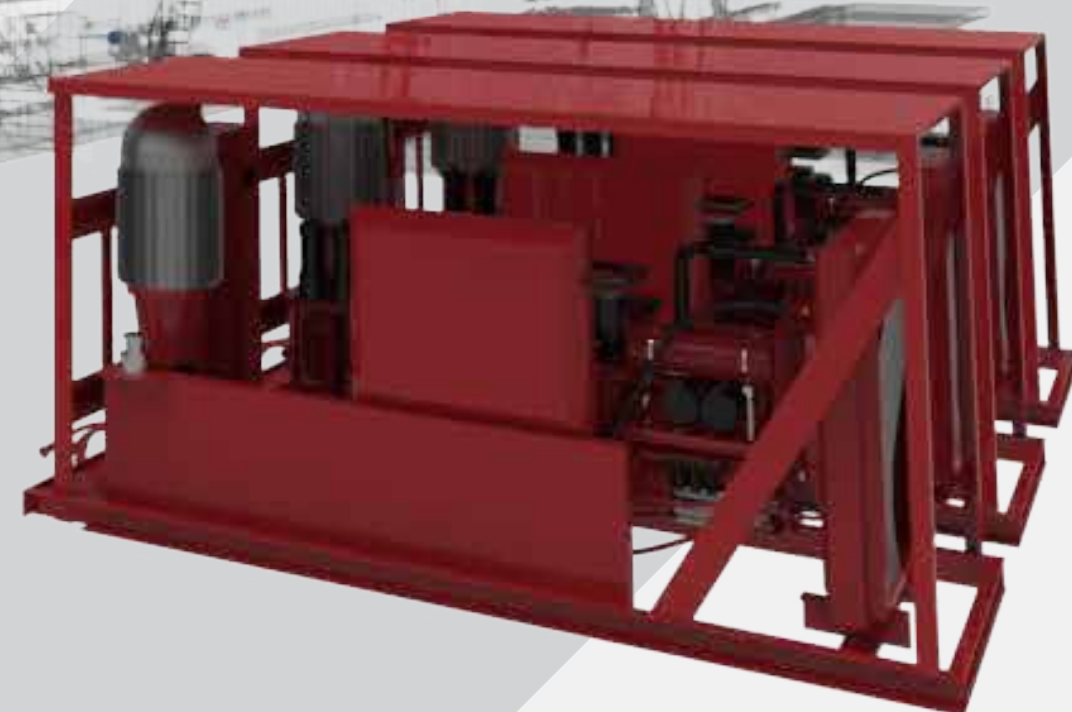
FRL combination units provide attractive, versatile air preparation solutions. Various pipe sizes, lightweight, corrosion-resistant bodies, durable piston or diaphragm design regulators, and fingertip lubricator adjustment.



04

HPU

DuraClean Oil - DuraClean™ is ultra-premium hydraulic oil provided exclusively by Parker. The fluid has a unique additive chemistry designed to maximize oil life while providing optimum anti-wear protection for the components of today's advanced hydraulic systems.





HYDRAULIC CONDITION MONITORING

Air filters and pre-cleaners designed and built to meet demanding high dust environments with excessive vibration and extreme temperatures.



RACOR FUEL FILTER

Heavy-duty fuel filter/water separators feature Aquabloc® media for high efficiency removal of water, rust, and dirt from diesel fuels. Options are available for all-weather operation.



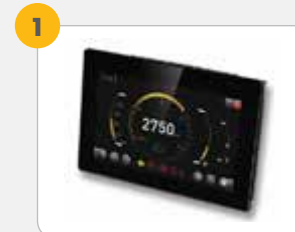
RACOR SPIN ON FUEL FILTER REPLACEMENTS

ParFit line of heavy-duty spin-on replacement fuel filters feature Aquabloc® media for high efficiency removal of water, rust, and dirt from diesel fuels.



ENGINE OIL FILTER

Absolute Series bypass oil cleaners increase the life span of engine oil by reducing the contaminants in oil resulting in longer filter life and lower maintenance costs.



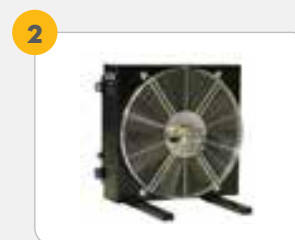
ELECTRONIC CONTROLS

Parker has developed numerous rugged displays and monitors for many industries. These products communicate with other devices using industry standard protocols.



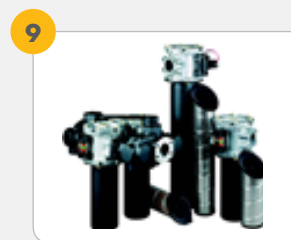
CHECK VALVE

Parker manufactures a wide variety of in-line check valves.



HYDRAULIC COOLERS

ULHC coolers with hydraulic motors provide maximum cooling capacity up to 215 hp. Easy to maintain and can be used as a retrofit.



HYDRAULIC OIL FILTERS

Moduflow Plus low pressure filters provide high versatility in mounting and porting configurations to meet your application needs.



OIL COOLER FAN DRIVE

M5 vane motors are compact and efficient for large cooling needs. Integrated valving option allows reversing functions for radiator clean out.



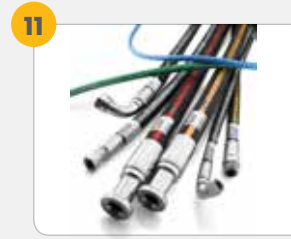
HYDRAULIC OIL FILTER

IL8 series of filters are designed for demanding lube oil applications with flows up to 300 GPM and utilize high capacity deep pleat elements.



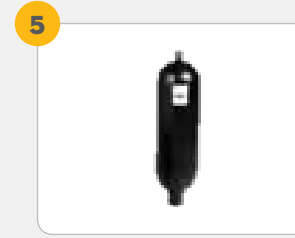
OPEN LOOP PISTON PUMPS

P1 and P2 Open circuit pumps provide consistent high pressure for the Skate and Stripper circuit.



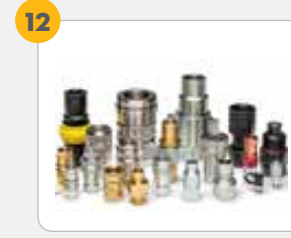
HYDRAULIC HOSE ASSEMBLIES

High performance hose, fittings, equipment and accessories necessary to keep your fracking equipment running at peak performance levels. (R2, R12, R13 are commonly used)



HYDRAULIC ACCUMULATORS

11 and 15 gallon bottom repairable bladder accumulators are two common examples of the bladder and piston accumulators that Parker manufactures.



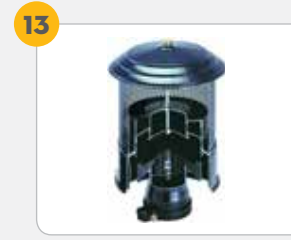
QUICK COUPLINGS

Parker is the world's largest manufacturer of quick couplings producing hydraulic and pneumatic couplings in a variety of sizes, materials, and end configurations.



REPUBLIC CONTROL VALVES

Attached to pneumatic cylinders.



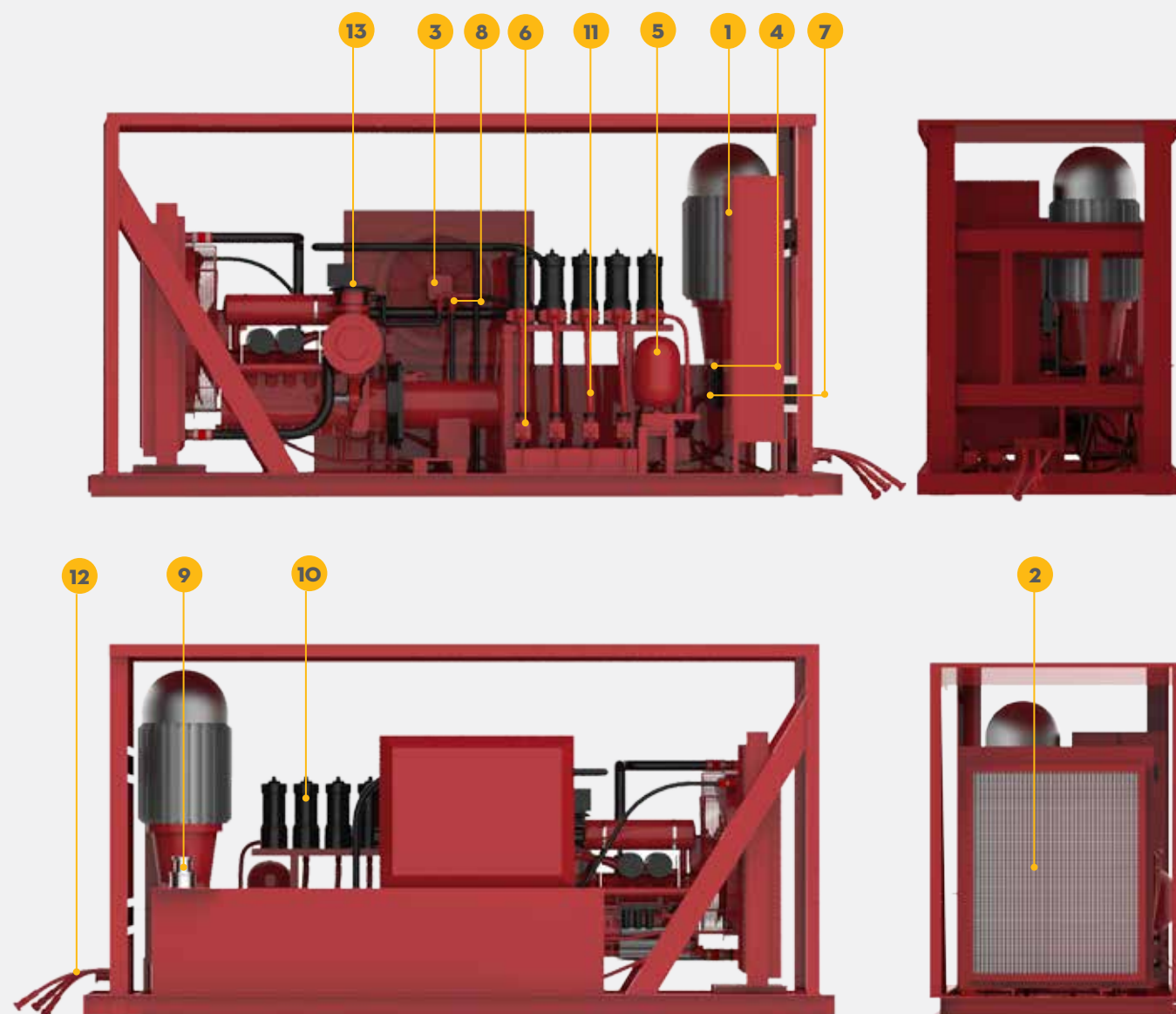
RACOR ENGINE AIR FILTERS

Air filters and pre-cleaners designed and built to meet demanding high dust environments with excessive vibration and extreme temperatures.



BALL VALVE

Up to 10,000 psi in 2, 3, or 4 way configurations. Carbon steel, stainless steel, brass, aluminum, and many seal options for different fluids. (BVHPSSclr shown)



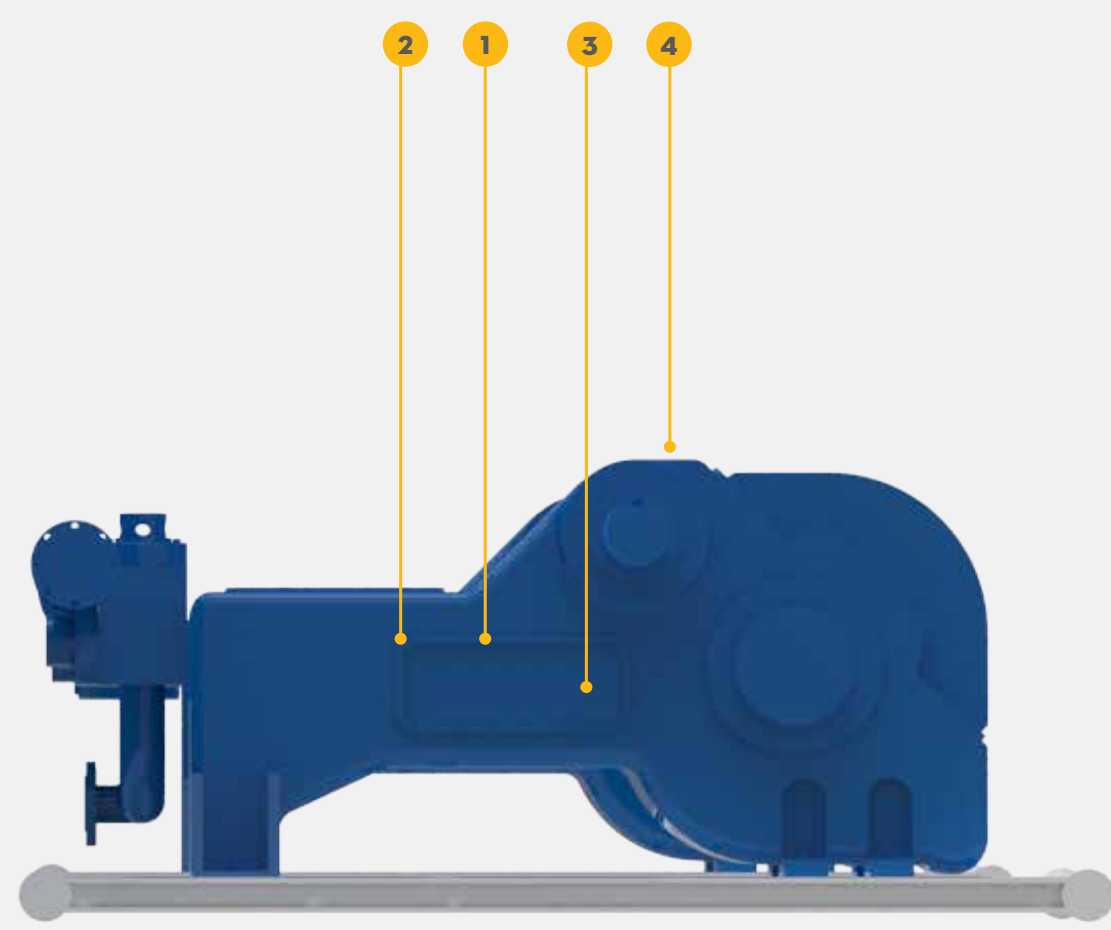
05

MUD SYSTEM

Parker DPR - Parker's DPR business unit specializes in high pressure manifolds and fittings commonly found in rig mud systems. In addition to providing these solutions, DPR also serves as a global land and offshore turnkey service provider utilizing certified engineers and welders to tackle the toughest high pressure piping systems.



MUD SYSTEM



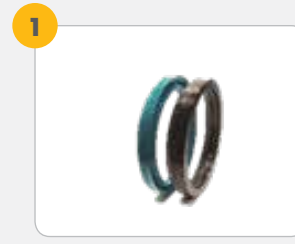
OIL FIELD MUD SUCTION HOSE
Large diameter industrial suction and discharge hose designed to handle drilling mud, mild chemicals, oily water, petroleum waste and sewage in oil field applications. -- Series TKW160



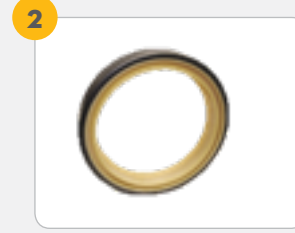
OIL FIELD MUD DISCHARGE HOSE
A heavy duty, high pressure industrial discharge hose designed to handle drilling mud, mild chemicals, petroleum waste and water in oil field applications. -- Series 7309



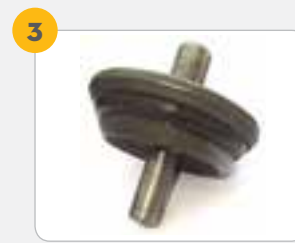
CORRUGATED OIL FIELD SUCTION/ VACUUM HOSE
Flexible suction hose designed to handle brine, crude oil, mild chemicals, sediments, sludge, slurries and water in harsh oil field waste pit recovery applications. -- Series 7213E



WELL SERVICE PACKING
Parker's Resilon® polyurethane well service packing is specifically designed to reduce downtime and a great option for both new build and replacement.



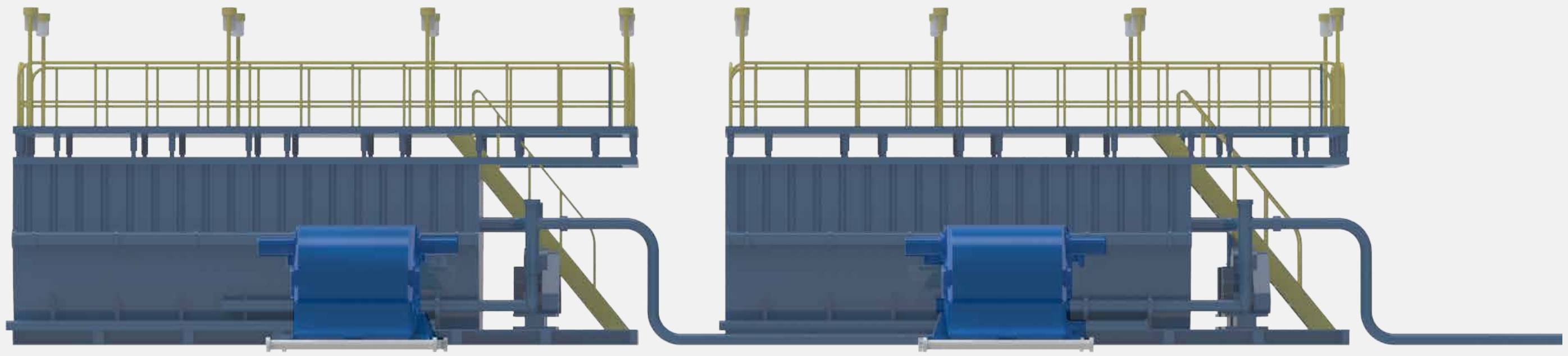
PONY ROD SEAL
Parker's Resilon® polyurethane pony rod seal offers a single piece solution to wipe debris from the rod and maintain gear fluids.



PUMP VALVE SEAL
A new redesigned seal geometry reduces hysteresis of the material allowing for superior performance for mud pumps.



METALLIC WEAR DEBRIS SENSOR
MWDS provides unbeatable real-time detection performance for both ferrous and non-ferrous metal debris in lubrication circuits maximizing pre-warning time before irreversible damage occurs.



06

ROUGH NECK

Parker Valves - Parker's Pulsar Series valves are well suited for high pressure applications where EH proportional XP operation is required. These directional control valves are used in hazardous environments in oil and gas applications providing industry leading performance.





WELDED CYLINDER

Welded cylinders are available in multiple stroke lengths and bore sizes and are repairable. Shown here is the RDH Heavy Duty Roundline.



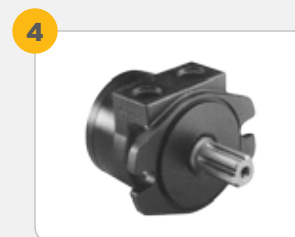
LSHT MOTOR

For 50 years, Parker Torqmotors™ have been the “go to” product when a high torque motor is needed for a tough application. Rugged. Dependable. Long life.



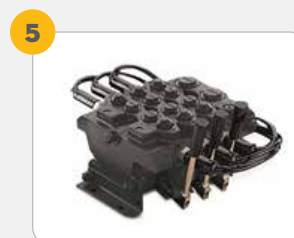
TIE- ROD- CYLINDERS

Ideal for catwalk positioning, Parker tie rod cylinders are available in multiple stroke lengths and bore sizes and are repairable. (2H Heavy Duty shown)



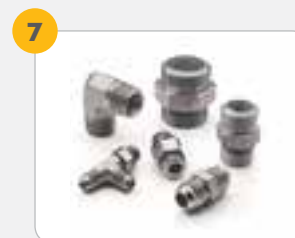
GEAR MOTOR

Solid shaft construction of this Parker Nichols high torque motor means high drive train strength and longer life. Delivers high power in a small package.



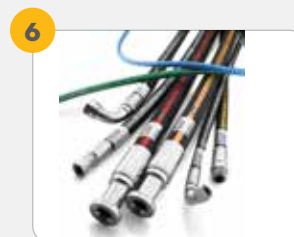
VPL SERIES HYDRAULIC VALVES

Multifunction load compensated for repeatable automation control with explosion proof options.



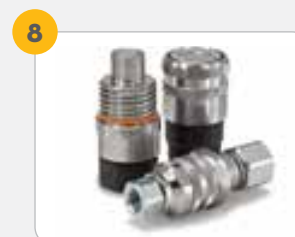
HYDRAULIC FITTINGS

Seal-Lok O-Ring Face Seal Fittings combined with Parker's XTR plating provides for leak free connections and superior resistance to rust.



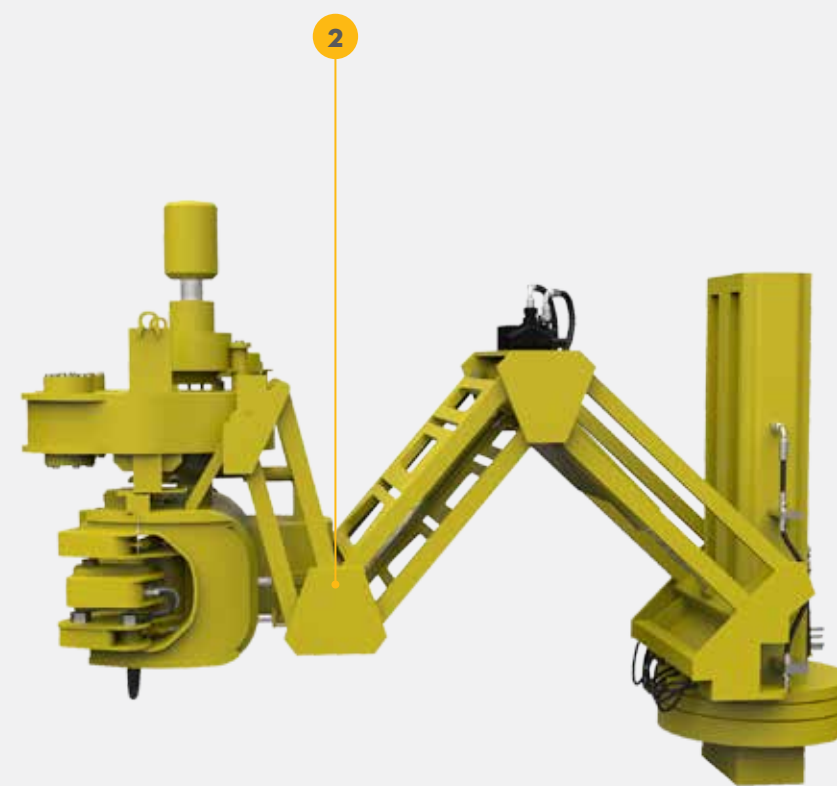
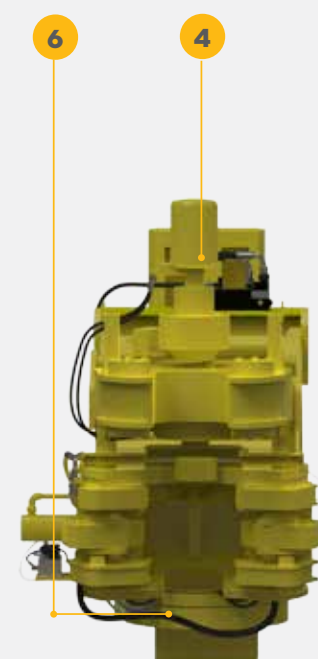
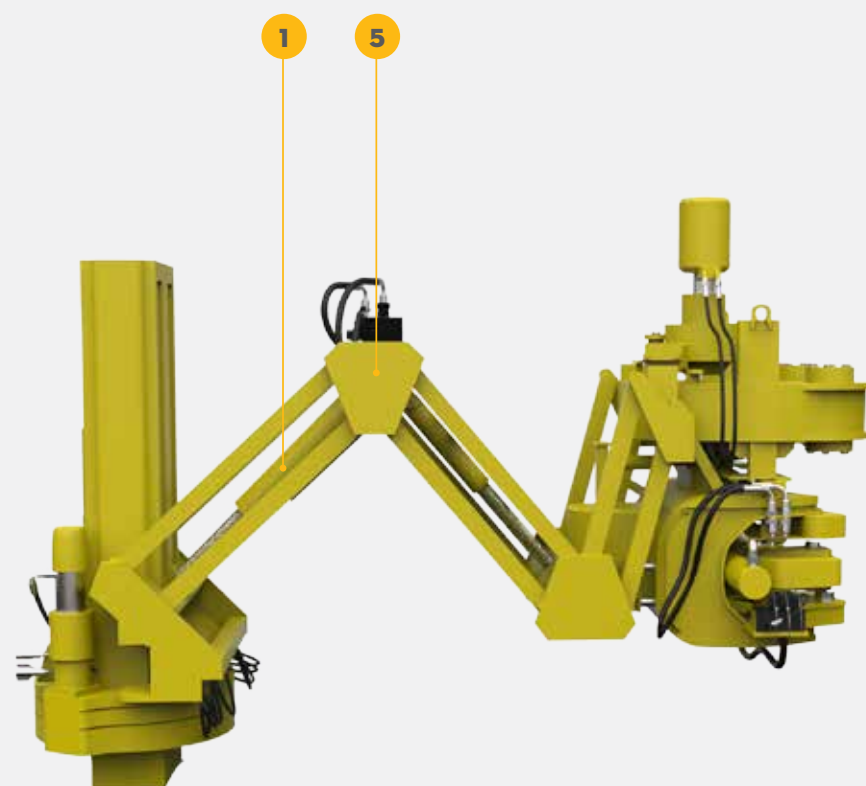
HYDRAULIC HOSE ASSEMBLIES

High performance hose, fittings, equipment and accessories necessary to keep your fracking equipment running at peak performance levels. (R2, R12, R13 are commonly used)



59 SERIES THREAD-TO-CONNECT

High pressure, high impulse, thread-to-connect quick coupling. Double-start ACME thread allows full connection in 2 1/2" turns under residual line pressure.



07



TOP DRIVE

Parker's hydraulic condition monitoring solutions now include the Metallic Wear Debris Sensor. The MWDS provides unbeatable real-time detection performance for both ferrous and non-ferrous metal debris in lubrication circuits maximizing pre-warning time before irreversible damage occurs. A perfect solution for reducing equipment downtime.





HYDRAULIC PUMP

The Gold Cup pump offers dependable high pressure closed circuit design and simplifies plumbing with integrated features.



COMPLETE PIPING SOLUTIONS

Combining the best non-welded piping system with a complete engineered piping services package, CPS offers your project incomparable assurance, efficiency and value.



VARIABLE FREQUENCY DRIVES

Parker is an industry leading manufacturer of AC variable speed drives, industrial and mobile inverters, DC drives, servo drives and servo motors.

1



HYDRAULIC HOSE ASSEMBLIES

High performance hose, fittings, equipment and accessories necessary to keep your fracking equipment running at peak performance levels. (R2, R12, R13 are commonly used)

2



59 SERIES THREAD - TO - CONNECT

High pressure, high impulse, thread-to-connect quick coupling. Double-start ACME thread allows full connection in 2 1/2" turns under residual line pressure.

3



HYDRAULIC COOLERS

Compact and easy to maintain, Parker's coolers are optimized for the oil and gas environment. The ULDC line is a perfect choice.

4



HYDRAULIC ROTARY ACTUATORS

HTR Series Unibody Actuators enhance the proven performance and efficiency of the rack-and-pinion hydraulic actuator by creating a compact, environmentally-sealed, modular package.

5



PROPORTIONAL MULTI FUNCTIONAL VALVES

Multifunction load compensated for repeatable automation control with explosion proof options. (VP120clr shown)

6



HYDRAULIC MANIFOLDS

A leader in the design and manufacture of integrated hydraulic circuits, Parker selects threaded cartridge valves from our wide range of products and integrates them into a single manifold.

7



HYDRAULIC GEAR MOTOR

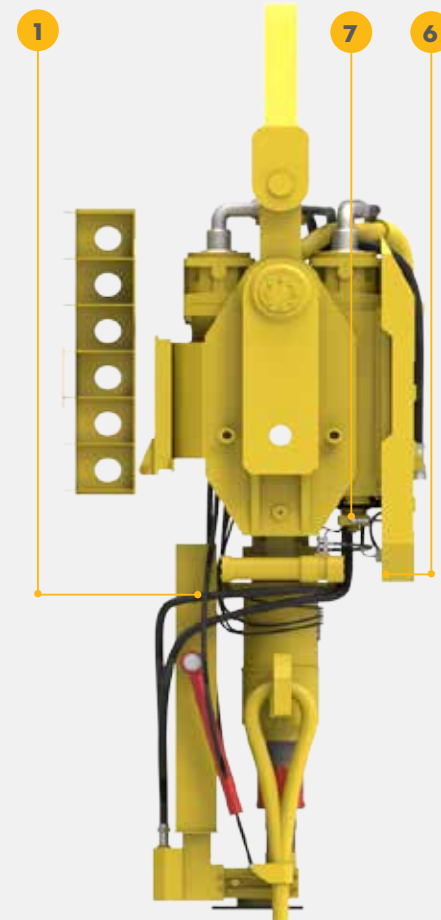
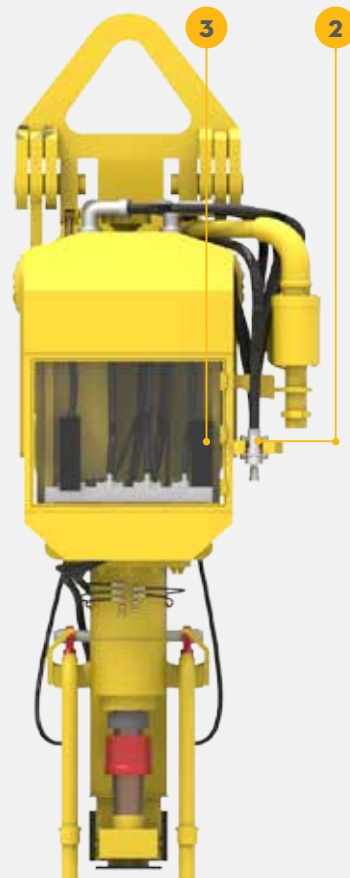
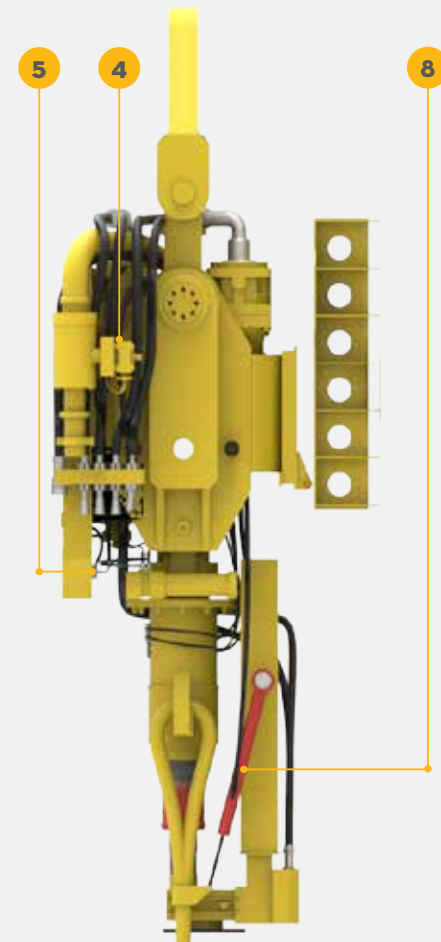
Cast iron and aluminum gear pump and motors provide reliable performance, reparability and application flexibility. (to support the main motor)

8



WELDED CYLINDERS

Welded positioning cylinders are available in multiple stroke lengths and bore sizes and are repairable.

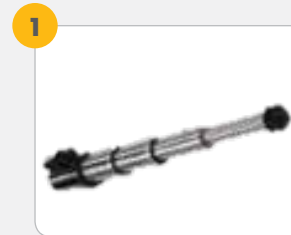
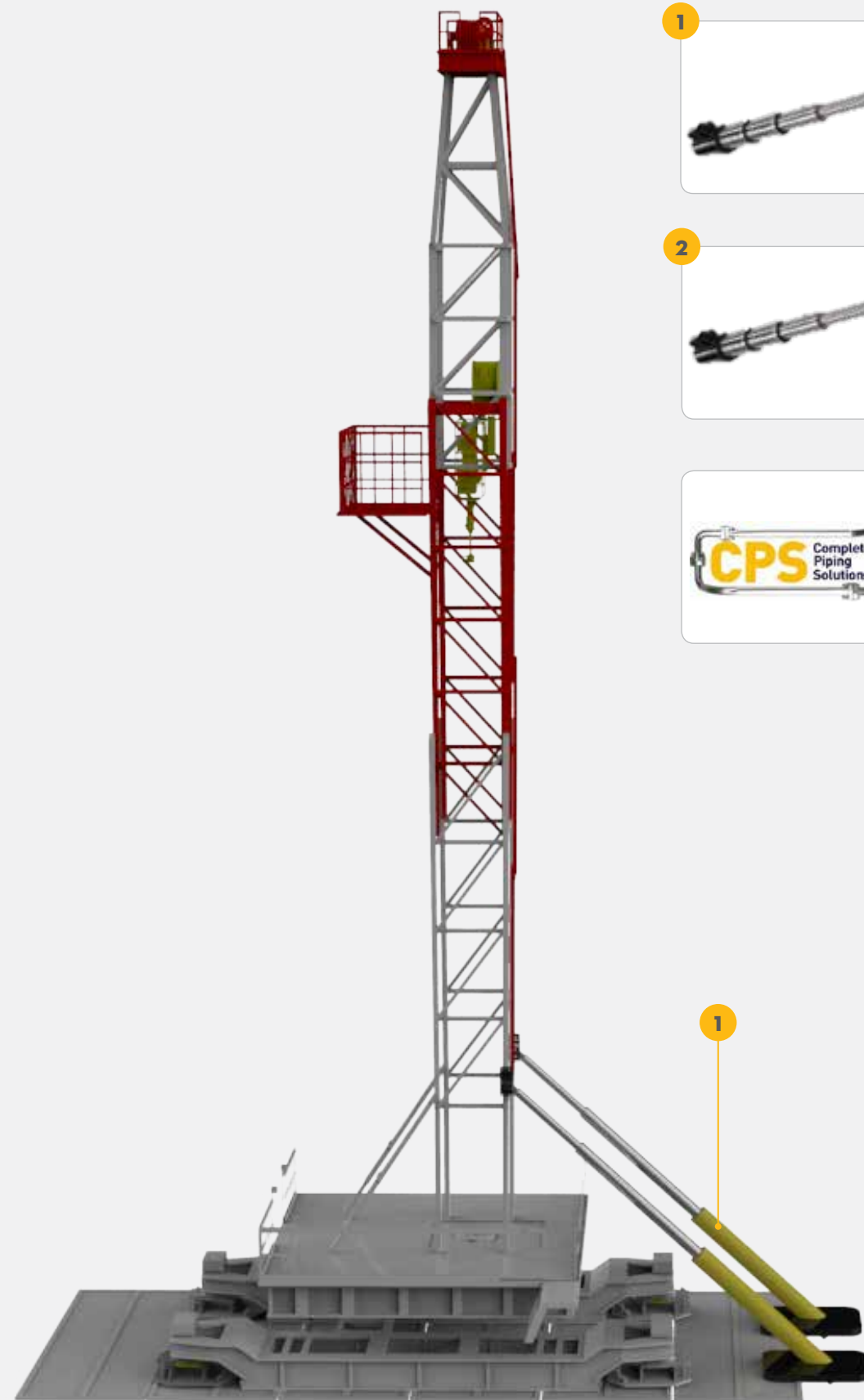
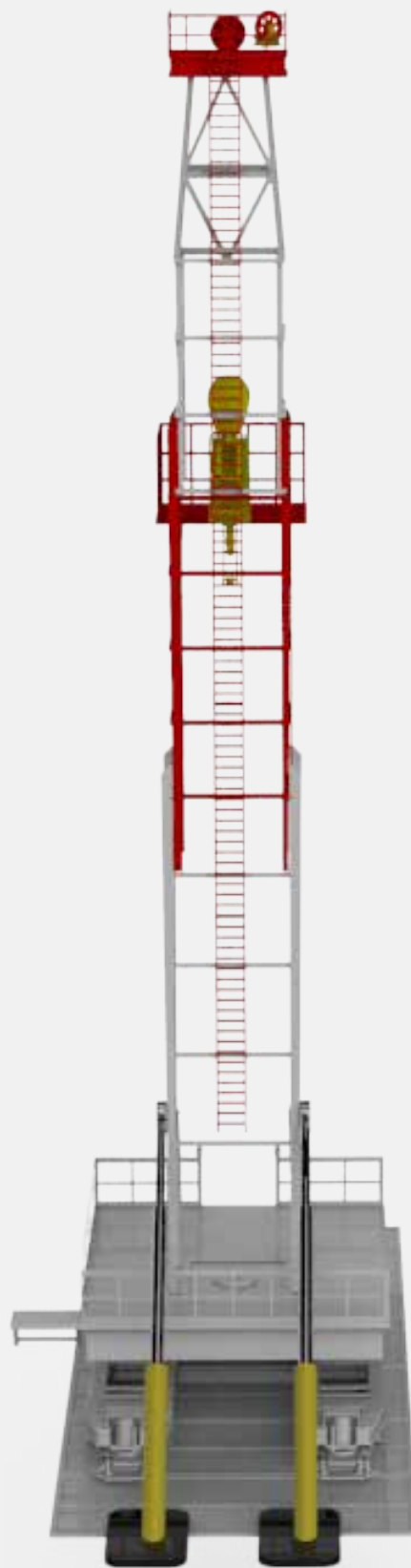
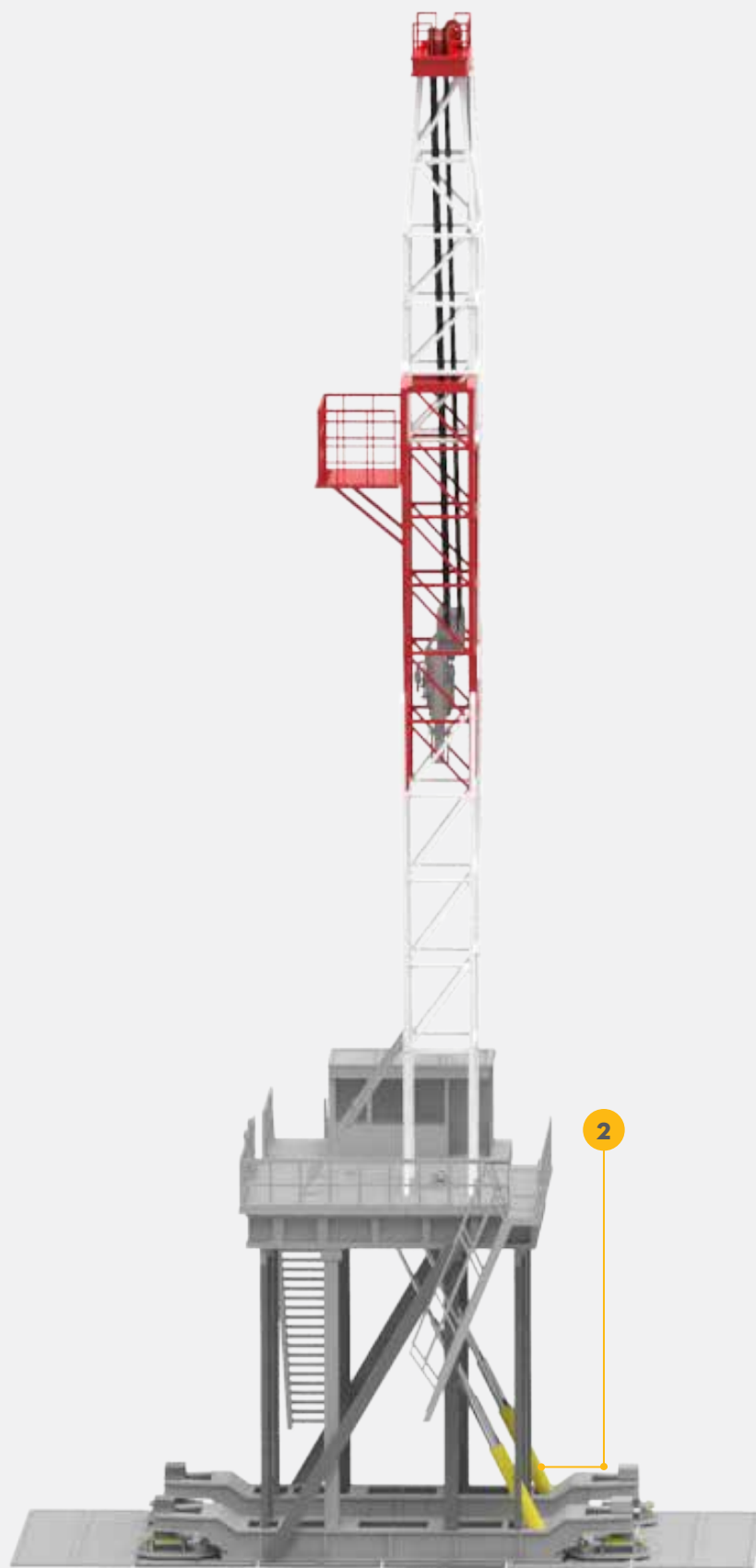


08

RIG STRUCTURE

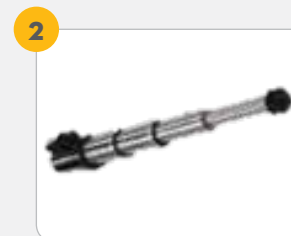
Parker Cylinders - Parker can be relied on for all of your linear actuator needs. Welded, tie rod, compact, custom, telescoping, electromechanical, pneumatic, and more. Added features include Parker's new Global Shield coating technology, Zero Leak sealing technology, Intellinder positioning sensors and many accessories.





MAST RAISING CYLINDERS

From workover rigs to the largest land rigs, Parker has the telescoping and custom cylinders you need for the most demanding lifts.



TELESCOPING CYLINDERS

Parker can handle all of your cylinder needs including any custom and/or telescoping cylinders for the sub-structure.




COMPLETE PIPING SOLUTIONS

Combining the best non-welded piping system with a complete engineered piping services package, CPS offers your project incomparable assurance, efficiency and value.

DPR

Parker's DPR business unit specializes in high pressure manifolds and fittings commonly found in rig mud systems. In addition to providing these solutions, DPR also serves as a global land and offshore turnkey service provider utilizing certified engineers and welders to tackle the toughest high pressure piping systems.

An aerial photograph of an oilfield camp. In the upper left, a large drilling rig is positioned on a dirt pad, surrounded by numerous blue and white support vehicles, including trucks and trailers. A large black storage tank is visible nearby. The camp is situated in a hilly, forested area with several large, light-colored rock outcrops. In the lower right, another drilling rig is visible, surrounded by several white modular buildings, red storage containers, and various vehicles. The overall scene depicts a busy oilfield operation in a natural setting.

For a more complete overview of Parker oilfield offerings,
please see our interactive online marketing materials or
contact one of our distributor partners.

www.parker.com