Hydraulic Presses
Dedicated products and solutions

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding
Dedicated products and solutions for
Parker – an experienced partner at your service

For many years, Parker Hannifin has been a major supplier of quality components and system solutions to machine designers within the manufacturing industry, with production and engineering facilities around the world, ensuring global aftermarket support.

Parker has dedicated teams of specialists working globally to assist our clients in the design of systems, sub-systems and solutions to meet the most demanding requirements, offering unbeatable global product availability and service.

There are several immediate value-adding benefits from utilising our expertise and our advanced technology.

For the manufacturer, time-to-market can be cut by several (very important) months, while production time and cost can be reduced by up to 15 percent, thanks to integrated solutions, unique design features, globally synchronized logistics and services such as Kanban, Kitting and Pre-assembly, which also cut inventories and simplify purchase routines significantly.

For the end-user, benefits such as greater efficiency, reduced down-time and less maintenance contribute to an improved profitability.

A revolution in dynamics and force
The series DFplus® with VCD® drive technology is a new generation of proportional DC control valves. With a frequency response of -3dB@350Hz (±5% command signal), it is particularly suited for all applications with exact positioning and accurate pressure and speed control. The DFplus® is an efficient alternative to “genuine” servovalves and other high-dynamics proportional closed-loop control valves.

Rotary actuators – delivering torque
Rack and pinion rotary actuators deliver constant torque in both directions of rotation. Standard rotations of up to 360° can be increased to up to five rotations or more on custom models. Fully enclosed, high-capacity bearings support radial and thrust loads, while compact dimensions make mounting easy.
Dedicated products and solutions for cylinders – the moving force

Tie rod, mill type and welded roundline cylinders, available with sophisticated electronic feedback, provide high productivity, low maintenance and a long service life in some of the toughest industrial environments around.

**Energy Saving with ePump Solutions**
Significant energy reduction at higher functionality, and integrated safety technology will be offered in multiple applications such as presses by speed variable hydraulic pumps. Depending on the application savings up to 50% can be achieved, and very often it goes along with higher dynamics and precision.

**Quiet power**
From a comprehensive modular kit, users can compose the optimal pump configuration that best meets their own demands. The PVplus adjustable axial piston pump distinguishes itself in particular by its energy-efficient operation and low noise level that is based on low-pulsation operation in conjunction with a housing of optimised stiffness. Complementary to the variable pumps, the “high low” vane pump systems will also allow a great performing solution. Combining both technologies is a unique and very efficient package.

**Cylinders – the moving force**
Tie rod, mill type and welded roundline cylinders, available with sophisticated electronic feedback, provide high productivity, low maintenance and a long service life in some of the toughest industrial environments around.
Store energy
Our complete range of CE-approved bladder, diaphragm and piston accumulators maintains high pressure for safe and smooth manoeuvring. Greater system efficiency and reduced pump sizes give longer life, lower costs and reduced noise levels.

Custom built blocks
The Parker block concept focuses especially on builders and suppliers of hydraulic presses for cold metal finishing. Thanks to multifunction modular design (which comply with EN693) they are also optimal for press retrofitting. Parker assembles the press control block with exactly the components defined by the customer.

High performance, high flow
The performance activity proportional cartridge throttle valve series TDP (2/2-way) and TPQ (3/2-way) conform to DIN 24342. They are driven by onboard closed-loop electronics, allowing extremely fast and accurate response. The poppets provide very precise flow control all the way up to max. 20,000 l/min (TDP) or 6,500 l/min (TPQ).

Measuring devices
A broad range of sensors and adaptors are available in our Senso-Control programme, all designed to meet global standards. A wide variety of mounting styles, pressure ranges and monitoring systems accommodate all types of application demands. Combined pressure and temperature sensor units are available.

Loader/unloader
Gantry robots and linear systems – the ideal way of loading and unloading machines, conveyors and pallets. These combine the highest standards of cost-effectiveness with seamless automation. There is virtually no limit to create custom specific solutions, made from Parker’s electromechanical product portfolio.
Adding system life by adding Parker Filtration solutions

Parker Filtration’s proven, innovative technology extends the life and increases reliability of machinery and systems in this market. In addition to a wide range of low, medium and high pressure hydraulic filters, lube and Racor fuel filter products and quality reservoir accessories, Parker offers over 50,000 Parfit™ interchange filter elements and advanced fluid condition monitoring with the countLCM portable particle counter and icountPD particle detector. A comprehensive range of products that combine with Parker experience to help reduce equipment downtime and minimize life cycle costs.
**Design, build and Installation services for Drives Systems**

For customers requiring more support in the design and implementation of their control systems, Parker SSD Drives offers a complete in-house design and build service, enabling you to focus on your core competencies. By allowing Parker’s experienced Systems Team to undertake the design, build, programming and commissioning of your motor control system, you can be assured that every aspect of the design, from environmental considerations through component selection to mounting of products has been carefully considered and allowed for.

Fully documenting a complete control system can be a daunting task – again Parker are on hand to help by providing complete electrical schematic and single line drawings as well as installation, maintenance and operating instructions. As an accredited systems builder, Parker SSD Drives are also able to undertake the certification process required to enable systems to be put into service in any number of industrial markets.

**Ingeniously simple – simply ingenious**

The product line of P*D digital electronic amplifiers is complete. All Parker proportional valves can be operated with only 4 different digital modules. The ProPxD software with integrated valve data base for easy set-up is supplied free of charge. The electrohydraulic controller Compax 3F is the new member of Parker’s servodrive family. It is especially designed for the requirements of electro-hydraulic systems and in particular for the position and force control of electrohydraulic axes.

**Electric Cylinders**

The Parker High Force Electro Thrust Cylinder (ETH) provides unmatched force density compared to other electric cylinders on the market. With optional sensor for the most precise force control and complete solution packages including Parker’s Compax3 servo drive with various connectivity options, the ETH is ideally suited for hybrid or electro-mechanical presses and injection molding applications.
Tie it all together

Parker’s extensive line of hoses, hydraulic hose fittings, tube fittings, flanges, couplings and assembly machines offers a complete package for efficient and leakfree installations. Parker is a single-source supplier for all important components.

PTFE hoses for high temperature applications:
Smooth bore and convoluted hose types for applications up to 230 °C, unique chemical resistance.

Parker’s Ultra High Pressure Hoses for extreme pressure applications. From DN3 to DN75, Parker UHP Hoses cover pressures from 70 up to 400 MPa.
Parker’s 492ST and 462ST Elite No-Skive Super Tough Compact hoses. High performance with an extremely abrasion-resistant polymeric cover – up to 450 times better than the ISO 6945 specification – for hard-wearing applications. A perfect alternative to expensive protective guards.

Small Bore Lubrication and Diagnostic thermoplastic hoses combine small internal and external diameters, which results in high flexibility and small bend radii.
Parker’s Compact Spiral™ Hose with Tough Cover is a compact, MSHA approved flexible hose offering 50 % tighter bend radii and 20 % less weight with superior performance and life expectancy, thanks to a patent-pending inner tube compound – tested for two million impulse cycles!
Parker Universal Push to Connect is a unique push-in system for tubes and hoses that saves time and costs through simple, rapid failure-free assembly.

Instant and function fittings in nickel-plated brass. Tubes, ball valves and brass compression fittings suited to severe conditions.

Quick Connect Couplings – a wide range of coupling systems with nominal diameter from 1.5 up to 20 mm, single and double shut-off, dry break and safety versions.