

Press release

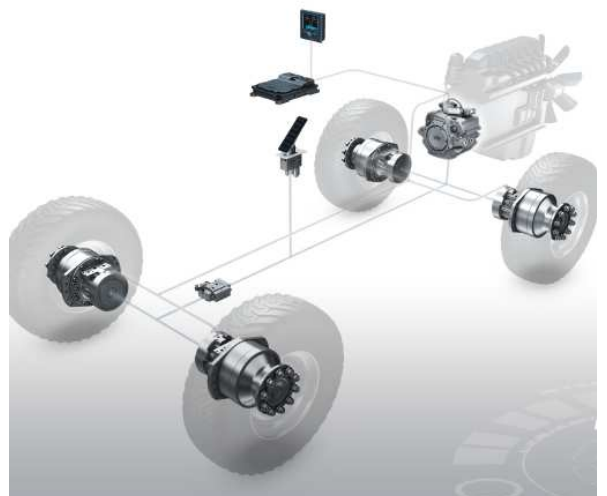
Verberie, France,
April, the 17th of 2015

THE HIGH PERFORMANCE RANGE

Poclain Hydraulics combines its components within their hydrostatic transmission systems. Its combined expertise in hydraulics, electronics and mechanics, along with its understanding of customers' applications, enables it to design, manufacture and offer high added value solutions that meet present and future market expectations.

The intelligence of its systems, namely its experience and competence in electronic control systems, enables the constant use at the optimum operating point of the customer machine. This guarantees the best performance while minimising fuel consumption.

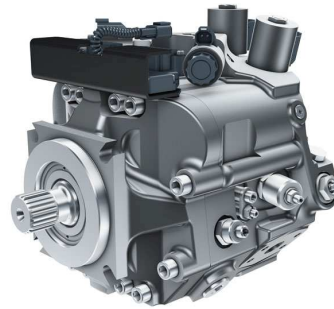
Poclain Hydraulics places the full range of its know-how through a wide offer of hydrostatic transmission systems. It minimises development costs and accelerates the time to market while improving the performance of the machines.



The new heavy duty pump PW & PWe by Poclain Hydraulics



PW pump



PWe pump

Used in hydrostatic transmission systems composed of motors, valves, and electronic controls, the PW & PWe range offers to customers the benefit of over 50 years of expertise gained by Poclain Hydraulics in the field of hydrostatic transmissions.

The performance and added value they provide will help make our clients' machines a commercial success.

The upcoming anti-pollution standards impose new constraints which must be taken into consideration. End users look for reliable, precise, high performance machines that minimize energy expenditure and maximize comfort.

Designed with compactness, energy efficiency and high power density in mind, the "Heavy Duty" PW & PWe pump range meets these requirements.

Quality

Reliability and durability are a “must” for machines. Drawing on 50 years of expertise in hydraulics, the PW & PWe range is the culmination of several years of design, development and validation.



Power density

By making the most of the installed components, customers can optimize their machines' performance. The PW & PWe range allows maximum pressure levels and unrivalled levels of speed. Increasing the accessible pressure and speed in this way improves machines' productivity, for greater customer satisfaction.



Energy efficiency

Machines' ecological and economic impacts are a concern for customers and end users. The PW & PWe range has been designed with the aim of optimizing all of these components. The result is a high level of operating efficiency which optimizes fuel consumption.



Precision

Power is nothing without precision. The PW & PWe range has an exclusive electronic control unit, making it precise and dynamic. Coupled with a dedicated electronic control system, machines meet present and future requirements in terms of comfort, safety and reduction in fuel consumption.



Compactness

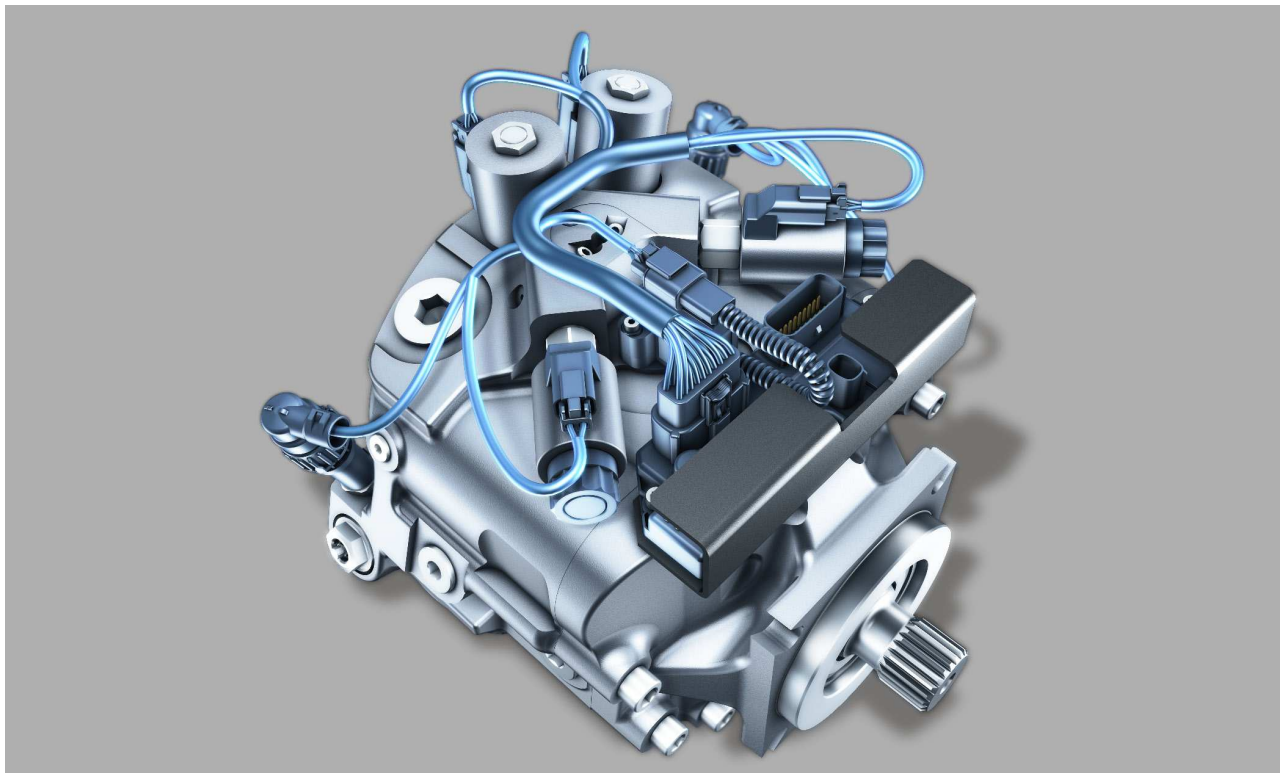
The technical solutions required by the new anti-pollution standards reduce the available space in diesel engine compartments. The PW & PWe range meets these new integration constraints perfectly by offering the best axial compactness on the market.

The PWe : Plug & Drive™

by Poclain Hydraulics

The PWe is designed to meet all customers' requirements, point by point. The on-board electronic control unit gives them access to a high level of safety for their control systems.

The control software, pre-installed at the factory, contains all the necessary functions to meet customers' needs in the area of performance, comfort and safety. Its communication capacities make it easy to install and it integrates seamlessly with the rest of the machineries.



On-board electronic control unit

The PWe's on-board electronic control unit can withstand the harshest environments, including proximity to the internal combustion engine. The IP69K type electrical connections and the factory-installed harness are tested at the end of the assembly line before delivery. The 2 integrated CAN bus allow you to share information with the rest of the machine (internal combustion engine, displays, hydraulic components...), configure and diagnose machines.

Standard software features

The software package pre-installed on every PWe on-board electronic control unit provides access to a set of features designed to enhance the comfort and safety of the machine and individuals. They are activated on a strictly "as-needed" basis, thus removing the need for any additional, costly software development. This helps to reduce development time and let customers control costs.



Operating safety

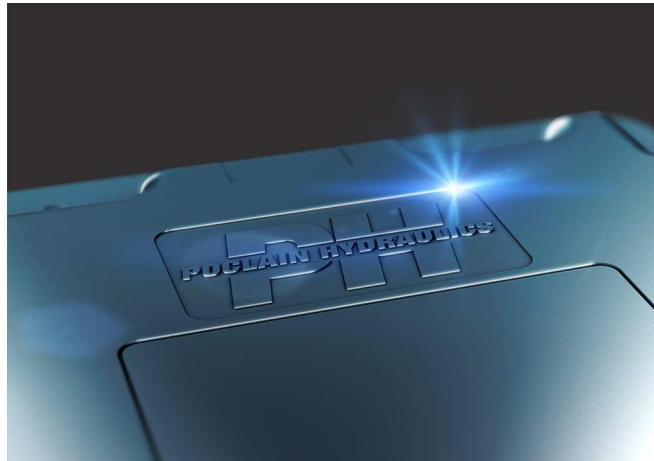
Any Off-Road machine sold on the market of the European Community must comply with Machinery Directive 2006/42/ EC and related standards such as ISO 13849-1. The PW & PWe range fitted with Poclairn Hydraulics electronic system allows to reach a high level of safety for control systems. Compatible with Performance Level d (Safety Level PL-d according to ISO 13849-1), it guarantees full compliance with the standards in force.



Transmission features

The PW & PWe range gives access to essential driving features (automotive mode and non-automotive mode) and safety features (Safety start management, Operator presence detection...). The comfort features (Speed control, anti-stall...) improve productivity. Finally, the protection features (over temperature, over pressure, over power) will ensure the longevity of the hydrostatic transmission..

SD CT 200/300 to complete HIGH PERFORMANCE offer



Operating safety and unequalled performances

Machine operating safety is now one of the issues that any manufacturer must integrate from the machine design stage. Electronic control integration allows to increase the added value of machines with regard to productivity, energy efficiency and comfort. Poclair Hydraulics is introducing a new range of CT 200 and CT 300 SmartDrive calculators capable of meeting these requirements in all regards. They offer functional security and operational safety capacities in line with the most demanding standards. Their large calculation capacity and the large number of inputs and outputs allow customers to efficiently operate their machines' hydrostatic transmission.



Complies with the machines' safety requirements

Any Off-Road machine placed on the European Community market must meet the 2006/42/EC directive and the associated standards such as ISO 13849-1. The new SD CT calculators provide a high safety level for control systems. Compatible with the Level d performance level (PL-d according to ISO 13849-1), they guarantee compliance with the standards in force.

Designed for Off-Road & On-Road applications

Their E-certified electromagnetic compatibility and their security architecture capable of the PLd level allow them to be used for Off-Road and On-Road applications.

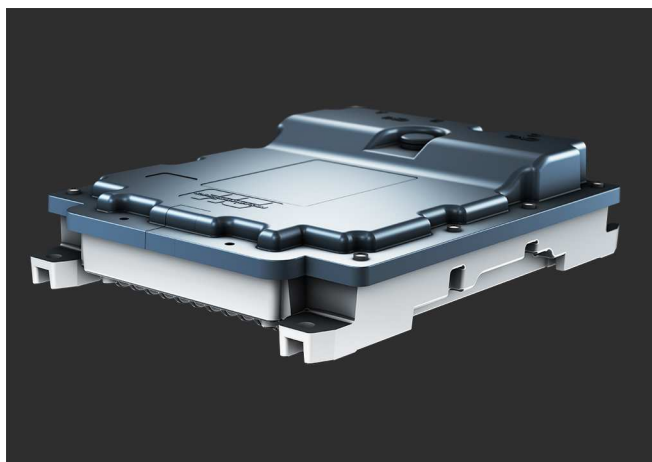
Performances & Added values

Robustness

SD CT calculators are designed to be used in extreme conditions. Operational over a temperature range of -40°C - +85°C, they also function in the case of immersion under a meter of water (IP67). Their electromagnetic compatibility (EMC), certified 'E', makes them compatible with the most demanding uses.

Calculation power

SD CT calculators are made efficient by incorporating an electronic architecture built around a 32-bit microprocessor and a 8-bit auxiliary microprocessor. They have a calculation capacity compatible with machines' safety, comfort and energy efficiency requirements. These technical characteristics provide access to sophisticated software functions that guarantee efficient and accurate control of applications.



Communication

The SD CT calculators have large communication capacities. The 3 integrated CAN buses allow to share information (heat engine, hydraulic components, etc.), and configure and diagnose machine. Equipped with 42 high-power inputs and 23 high-power outputs, they provide accurate control of the hydrostatic transmission.

A high added-value offer.

The SD CT offer is accompanied by a panel of software components with all of the features required by machines. Each customer can control all of the pumps available on the market. They also allow to manage transmission errors and their diagnosis. But it is within a Poclain Hydraulics transmission that they offer their maximum potential: Pump management, engine control, automotive driving mode, power limitation, fuel consumption optimisation, etc. Customers thus achieve the full added value of Poclain Hydraulics's system offer

