Hydraulic Power Units

POCLAIN HYDRAULICS

Poclain Driving Values for the Future

HYDRAULIC POWER UNITS







What is hydraulic power unit?

Hydraulic power unit is an arrangement of interconnected components, which controls hydraulic energy.

Application of hydraulic power units

Hydraulic Power Units are used whereby energy is transmitted, controlled and distributed using pressurised liquid fluid as medium. Modern day applications of hydraulic power units are extremely diverse and are divided into mobile applications (agriculture machinery, diggers, graders, road maintenance vehicle, fork lift trucks, excavators etc.), industrial applications (machine tools, food processing machinery, automatic handling and assembly equipment, steel works and mining etc.), and other (automotive, aerospace and marine industry, civil engineering, theatre and leisure, medicine etc.).

Hydraulic Power Units can be designed as open, closed and combined.

What makes a hydraulic power unit?

A typical hydraulic power unit may include the following components:

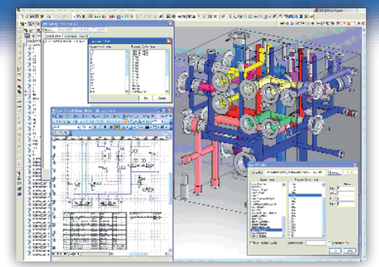
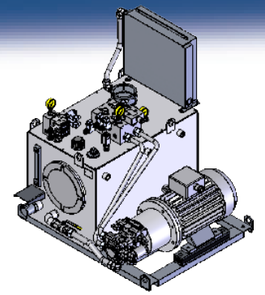
- pump to convert mechanical power into hydraulic power,
- cylinders or motors to convert hydraulic power to linear or rotary mechanical power,
- valves to control direction, pressure and amount of fluid,
- filters and regulators which maintain the condition of fluid,
- hoses, tubes and fittings,
- reservoirs and accumulators to store the fluid and energy,
- Instruments to monitor the performance of the hydraulic power unit.

The benefits of hydraulic power units:

Hydraulic power units ensure:

- safety,
- quality, reliability and
- cost efficiency
- high density of power transition.

FROM CUSTOMER NEED TO FINISHED PRODUCT

Hydraulic power units are produced in close cooperation with customers. Technical and commercial very well educated personal in marketing process continually search for needs and wishes of our customers and their problems from the field of hydraulics. Poclain Hydraulics offers to our customers knowledge, abilities and experiences for solving such problems.

Poclain Hydraulics' engineering knowledge is core competence of projecting processes. In this process our engineers design hydraulic power unit according to customer demand, all necessary documentation is prepared and risks and production capabilities are assessed and the whole project is prepared for execution.

In sales process the customer gets a complete offer. The whole process of following the execution of customer's order is followed by business information power unit.

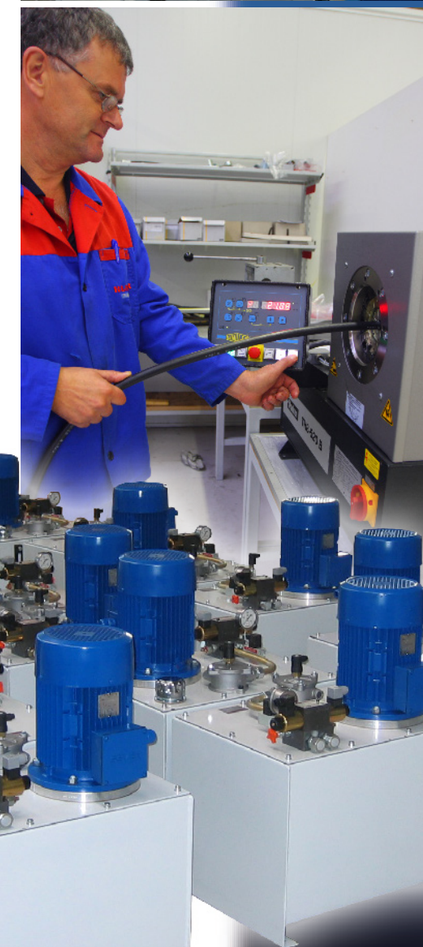
In order to delivery process the hydraulic power unit is produced, tested, adjusted and prepared for transport on the basis of technical documentation. Poclain Hydraulics pays a great attention to quality, design, safety and environmental influences.

Poclain Hydraulics also respect the guidelines of functionality in design and production, which enable simple operation and maintenance of hydraulic power unit.

Our job is also installation and put into service the hydraulic power unit. Work is done by specialised personal and assures perfect operation and reduces costs of maintenance.

Modern tools for designing and projecting CAD, product data management PDM and business information ERP support the whole business process.

All processes and products comply to demands of internal market of European Union.

HYDRAULIC POWER UNITS

> Flow rate to 1500 l/min
> Working pressure to 700 bar
> Tank volume to 5000 l
> Nominal power to 200 kW

> Fluid type: mineral oil HL or HLP (DIN 51524);
quick degradable oil HETG, HEES or HEPG
(VDMA 24568); fire resistant fluids.

> Flow rate to 100 l/min
> Working pressure to 350 bar
> Tank volume to 400 l

> Fluid type: mineral oil HL or HLP (DIN 51524)

Smaller hydraulic systems are assembled from standardised componets. Their modular construction allows quick and cost effective production with its various options that can satisfy variety of demands.

Open-loop units

Closed-loop units

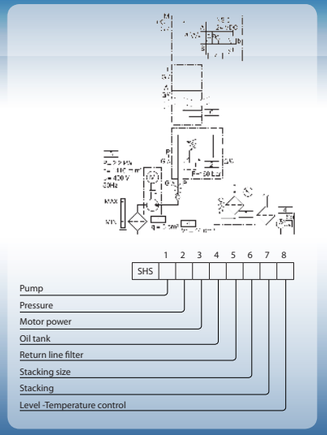
Combined units

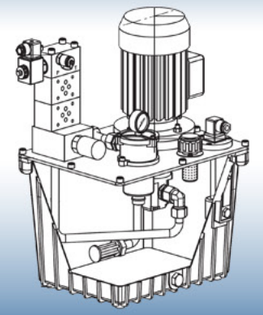
Standard hydraulic power units, type SHS

Large units

Low-pressure units

Accumulator stations





MINI HYDRAULIC POWER PACKS

> Flow rate to 12 l/min
> Working pressure to 210 bar
> Tank volume to 25 l
> Electric motor power to 3kW (AC) / to 2kW (DC)

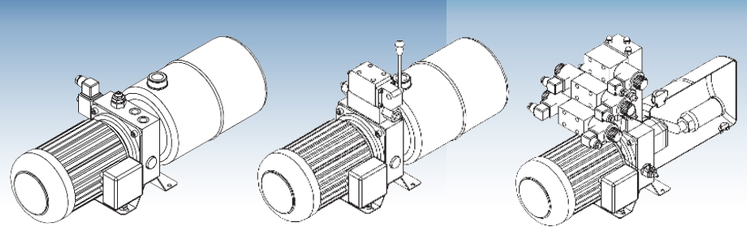
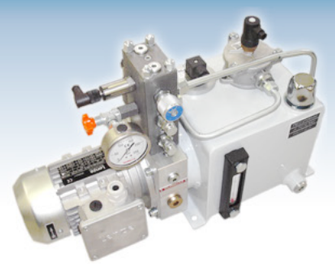
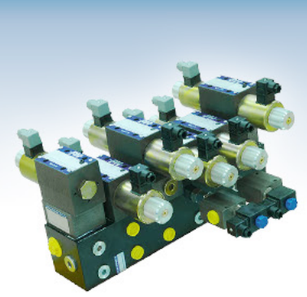
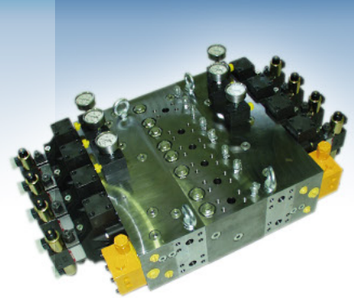
> Fluid type: mineral oil HL or HLP (DIN 51524)

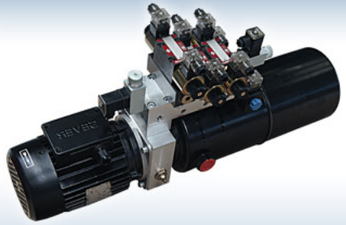
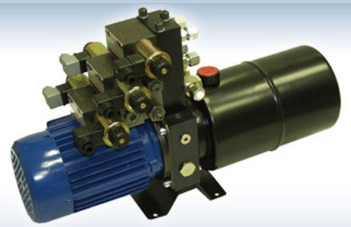
Compact modular design allows wide spectrum of different applications with small dimensions. Mini hydraulic power packs are assembled from standard components which allows short delivery time and competitve price. Mini power packs are suitable for low cycle applications in industrial and mobile hydraulics.

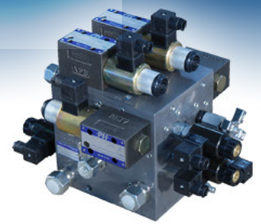
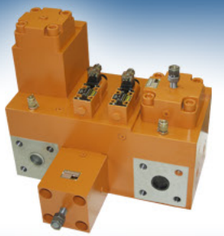
HYDRAULIC BLOCKS

Hydraulic blocks allow compact and simple hydraulic connections between different components. Modern CAD/CAM technology allows reliable and cost effecive design and production also in small series or single pieces.
Hydraulic blocks are machined form steel, aluminium or nodular casti iron. They are completed with hydraulic components and tested.

MHS power packs - different hydraulic controls types

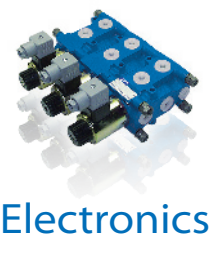

> 8 plants on 3 continents
> 17 subsidiaries on 4 continents
> Over 150 distributors around the worls
> 1,700 people worldwide

www.poclain-hydraulics.com

Motors

Pumps

Valves



Electronics

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