## scope of technical capabilities of hydraulic systems production

PONAR Wadowice S.A. products find a variety of applications in mining industry, power industry and many branches of heavy industry. We offer comprehensive solutions, from single components to complete systems. Thanks to our experience, we know the specifics of our field and offer solutions designed and manufactured to suit Customers needs.

Our products have all the required certificates for use in difficult environment, including areas exposed to a risk of explosion. All products undergo strict quality examination on each stage of production and are closely inspected on dedicated test rigs.

Thanks to our Research and Development Centre, we are constantly adjusting to changing technology, offering proprietary solutions that can be used with many different devices and also as an alternative to other producers' equipment.

## Our applications can be found in:

- mining industry
- conventional and renevable energy industry
- iron&steel industry
- offshore and oil&gas industry
- aviation industry
- agricultural and food processing industry
- mobile machinery industry
- defence industry

We offer a full range of service, from designing, assembly, technical inspection - to the final product. We manufacture new hydraulic systems and carry our repairs and upgrades of existing ones, including selection of spare parts.

Our solutions feature high quality and reliabilty of operation. The quality of production, short term of completion of order, suited to the individual requirements of the Customer are the main advantages of cooperation with us.

The Company also provides a full range of services, starting from simple cabinets controlling hydraulic power packs - to the complete control systems, equipped with PLC drivers with display and archiving of the processed data.

On Customer's request we can specially select type of control and measurment equipped, taking into consideration the existing system solutions. We also provide modernization and upgrade services to the control with integraded systems of sypervisory control.

Hydraulic systems can be also manufactured in compliance with the requirements of quality standards AQAP and ATEX. PONAR Wadowice specialised in construction of pipelines from carbon and stainless stell, based on the Customer's or proprietary design. Our services include also flushing of pipelines to achieve the required cleanliness class. We also carry out pressure test in the assemblied installation and take part in a "cold" or "hot" stary-up of the hydraulic system.





basic parameters of hydraulic systems	basic Technical data of standard hydraulic systems			other hydraulic systems
	with a vane pump	with a gear pump	with a piston pump	(max. parameters as agreed)
working pressure [max. MPa]	16	30	35	63
pump capacity [max. dm³/min]	60	100	300	subject to requirements
oil viscosity [mm²/s]	10 ÷ 160	10 ÷ 400	16÷100	max. 1000
motor rotary speed [rev./min]	1500	1500	1500	max. 3000
electric motor power [max. kW]	22	55	320	320
filtration level [μm]	16	16	10	subject to requirements
tank capacity [dm³]	40 ÷ 250	12÷630	100÷630	subject to requirements
optimal oil temperature range [°C]	40÷55 °C	40÷55 °C	40÷55°C	40÷ 55 °C
allowable oil temperature range [°C]	20÷70 °C	20÷70 °C	20÷70 °C	20÷70 °C
ambient temperature range [°C]	-15÷35 °C/50°C *	-15÷35 °C/50 °C *	-15÷35 °C/50°C *	-30÷35 °C/70 °C*
colour	RAL 5010	RAL 5010	RAL 5010	subject to requirements
motor supply voltage	3x400 V 50 Hz	3x400 V 50 Hz	3x400 V 50 Hz	subject to requirements
control elements supply voltage	24 V DC, 230 AC	24 V DC, 230 AC	24 V DC, 230 AC	subject to requirements

<sup>\*</sup> for systems with a water-oil heat exchanger