

Hydraulic Power Units

Applications

Hydraulic Power Units

- We design and manufacture hydraulic power units in the range of 11 kw up to 300 kW, where reliability and efficiency are important to our customers.
- Formerly MGR Fluid Power we have many years of experience of supplying both simple and complex hydraulic power units.



Hydraulic Systems Applications

300 Tonne Under Roller System

- Complete systems designed, delivered and commissioned in 12 weeks.
- Hydraulic power pack with 350 l/min flow rate from main pumps and 20 l/min from auxiliary pump. Electrical control system housed in a DNV certified 10 ft container.
- 1200 litre reservoir with return filter, level switch, temperature switch, breather, level gauge and drain valve.
- Sea water shell and tube heat exchanger.
- Hydraulic control manifold with proportional speed control.
- Pipework and hoses installation with pressure testing and flushing.



Hydraulic Systems Applications

Hydraulic Power Pack in an ISO 20ft Container

- Supplies the hydraulic power for a Pipe Handling System and Coating Station on a Pipe Laying Barge.
- Plug & play capability.
- 360 l/min flow from each of two pressure compensated axial piston pumps.
- 2500 litre reservoir with filter, heater, level switch, level gauge, breather, temperature switch.
- Off line cooling and filtering system.
- Commissioned the complete hydraulic system for our customer.



Hydraulic Systems Applications

Cable Laying Vessel Hydraulic System

- Complete hydraulic system including;
 - 320 l/min, 250 bar power pack.
 - Electrical control panel.
 - Carousel control manifold with speed control.
 - Winch control manifold.
 - Installation of hydraulic motors.
 - Pipe work installation, flushing and testing.



Hydraulic Systems Applications

Hydraulic System for Renewable Energy

MGR Fluid Power designed and manufactured an integrated hydraulic system to control water valves on a wave energy system. The hydraulic system consisted of;

- Hydraulic power pack with a 20 litre accumulator. The pump was turned off when the accumulator was charged.
- Station manifold and directional control valves.
- Electrical starter and control panel and a terminal box for the instrumentation wiring.



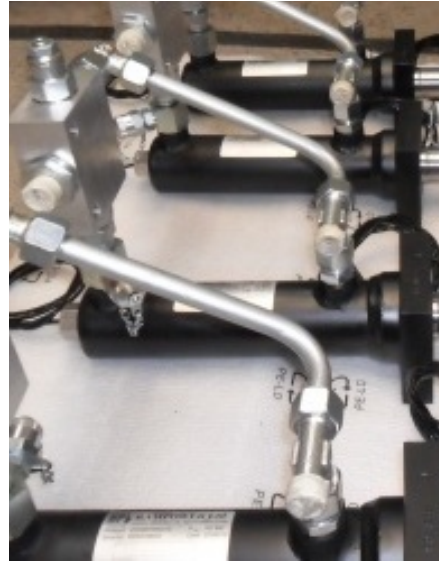
Hydraulic Systems Applications

Hydraulic Power Pack for a Test Rig

- MGR supplied a hydraulic power pack for testing marine type hoses. The power pack consisted of;
 - 1200 litre reservoir with return filter, thermostat, breather and dual level switch.
 - Individual pump skids with 90 kW motors, 140 cc/rev pressure compensated pumps, 3 micron filters and vented relief valves.
 - Main outlet pressure pipework made from 63 mm nominal bore tube and welded fittings. A 2 litre accumulator was fitted to reduce pressure ripple.



Hydraulic Systems Applications



Hydraulic Systems for Simulator

- In 2012 MGR Fluid Power provided the hydraulic system for the a Theme Park simulation attraction. The system included;
 - Hydraulic power pack with an accumulator and air blast cooling.
 - 8 hydraulic cylinder with load hold valve assemblies and LVDT's.
 - 8 proportional valves.
 - Starter panel and closed loop control for the valve/cylinders.
 - Installation & commissioning.

Hydraulic Systems Applications

Automotive Production System

MGR Fluid Power supplied two complete hydraulic systems for Ford in Russia. The systems comprised of;

- 7.5 kW power pack with a pressure compensated pump and control valves.
- Two off hydraulic cylinders with load hold valves
- Acoustic covers to reduce the noise of the systems to less than 75 dBA
- Return line air blast coolers.
- The systems was installed and commissioned at the customers UK facilities.



Hydraulics Systems Applications

Deck Cart

- Rugged offshore design with stainless steel pipes and fittings.
- Water removal system fitted.
- Cast iron external gear pump with a 20 l/min flow.
- Designed and manufactured in less than 5 weeks.
- Fully integrated systems with starter panel and water removal system

