Customer: US Navy

Project: Gantry Crane with Hydraulic Power Unit

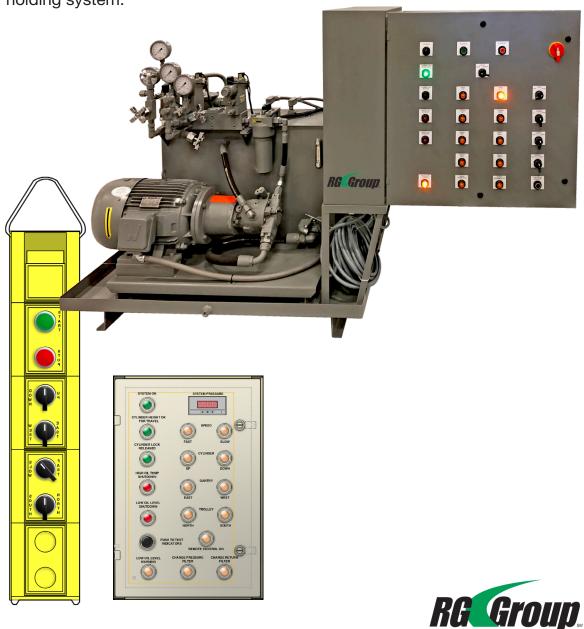
RG Group engineered, manufactured and completely upgraded

100 ton Cyclops Gantry Crane with a new HPU and remote touch

screen operational electrical controls. The main 30' Bear LOC

lifting cylinder was rebuilt and upgraded with a new titanium internal

holding system.



Customer: US Air Force

Project: Multiple 1,000 HP Hydraulic Power Units

RG Group furnished the turn-key design, labor, materials and equipment for

16 massive hydraulic power units. We provided the demolition, fabrication,

delivery and installation of three of those HPUs in 2020. Additionally, RG completed

the hot oil flushing of 10 hydraulic systems.





Customer: US Army Corps of Engineers - NY

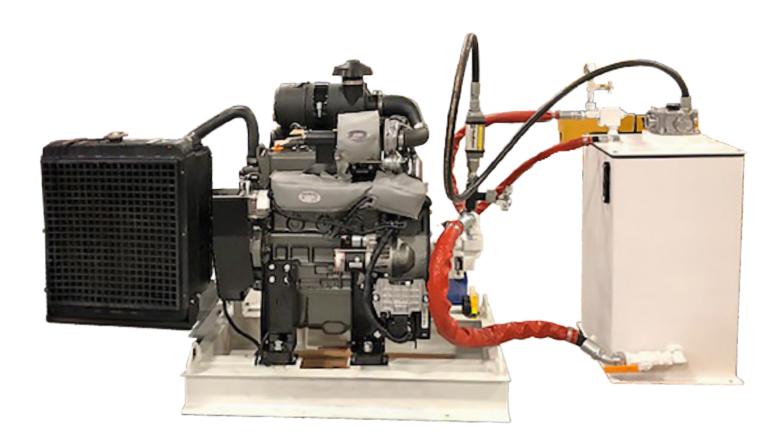
Project: Diesel Powered Hydraulic Power Units

RG Group engineered and constructed a Skid-mounted

Diesel Powered HPU System producing 14 GPM at 4500 PSI

with a fixed displacement pump and a Keel Oil Cooler. Additionally, RG supplied spare hydraulic hoses, fittings,

valves, filters and engine components.





Customer: US Navy

Project: Electro-Magnetic Aircraft Launch System (EMALS)

Hydraulic Power Unit

Result: Designed, manufactured and upgraded multiple build-to-spec

HPUs to supply pressure for the Nose Gear Launch (NGL) System. Additionally, the project included design and fabrication of the Bench Test Loop Manifold with First Article Testing for all future

Navy Aircraft Carriers.

P/N: 3988AS9901



Customer: US Navy

Project: Design and build hydraulic power units for

Gerald Ford Class (CVN-78) Steam Valve

Result: RG Group engineered and manufactured

the four Hydraulic Power Units that operate the main Engine Steam Valve

on the US Navy's Gerald Ford Class

Aircraft Carrier. The system was specifically designed to meet strict requirements for

performance in shock and vibration scenarios while

eliminating EMI interference.

The hydraulic system is a self-contained HPU with pump, electric motor, stainless steel reservoir,

filtration, pressure and directional control valves,

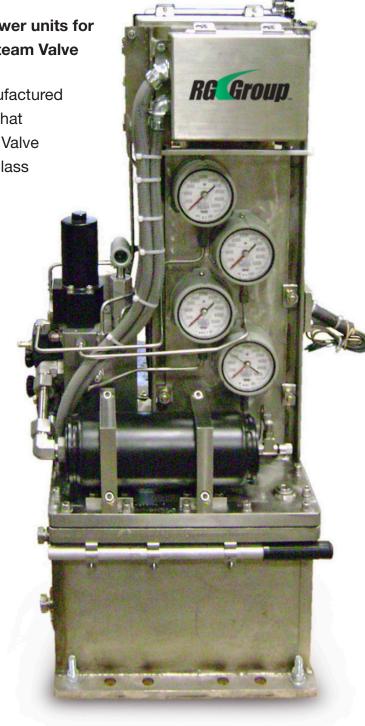
accumulator and a backup hand pump for emergency

operation. These RG HPUs are currently in service and

in the future will be

installed on the new

John F. Kennedy (CVN-79).





Customer: US Navy

Project: Design and build High Capacity Along-side

Sea Base Sustainment (HiCASS)

Result: The RG Group Engineering Team worked with the Office of Naval Research

(ONR) to provide a complete Hydraulic System for the High Capacity

Along-side Sea Base Sustainment (HiCASS) Program. This system included

a motion compensating crane used to transport cargo containers from ship



to ship at sea. This 1000 HP Hydraulic System moved the container at the end of the crane up to 7 feet vertically and in any multiple axis to keep the container aligned with the deck of the ship during all phases of ship-to-ship transfer up to and including Sea State 4. This RG solution exceeded all government requirements on budget and ahead of schedule.



Customer: US Army

Project: Design and build Medium Mine Protected Vehicle (MMPV) -

Ramp Hydraulic System

Result: RG Group developed, tested and delivered a complete hydraulic

system to operate the Rear Ramp on the Medium Mine Protected Vehicle (MMPV) - a variant of the MRAP used specifically to deploy EOD robots in the field. The system consisted of a Hydraulic Power Unit (high HP DC motor, pump, pressure and directional control valves, reservoir, filtration, electrical power cables, hydraulic cylinder, and connecting hose assemblies. RG completed this incredible task from design to fully field tested with DCMA approval in only 16 weeks. The system had specific design characteristics that allowed operation even if the vehicle was in a rollover condition, which was critical to the safety of the personnel.

This RG solution is used widely in the Middle East by US military

personnel with hundreds of systems

delivered in a span of only







Customer: US Marine Corps

Project: Design and build Hydraulic Control System for IED Mine Roller System

The RG Group designed, tested and delivered a complete Hydraulic and Control System to operate the IED Mine Roller System used extensively in Iraq and Afghanistan to protect US military personnel. The system consisted of a Hydraulic Power Unit (high HP DC motor, pump, pressure and directional control valves, reservoir, filtration), electrical power and control cable, handheld pendant to operate the system from the cab of the drive vehicle, hydraulic cylinders, and multiple hose assemblies. RG worked to deliver the systems from paper to finished product and approved for use within 12



weeks - receiving a bonus from USMC for early delivery! The first systems were delivered to Iraq in December of 2006 and immediately put into service.



Customer: National Foam

Project: Motorized Hose Reels for Fire-fighting

RG Group designed and manufactured 35 diesel engine-driven hydraulic

power units and motorized hose reels for fire-fighting use.

Construction of the units was at our facility in York, PA.

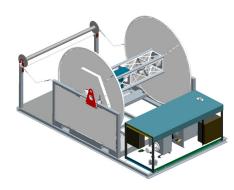
We were able to design and manufacture the

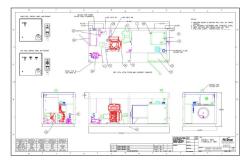
ideal system for this highly specialized

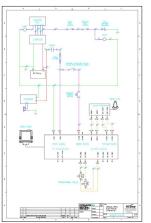
mobile application.













Customer: Middle River Aircraft Systems

Project: Hydraulic Aircraft Cart for thrust reverser

testing on jet engines

Result: This is a system used to test newly manufactured thrust reversers

for jet aircraft engines. The system provides hydraulic power to actuate thrust re-

versers and the controls to operate and provide data

acquisition, serialized test reports and failure analysis of the Unit

Under Test (UUT).

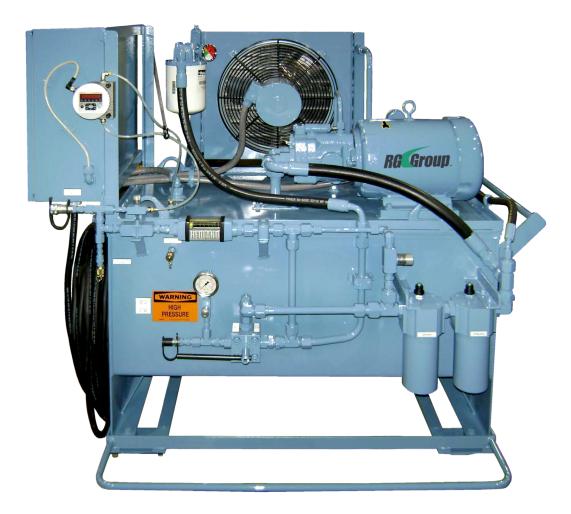
The customer commissioned and RG Group built 3 of these systems. RG also helped design the custom user interface needed to conduct the testing, as well as assisting with on-site startup and commissioning of the systems for use in the customer's production program. RG Group RG Group.

Customer: Knorr Brake Corporation

Project: Design and Build Hydraulic Power Cart

Result: These production test systems were built to field test the functionality of commuter train brake systems. RG Group built 20 of these systems during the past 10 years.

The power carts are placed in maintenance shops of various end users of commuter rail cars to provide functional testing of the brake systems, monitor fluid clean-liness, system pressure and temperature.





Customer: Wabtec Corporation

Project: Design and Build Hydraulic Test Cart

Result: These production test systems were built to be highly portable and

serve as a maintenance cart for use in the field. RG Group built 10 of these easy to use

systems during the past 5 years.

