Your preferred and superior source for custom hydraulic cylinders & valves.
Energy® Manufacturing Company, Inc. is a leading manufacturer of custom and standard hydraulic cylinders and valves for original equipment manufacturers (OEMs) throughout North America. Founded in 1944, the company is headquartered in Monticello, Iowa, with over 115,000 square feet (10,685 m²) dedicated to the world-class design and manufacture of fluid power components. Since May 2004, Energy has been owned by its management along with a private equity group, thus enhancing service and responsiveness to its customers.

Strategically located in the nation’s heartland, close to many of its customers and important sources of raw materials and components, Energy® Manufacturing combines these advantages with the dedication and work ethic of a rural Midwestern community, providing its customers with:

- Excellent product quality
- Outstanding delivery
- Competitive pricing
- Strong engineering capabilities
- Superior customer service

Energy®’s track record has earned it a leading reputation among OEMs who seek the optimum combination of performance, reliability, value, and responsiveness. Today, Energy®’s products are found everywhere, on machines such as material handling equipment, on-highway trucks, grounds care equipment, aerial lifts, medical chairs and tables, forestry equipment, trash compactors and recycling balers, agricultural equipment, construction equipment, and many more.

In addition, some Energy® products are available to the aftermarket and end-user customers through Energy®’s website/online store, and several catalog houses and fluid power distributors.
Whatever your cylinder or valve needs may be, our experienced engineers offer a wealth of design and application expertise. We’ve worked with hundreds of customers and have thousands of successful designs behind us.

Our personnel listen to your requirements, and combine your needs with our capabilities and resources to provide the optimum solution for your specific equipment. Whether a standard, modified standard, or completely new design, you can count on Energy® to meet your performance and cost goals. Lead times for modified or custom-designed products are shortened by our CAD system, which uses the latest design and system dynamics software, thus speeding parts selection and design documentation. These tools also enable our adherence to the highest engineering practices, resulting in superior designs.

Detailed customer drawings are available in both hard copy and a variety of electronic formats, and are typically e-mailed, saving valuable time. Quotations with proposal drawings for both standard products and special products are then issued promptly.

Energy® Manufacturing offers you and your company with more than 65 years of experience in designing, manufacturing and applying cylinder and valve solutions to satisfy your particular needs.
TESTING

PRODUCT TESTING

Whether for custom orders or verifying a new addition to our standard product line, our test lab houses state-of-the-art controlled test equipment for life cycle testing, burst testing, mechanical load strength testing, and simulated field performance testing. Pressure and flow capabilities to 60 gpm (227 lpm) and 5,000 psig (345 bar), as well as mechanical loading capabilities to 60 tons (120,000 lbs. or 444,800 N) are an important resource, and assure sound design and proper material selection and construction.

MANUFACTURING

MANUFACTURING CAPABILITIES

Dedicated solely to the manufacture of top quality cylinders and valves, our Monticello, Iowa, plant layout and machining centers are configured for manufacturing and process flow efficiency, from raw material receiving to finished product shipment. Energy® Manufacturing maintains this centrally located, high-tech, well-tooled manufacturing facility in ideal proximity to key suppliers, thus enabling rapid response. This favorable cost structure, combined with our design, manufacturing, and quality assurance practices, assures you of outstanding product value.
DELIVERY
OUTSTANDING PRODUCT DELIVERY

Energy® has a documented history of delivery performance well above the industry standard. You can count on Energy® to supply the cylinders and valves you require, wherever and whenever you need them. Even small lot tie-rod cylinder and valve orders are filled from a closely monitored finished goods inventory that allows fast response to urgent needs. For scheduled orders, a history of on-time delivery in excess of 95% speaks for itself.

QUALITY
PRODUCT QUALITY

Energy® Manufacturing is an ISO9001:2008 (with design) registered company. Beyond our computerized machining, extensive inspection equipment, and stringent quality assurance monitoring practices, there is a pride within our people, who for generations in this rural area have shared an attitude of responsibility and customer care, and who do things right the first time. The goal for every Energy® product, from order to shipment, is zero defects in the end user’s application. And of course, just in case, all Energy® products are backed by an outstanding warranty against any potential defects in materials or workmanship.

SERVICE
CUSTOMER SERVICE

No one can match our ability to respond to your needs and deliver the products you require like we can. We’re specialists in cylinders and valves, and our history of proven performance shows that Energy® is committed to unmatched customer service. When you call Energy®, you’ll find our people receptive and responsive to your needs, and you can always expect a “customer-friendly” attitude.

We have a substantial range of standard or easily modified products in stock, ready to meet your needs. Or, for custom products, be sure to contact us early in your design, and we’ll respond with the optimum solution.

To sum it up, Energy® is your superior source for hydraulic cylinders, valves and accessories. Since you design your products to be the best, why not choose a company with the same high standards? Energy® Manufacturing Company, Inc.
A wide range of welded, tie-rod, and ram-type cylinders are available to satisfy virtually any hydraulic application or need:

**Custom & Standard Non-Rephasing Cylinders** – .625 inch (1.6 cm) to 11 inch (27.9 cm) bores – others available; strokes to 15 feet (4.57 m) – longer possible; single-acting, double-acting and RAM designs; working pressure capabilities up to 10,000 psig (690 bar); many end mechanisms, integral valves, and other options available:

- **CHD Series Welded Cylinders** – Threaded guide design; 5,000 psig (345 bar) working pressure capability – special designs available for working pressures up to 10,000 psig (690 bar).
- **CSR Series Welded Cylinders** – Round retaining ring guide design; 3,400 psig (235 bar) working pressure capability.
- **CYR Series Welded Cylinders** – Round retaining ring guide design; 3,400 psig (235 bar) working pressure capability.
- **CYL Series Welded Cylinders** – Snap ring guide design; 3,000 psig (207 bar) working pressure capability.
- **HPTR Series Cylinders** – Tie-rod design; 3,265 psig (225 bar) working pressure capability.

**Custom Rephasing Cylinders** – Rephasing cylinders are two or more cylinders plumbed in series or parallel, with the bores and rods sized such that all rods extend and/or retract equally when flow is directed to the first, or last, cylinder within the system.

In “parallel” applications, the bore and rod sizes are always the same, and the cylinders are always used in pairs. One cylinder will retract as the other cylinder extends, in synchronization. Such circuits are typically used for the steering function on machines.

In “series” applications, the bore and rod sizes are always different, and two or more cylinders may be used. In these applications, the bores and rods are sized such that all rods extend or retract equally when flow is applied to the first or last cylinder within the system.

This hydraulic synchronization of rod positions eliminates the need for a flow divider in the hydraulic system, or any type of mechanical connection between the cylinder rods to achieve synchronization. All double-acting Energy® cylinders can be modified to take advantage of these rephasing design benefits.

Please contact us for additional information regarding this technology.
VALVES

VALVES FOR A VARIETY OF CONTROL FUNCTIONS

We offer directional control valves and accessories for a wide range of operating pressures and applications.

Hydraulic Valves –

*CVA, DCVA, and CVR Series – Zero to 20 gpm (76 lpm) three-position four-way single-spool directional control valves rated for 2,500 psig (172 bar) working pressure. Available features include:

• Linear or rotary-type handle operators
• Wide variety of circuitry configurations
• Spring-return, spring-offset, and detent designs
• Inlet relief valve
• Hydraulic kickout
• SAE o-ring boss and NPTF ports

Selector Valve Series – Zero to 30 gpm (114 lpm) two-position three-way selector valves rated for 3,000 psig (207 bar) working pressure. Available features include:

• Knob or handle-type operators
• Wide variety of circuitry configurations
• Spring-offset and detent designs
• SAE o-ring boss and NPTF ports
A brand of quality products designed and produced by Energy® Manufacturing – choose from the following expanded range of components, systems, and technology to meet and exceed your everchanging hydraulic design needs...

**ELECTRIC POWER UNITS**
- DC (12 Volt & 24 Volt)
  - Cast Stack Design (Piston & Gear)
  - Aluminum Design (Gear)
  - Bi-Rotational (Gear)
  - Compact (Gear)
  - External EPU (Gear)
- AC (120 Volt & 240 Volt)

**DIRECT MOUNT PUMPS**
- Piston Pumps
- Gear Pumps
  - 900 Series
  - 1500 Series
  - Bi-Rotational Series

**VALVE OPTIONS**
- Manual Single and Double-Acting
- DO3 Single and Double-Acting
- Exclusive Recycle Valve in Manual and DO3 Versions

**VALVE / TANK**
- “M” Series
- “W” Series

**REMOTE DIRECTIONAL CONTROL VALVES**
- 1000/2000 Series
- Cartridge Stack Series

**CONTROLS**
- Manual Cable
- Electric Valve w/ Toggle
- Bonnet Style
- Air Shift

**GASOLINE POWERED HYDRAULIC UNIT**
- Light Duty
- Heavy Duty

**ACCESSORIES**
- Breather Caps
- Parts