



COMPANY PROFILE ///

AJAX-CECO-ERIE PRESS (ACE)

MOVING BEYOND FORGING

ACE Hot Bar Feed into solid die forging machine
The largest forging equipment supplier in North America offers a range of metal-forming machines, services, and support that can dramatically increase productivity. (Courtesy: ACE)

Ajax-CECO-Erie Press (ACE) offers a range of metal forming machines, services, and support that can assist in dramatically increasing production uptime as well as efficiency and productivity.

By **BILL GOODWIN**

In today's highly competitive market, businesses need equipment that can keep up with the demands of their operations. This is especially true for those in the manufacturing industry, where the quality of machinery directly affects production output and efficiency.

When experience and quality are crucial for manufacturers, OEMs with a long history in the industry like Ajax-CECO-Erie Press (ACE) play a vital role. With 145 years of experience in equipment manufacturing and more than 300 years of combined forging knowledge, ACE is considered the longest-running, most experienced forging company in the world.

Today, this supplier delivers a comprehensive array of machines, including upsetters, presses, programmable hammers, forging rolls, and automation solutions for materials such as carbon steels, aluminum, titanium, and super alloys.

BEYOND FORGING

However, due to numerous mergers and acquisitions over the past several decades, its product and support portfolio now extends far beyond forging. High-volume, specialty metal forming equipment is also offered, including compression molding, powder compacting, hot forming, superplastic forming, stretch forming, and contour roll forming.

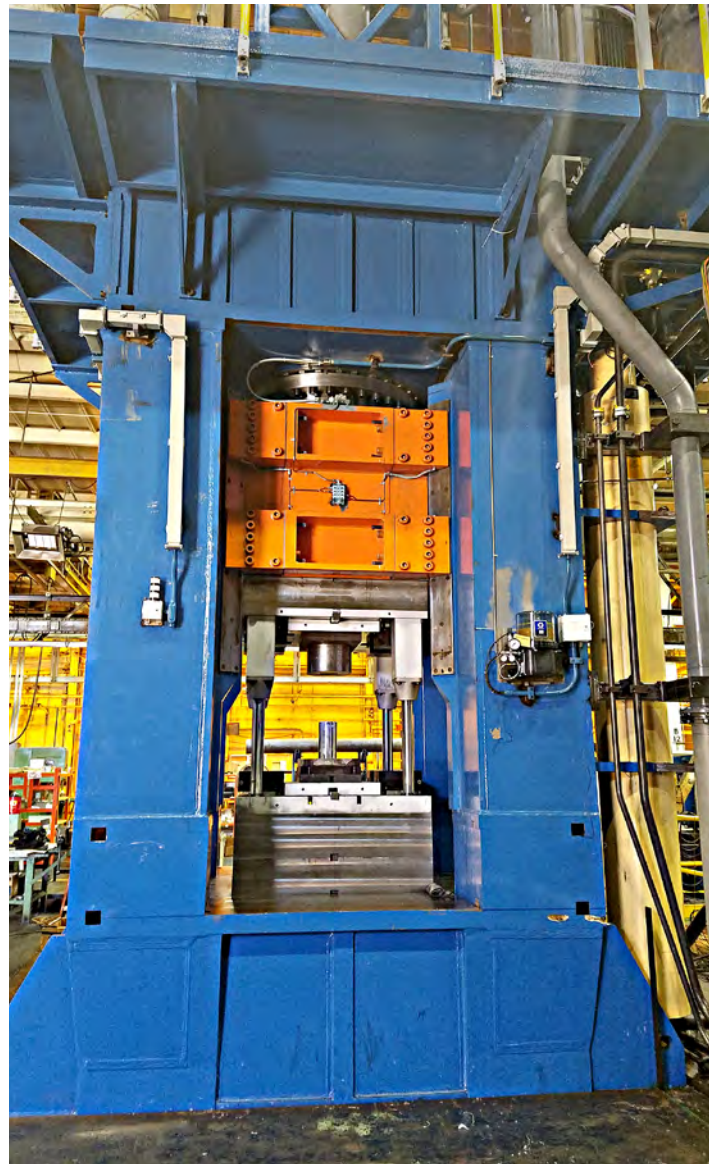
In 2005, Ajax, a forging equipment OEM since 1875, purchased the intellectual property of the Chambersburg Engineering Company (CECO), and in 2020, Park Ohio added Erie Press Systems to the group, expanding the range of custom hydraulic presses and legacy hammers supported.

These strategic moves streamlined maintenance and repair for manufacturers with equipment from any of the associated brands in their plants. With the combined resources, support response times have improved, and more field service technicians are available. Investment in research and development and new technology have also expanded.

Regardless of equipment type, most systems in this field must withstand extreme temperature and pressure. For manufacturers seeking to maximize machinery output, long-standing OEMs bring deep experience in building, maintaining, and upgrading specialized systems. There are shared practices across equipment lines aimed at helping manufacturers increase production speed, enhance safety, and reduce downtime.

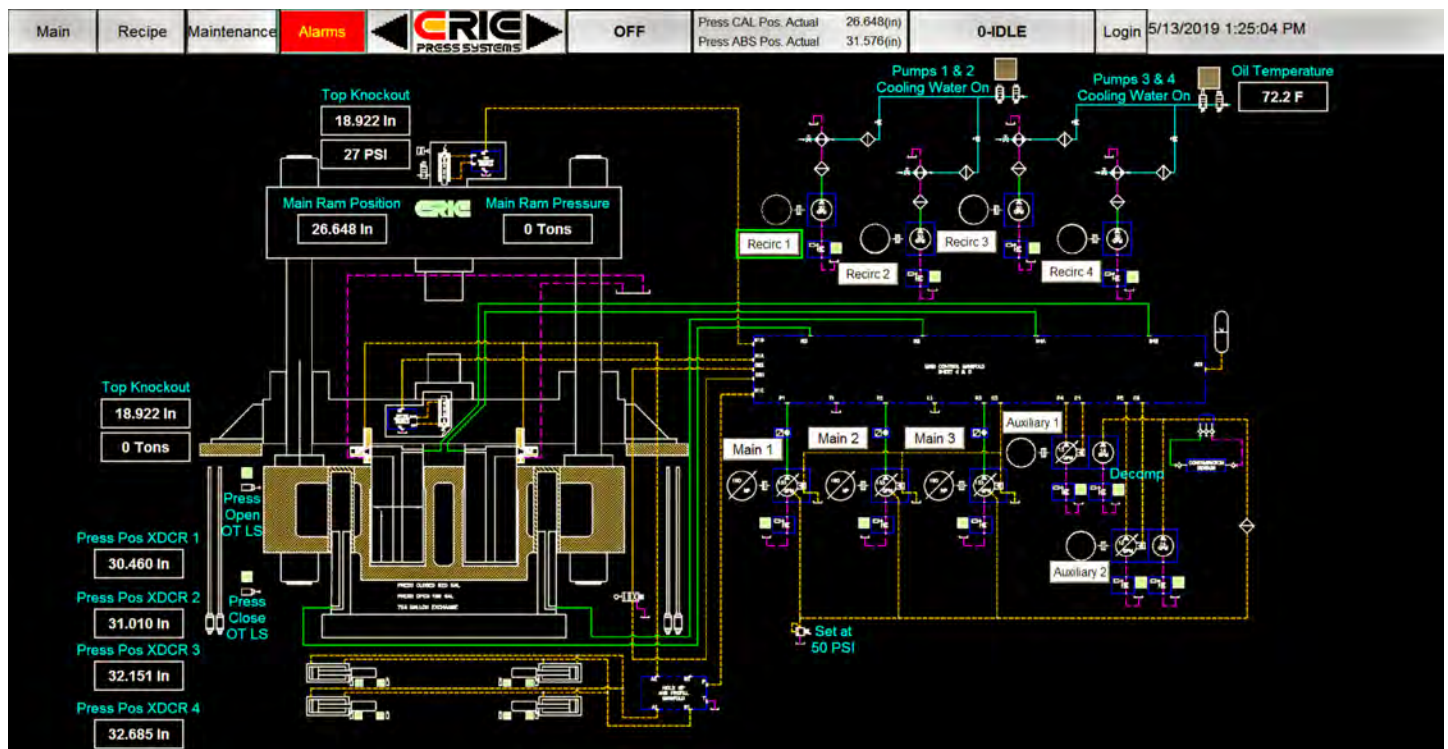
REPAIRING EXISTING UNITS

When wear and tear take its toll, the most immediate and economical option is to repair existing or out-of-commission units. This may involve replacing worn or broken parts to bring machines back to spec efficiently. To minimize downtime, many perishable items common to all machines are stocked in advance.



Manufacturers can benefit from working with an OEM that has expertise in manufacturing, maintaining, and upgrading a wide range of metal-forming machines. (Courtesy: ACE)

Complications arise when essential components date back decades and may no longer be in production or when manufacturers aren't sure whether original drawings even exist. In such cases, sending parts out to third-party machine shops for reverse engineering can lead to errors — especially when crucial details such as material grade, heat treatment, and tolerances are missing.



Touchscreen, menu-based HMIs can automate many equipment processes. (Courtesy: ACE)

To avoid such problems, some OEMs offer stocking programs for long-lead components such as main gears, eccentric shafts, and rams — parts customers rarely stock due to cost. Under these programs, the OEM holds the part in inventory while the customer pays a portion up front and the remainder upon use, even years later.

Customized stocking plans allow multiple machines with similar designs to have parts pre-manufactured to a semi-finished state, ready to be tailored to specific dimensions when needed — eliminating months of delay.

AUTOMATION

At experienced forging OEMs, automation is also playing a growing role in boosting manufacturing efficiency. Control consoles and material handling systems are now commonly upgraded to

automate part transport and loading/unloading. Robotic arms and servos have replaced repetitive manual tasks, increasing safety and production speed.

In addition, human-machine interfaces (HMIs) are transforming how operators monitor and control equipment. These graphical software tools replicate control panels and machine status, allowing users to observe operations on-site or remotely via smartphones, laptops, or PCs. Advanced HMIs offer dynamic schematics, animations, and trend data, enabling operators to compare actual performance to expected behavior.

Visual interfaces are especially helpful in training less experienced personnel as well. Live press positional and force data can be viewed as the machine transitions through the production cycle, and graphical windows into the control system allow quick identification of errors when something is out of sequence or stops unexpectedly.

In addition, touchscreen and menu-driven HMIs automate many routine tasks. Monitoring software also speeds diagnostics and allows remote troubleshooting and training support directly from the OEM.

NECESSARY TRAINING

As experienced workers retire, training for the next generation becomes critical. Augmented reality (AR) is now being used by OEMs to provide remote, real-time training and equipment support. These tools enable step-by-step guidance via video calls, image annotation, schematic sharing, and more — delivered through smartphones, tablets, PCs, or AR headsets. AR can accelerate issue resolution as much as 90 percent and cut training time in half.

When repairs are insufficient, rebuilding equipment is often a faster, lower-cost option than purchasing new. Rebuilds replace high-wear items such as bearings and bushings and restore the machine to working order. Frames and major components are inspected and repaired as needed, with work scopes tailored to customer needs. This reduces capital outlay while bringing equipment online in months, not years.



Tasks that were once performed manually are now automated to minimize the requirement of skilled labor while improving worker safety. (Courtesy: ACE)



ACE offers high-volume, specialty metal-forming machines including super plastic forming, hot forming, and stretch forming. (Courtesy: ACE)

ONSITE REBUILDS

Rebuilding can be performed at the OEM's site, on the manufacturer's floor, or with oversight of the in-house maintenance team — providing training and operational insights in the process.

Without access to original engineering data, independent rebuilders risk installing suboptimal or mismatched parts. Even minor changes in material can shorten machine life dramatically due to the high mechanical loads involved. OEMs with design archives can supply original specs and custom parts — even for machinery as old as 50 years.

In some cases, full remanufacture is required. This process strips machines down to the cast frame and replaces internal components, avoiding the delays of casting a new frame. Remanufacture is typically completed faster than buying new, at about 85 to 90 percent of the cost, and often includes a new equipment warranty.

With unmatched access to legacy documentation and deep technical expertise, established OEMs remain essential partners for manufacturers needing to maintain production continuity, enhance safety, and keep aging equipment in top working condition. 🔥

ABOUT THE AUTHOR

Bill Goodwin is vice president of Sales and Engineering, Ajax-CECO-Erie Press (ACE), the largest forging equipment supplier in North America. Formed through the merger of Ajax, CECO, and Erie Press, the company provides forging and specialty metal forming machinery, service, and support backed by more than 300 years of combined industry experience. More info: www.AjaxErie.com

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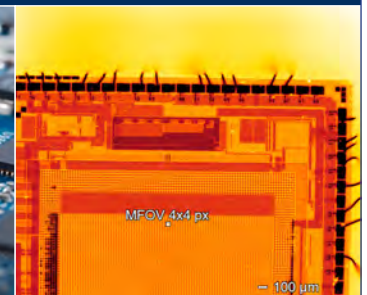
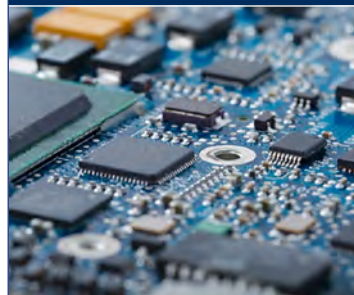
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