Experience in Metal Forming

AJAX MANUFACTURING AND FORGING DEVELOPMENTS INTERNATIONAL TRADING AS

AJAX TECHNOLOGIES
A DIVISION OF PARK OHIO TRANSPORTATION GROUP
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**We are AJAX**

Located in Cleveland, Ohio, U.S.A., The Ajax Manufacturing Company has pioneered in the design and manufacture of forging machinery since 1875. Since its inception Ajax has built over 6,000 machines of all types and has earned worldwide respect as a manufacturer of highly reliable, well designed and engineered forging machinery.

In recent years Ajax has expanded its engineering efforts in the wire drawing field, plus introducing a line of free standing shears and a line of versatile Wide Ram Presses. Product improvements and efforts to modify designs to fit customer needs are made constantly. You are encouraged to discuss your own production requirements with Ajax at any time, either at the factory offices in Cleveland, or in your plant.

**Computer Numerically Controlled (CNC) Vertical Boring Mill**
- Capable of turning parts up to 51" in diameter.

**Adjustable Rail Planer Mill**
- Used for accurate machining of castings, forgings and weldments weighing up to 126,000 lbs. each.

**Bottom Right:**
- Horizontal Floor Type Boring and Milling Machine for milling and boring of massive work pieces.

**Bottom Left:**
- Main Assembly Bay with 150 Ton Overhead Crane.
Ajax Forging Machines (horizontal upsetters) are manufactured in sizes ranging from 1" to 10" capacity. Both hot and cold material can be upset or extruded, depending on the adaptability of the forging design. Fully automatic transfer mechanisms can be specially designed and built for forgings that are suited to automatic production.

Ajax Tube Upsetters are built in sizes from 3½" to 13½" capacity. Specifically designed for upsetting tubing (such as API oil country tubes), these upsetters can have stock gauging and pre-clamping built-in. They are easily adapted to a fully automated process line.
AJAX Forging Presses are produced in sizes from 300 tons to 8,000 tons capacity. These high-speed mechanical forging presses feature the solid one-piece steel frame design that has proven rugged and dependable for so many years. Hot, warm, or cold forging can be performed, depending on suitable application. Special presses are available for semi or fully automatic operation.
Ajax Wide Bed Twin Pitman Forging Presses fulfill an industry requirement, allowing for in-line forging, often including the trim operation within the press. This encourages higher production through maximum operator utilization. These presses feature the solid one-piece steel frame design and incorporates all the other features of the standard line of forging presses.

An addition to the Ajax Forging equipment line, the newly developed Wide Ram Four Point Press provides for controlled parallel ram motion and an exceptionally large die seat and ram working area. This facilitates the positioning of multi-operation tooling, side by side. Built in sizes from 150 tons to 1,000 tons capacity, they were developed to combine versatility, compatibility and reliability. In addition to general forging, these presses are suitable for auxiliary forging operations including preforming, extrusion, setting, hot coining, trimming and piercing to complement closed or open die units.
AJAX-HOGUE WIRE DRAWERS

Ajax-Hogue Wire Drawers are used in conjunction with cold headers, parts formers, presses and other cold fabricating machines to cold draw hot rolled rod in coils. Built in sizes a to 8, their capacities extend from 1/8" to 2" diameter alloy rod.

Ajax Draw, Straighten and Cut-Off Machines transform hot rolled rod from coils to accurately sized cold drawn stock. The machine produces straight finished drawn and cut off blanks automatically to predetermined lengths. Built in sizes #4 to #6, diameter 1/4" through 1 1/4" alloy steel. Cut-off lengths with stock gage 8" to 72" — longer lengths possible to suit customer requirements.

Ajax Draw and Cut-off Machines are custom made to suit customers application. Built in sizes 0 to 8, diameters 1/8" to 2". Can be used in conjunction with Instacut.

Ajax Continuous Drawing Machines draw hot rolled straight bar stock at high speeds. Built in sizes 3 to 8, diameters 1/2" to 2". This design can be built with the addition of a moving cut-off so that hot rolled coils can be drawn and cut into straight bar lengths.

The Ajax-Hogue Wire Drawer was originally designed as an attachment for cold headers to cold draw hot rolled rod. Further expansion of the basic Ajax-Hogue wire drawing concept through new development and innovation have produced a line of Draw, Straighten & Cutoff Machines, Self Powered Wire Drawers, Continuous Bar Drawers and other specialized drawing machines.

Today's wire drawers are built in sizes from No. 0 to No. 8, with capacities ranging from 1/4" diameter to 2" diameter alloy steel rod. Additional capabilities include the drawing of shaped materials (round, square or hex).

Ajax drawers have been attached to a wide assortment of wire forming machines such as high speed headers, boltmakers, chain machines, presses and shear devices.

Listed below are the 4 main types of drawing machines manufactured by Ajax:

1. Ajax-Hogue Wire Drawers are used in conjunction with cold headers, parts formers, presses and other cold fabricating machines to cold draw hot rolled rod in coils. Built in sizes 0 to 8, their capacities extend from 1/8" to 2" diameter alloy rod.

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4. Ajax Continuous Drawing Machines draw hot rolled straight bar stock at high speeds. Built in sizes 3 to 8, diameters 1/2" to 2". This design can be built with the addition of a moving cut-off so that hot rolled coils can be drawn and cut into straight bar lengths.
The Ajax "Instacut," a freestanding shear, produces high quality sheared blanks at high production rates. Hot rolled or cold drawn bars up to 3" diameter, in a variety of shapes...square, hex or round...in medium or high carbon steel, alloy steel, aluminum, or most non-ferrous materials can be sheared in the Ajax Instacut. The addition of the automatic feeder unit, allows precise length control for a wide range of blank lengths.

The Instacut can also be used in-line with an Ajax-Hogue Wire Drawer to form an ideal process for the high speed production of drawn, sheared blanks or bars from hot rolled rod.

Ajax Wide Adjustment Forging Rolls are designed to produce and perform a great variety of straight and tapered forgings. Forgings rolls are built in sizes from No. 0 to No. 6, with capacities for rolling from 1 1/2" to 7" round corner square stock. Available designs include wide segmental roll dies between two housings and full cylindrical dies mounted outside the roll housing. Uses range from preforming of blanks to finish forming of coil or leaf springs.

Full automation is available for the complete line of Ajax Forging Rolls.
Specialty Services

CONTRACT MACHINING
- 140,000 sq. ft. of manufacturing space
- 400,000 lb. lifting capacity
- Up to 8" horizontal boring capacity
- CNC Vertical Turning
- Vertical Turning Center

MACHINERY UPGRADES
- New Forging Machine Controls
- Forging Presses (all makes)
- Hydraulic Presses
- Plastic Injection Molding Machines
- Rubber Injection Molding
- Trim Presses
- Rolling Machines
- Upsetters & Forging Machines
- Forging Hammers

SPARE PARTS
- Comprehensive technical records
- Wide range of parts in inventory
- Quick turn around for emergency repairs

SERVICE
- Dedicated Customer Service Managers
- Equipment Surveys
- Planned Maintenance Training
- Emergency Repairs
- Skilled Technicians

CONSULTING
- Training Seminars
- Evaluations
- Feasibility Studies

A 2500 Ton Rebuilt Forging Press

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