

See poster inside
for detailed diagram of
how aluminum is produced.

ENGINEERING INNOVATIONS

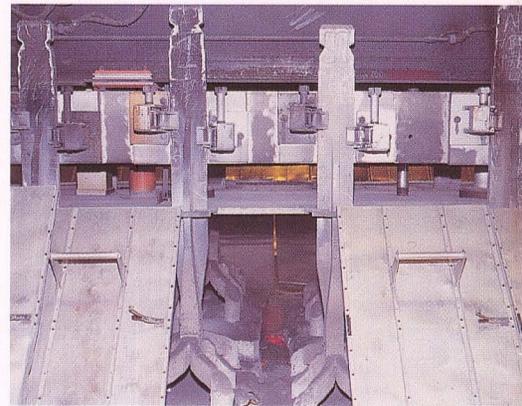
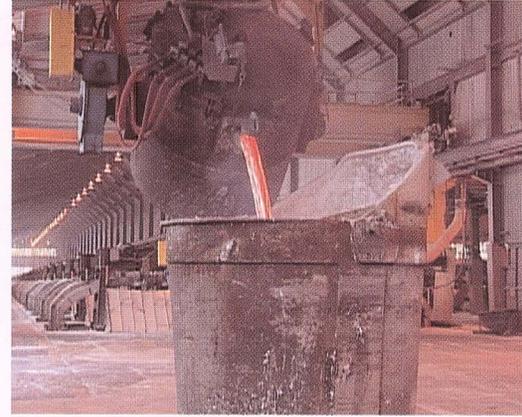
Eastalco is continually seeking new methods for producing the highest quality aluminum with greater efficiency. Throughout Eastalco's history, a number of the company's technical innovations have contributed to the raising of industry standards.

Cryolite, the electrolytic solution in which aluminum is separated from oxygen, becomes a solid at room temperature. In the early days of aluminum reduction, the hard cryolite crust that formed atop electrolytic pots had to be broken with hand pokers. In the 1940s pneumatic breakers were adopted for the task of crust breaking. In the 1970s, Eastalco became one of two plants in the world to use a semi-gantry crane to break and feed the cells. Advances in computer controls enabled the semi-gantries to operate with increased efficiency.

In the effort to continually upgrade the plant, Eastalco has converted from side-work to center-work technology. Previously, a semi-gantry crane raised the pot's hoods, broke the crust and fed alumina into the sides of the cell. In the center-feed system, each pot has its own crustbreakers and alumina feeders. Center feed is more efficient because computers control precisely when and how much alumina should be fed into the pots, thereby achieving a more stable electrolytic chemistry. Because the hoods remain intact during the break and feed process, pot-hooding efficiency is improved as well.

We welcome your interest and inquiries about Eastalco Works' operations and products. For further information, write or call:

Public and Government Affairs Office
Alcoa Eastalco Works
5601 Manor Woods Road
Frederick, Maryland 21703
(301) 696-1694



Top right: After the reduction process, the molten aluminum is held in these ladles for transport to cast house.

Center: A look inside the reduction cell where electricity generates temperatures of 960°C or higher.

Bottom right: T-ingots stacked and ready for shipment to Alcoa's customers.



UNION-MANAGEMENT TEAM AT EASTALCO

Bargaining unit employees are represented by the United Steelworkers of America AFL-CIO Local 7886. Both the management and the local steelworkers' union have entered into a partnership agreement to jointly improve worker participation in plant operations through empowerment and teamwork concepts.

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