Armco's Outlook For Ashland

by C. W. Verity, Jr.

Armco Steel Corp.'s Ashland Works has historically played an important role in the development and progress of the company. Located along the Ohio River in northeastern Kentucky, "where coal meets iron," Ashland Works enjoys the benefits of geographical proximity to raw materials and customers.

In 1923, two years after acquisition of the Ashland plant, Armco developed there the steel industry's first successful continuous rolling mill. This breakthrough, which ranks as one of the most significant technological advances in the industry, led to the nationwide construction of similar mills which resulted in low-priced steel sheets and means of manufacturing consumer products from them.

The urgency of production during World War II and the ensuing postwar clamor for steel industry products took a heavy toll at the Kentucky plant. By 1950, the Ashland Works was showing signs of fatigue. With its geographical advantages of river transportation, closeness to the coal fields, and location near good customers, the Ashland Works was too valuable a property for Armco to let it slide into decline.

In the early 1950's, a capital improvement and modernization program for the Ashland Works, with an investment of approximately \$145 million, was announced and started. This long-range program called for additional facilities to keep the plant competitive in its product lines, especially the production of hot-rolled sheets. Included in this program were: construction of a large, new blast fur-

nace and modernization of the existing Bellefonte blast furnace; construction of a new steelmaking shop; construction of new finishing facilities; and extensive modernization of existing melting, rolling, and finishing facilities. The program contained strong emphasis on quality control, as exemplified by the construction of the high-speed continuous pickling line which produces scratch and bind-free pickled strip in an extremely tight-wound coil.

The result of the program, soon to be completed, will be a nearly 80% newly constructed and modernized Ashland Works, capable of upholding its role as one of Armco's major producers.

The completion of Amanda, the noncommunist world's largest blast furnace, in late 1963, and the rebuild and modernization of Bellefonte blast furnace in the spring of 1964, gave Ashland a tremendous ironmaking potential. Bellefonte furnace is one of the first production blast furnaces in the American steel industry to utilize pulverized coal injection. Ashland's eight oxygen-equipped open-hearth furnaces and its two-vessel LD basic oxygen steelmaking shop have a combined annual capacity of more than 2.4 million tons.

This summer the plant assumed the responsibility for production and shipment of semi-finished steel for Armco's pipemaking facility at Ambridge, Pa. The Ambridge plant formerly received its semi-finished stock from an outside producer.

Future plans for the Ashland Works include additional processing and finishing facilities which will result in a more fully integrated operation along the Ohio River.

Ashland Works will soon take its place as an important corner of the steelmaking triangle that also involves the plants at Middletown, Ohio, and Butler, Pa. Under the plan, each plant will specialize in the production of those steels tailored to the advantageous market locations within the plant's area. Increased emphasis has been placed on the production and sale of high-quality, hot-rolled steels, a product which the Ashland Works is readily capable and qualified to produce, as well as on certain cold-rolled grades and coated sheets and strip.

While Ashland's Amanda furnace, specifically designed for operation with a 100% beneficiated burden, Bellefonte blast furnace with its new coal injection system, and the LD basic oxygen steelmaking plant, are all production facilities, they also are serving Armco as full-scale research tools. The information gleaned from these modern operations is being used by Armco for the design of equally and possibly more modern and efficient facilities at other locations. So, although the major part of Ashland's capital improvement program is history, the story of the Kentucky plant's contribution to the growth and progress of Armco has just begun.

Photo by L. K. Henderson.

C. W. VERITY, JR., is vice president, Armco Steel Corp., Middletown, Ohio.