## NEW SENDZIMIR TECHNOLOGY ASSURES OPTIMUM STRIP QUALITY AT ARMCO

Armco Inc.'s Coshocton Operations has once again invested in Sendzimir equipment. The company has just modernized its first Z-high, installed in 1981, to meet the design specifications of its second Z-high, installed in 1997. "The new design incorporates computerized pass-line and side-support beam adjustment", says Kerry Fender, General Supervisor - Cold Rolling, Armco Coshocton Operations. "This enables operations to make accurate adjustments, assuring optimum strip quality for our customers."

Z-high insert changes are now particularly easy at Coshocton because the lateral adjustment mechanism is attached to the mill housing instead of the Z-high cartridge, thus minimizing the number of hydraulic connections and reducing the cost of spare Z-high inserts. "The old shim and overload system have also been replaced with an automatic roll-diameter compensation system", says Leszek Skulski, Sendzimir's technical representative. "This upgrade, plus the quick work roll change capability of Sendzimir products in general, has maximized Coshocton's ability to maintain top-quality finishes while eliminating the need for a large inventory of work rolls and with reduced downtime." The increased stiffness of the side support beams also allows Coshocton to increase speeds of the mill without affecting strip quality.

Coshocton produces 18 to 50 inch-wide bright-finish stainless at final gauges down to 0.010" from 0.250" starting thickness. The Z-highs, which are both retrofits of existing 4-highs, are providing the flexibility, performance, and quality control necessary to produce consistency top-quality product on a three-shift, 24-hour day.

The Z-high retrofits have cut Armco's costs as well as improved production, with minimal capital investment. The 4-highs required that the work roll be changed every time the strip width changed; with the Z-high, the same effect is accomplished through lateral adjustment of the intermediate rolls. Grinding the 4-high work rolls was a time-consuming, expensive process; on the Z-high, small, chockless work rolls enable much faster regrinding. Moreover, the Z-high's quick roll changes and high-quality, tougher roll materials ensure the strip's consistently high surface finish and color, which is critical to Coshocton's business.

T. Sendzimir, Inc., acted as prime contractor. "Installation was accomplished within a time-critical schedule, and the equipment is producing as expected", says Skulski.