# INDEPENDENT CEMENT CLINKER SILO

#### **Owner**

Independent Cement Corporation

#### Size/Capacity

30,000 tons

## **Completion Time**

Civil - 6 months Mechanical - 5 months

## Younglove's Services

- General construction
- Construction management
- Slipform concrete construction
- Equipment installation

## Hagerstown, Maryland

This 98-foot-diameter by 148-foot-tall silo required 16-inch thick walls with hoop reinforcing on the inside face, outside face, and in the center. The heavy reinforcing was required not only because of the large diameter of the silo, but also because clinker is roughly twice as dense as grain. Approximately 2,700 cubic yards of concrete went into the foundation, not including concrete for the mud slab, which evened up the rock surface below. A total of 104 tons of steel supported the roof deck in truss fashion, which also encompassed the penthouse structural.

The mechanical included some renovation and the modification of a two-way tripper into a three-way tripper. A belt conveyor extended from the tripper to a 250-ton-per-hour bucket elevator. Reclaim was via vibratory feeders and a belt conveyor. Work-hardened Triten steel was used for liner plates.



