

Facility Engineering Services Project Profile



Project Name: Sugar Camp Energy

Client: Hoffmann, Inc, Sugar Camp Energy

Project Location: Macendonia, IL



Project Description:

Facility Engineering Services was called on to design a 200 ft tall by 66 ft diameter coal silo in a high seismic zone in southern IL. A Key design feature included concentrically discharged the coal using expanded flow, to provide the benefits of mass flow without the high switching forces. The elevated floor was 5 feet thick and the silo walls were 12" thick. Other features include large diameter columns and heavy beam framing to support the floor. Equipment access platforms were designed at various levels of the silo.

Design Issues:

This silo was constructed using the jump form method. The heavy floor beams were placed after the walls were formed. They were lifted into place and slid into large beam pockets at their associated levels.

Benefits:

Facility Engineering Services provided sensible and economical solutions for the High Seismic Zone forces and provided a design that satisfied the contractor and owners need for mass flow discharge.