

Hanson Pipe & Products Houston Pipe Plant Project

Focused improvement in efficiency, reliability, and quality was the objective.

Hanson Pipe & Products, Houston Pipe Plant, turned to Advanced Concrete Technology to make improvements in production efficiency and quality at what is a critical facility for this leading manufacturer of dry-cast concrete pipe. Just as with Hanson's neighboring Houston Precast Plant, ACT delivered a turnkey mixing and batching solution that got the plant up and running reliably at capacity faster than alternative solutions.



MobilMat Mo 110 Mixing/Batching Plant

Project Highlights

- *Efficient, compact foot print in a turnkey plant designed for increased output and quality.*
- *Maximum continuous 140 tons/hour continuous production capacity, with mixer cycle time of 2.5 minutes per batch.*
- *Automatic mixer cleaning system with 10 minute cleaning cycle reduces labor for end of day clean-up and extends production time.*
- *Galvanized dual cone aggregate batching gates for precision fast/slow feed aggregate batching onto 40" wide weigh belt.*
- *Windows-based, unattended PCS Control provides comprehensive production statistics and documentation. PCS Control stores production statistics for life on the hard drive for easy recall.*
- *Automatic metering for up to 4 admixtures.*
- *Ground mounted dust collection system makes for easy and safe access for maintenance, and provides 4000 CFM for silo and mixer, with automatic recycling of reclaimed dust to the fly ash silo.*



WE ADD PROFITABILITY TO THE MIX.



Aggregate Material Handling

Hanson Houston Pipe Specs

Single MobilMat Mo110/4-PCS with Wiggert HPGM 3750 planetary countercurrent mixer serving a dry cast Hawkeye PipePro96 Machine. Mixer cycle time is 2.5 minutes per batch continuous production, allowing time for automatic HydroMat microwave water correction.

4 Compartment aggregate bins, with maximum capacity of 460 tons of aggregates are charged by an automatic material handling system directly from dual ground mounted truck dump hoppers.

Automatic mixer cleaning system with 10 minute cleaning cycle.

Two 550 BBL Silos for cement and fly ash installed inside building, with anti-overfill system and 0-100% continuous level indication.

Windows-based PCS Computer Control system is fully automatic for truly unattended operation. Concrete production is automatically initiated by the Hawkeye on an as needed basis.

Automatic Admixture metering system, providing extremely accurate dosing.

HydroMat mixer probes automatically adjust batch water to maintain perfect consistent W/C ratio of each batch even with varying aggregate moisture.

Hydrotester aggregate bin probes automatically adjust batch weight in order to compensate for aggregate moisture and to maintain batch yield.

The MobilMat Mo 110 from ACT delivers for Hanson.



PCS Windows-based Control



The team at ACT designed an extremely efficient high output solution to fit into Hanson's state of the art plant with an exceptionally compact footprint. The MobilMat Mo110/4-PCS with a single 3 CuYd/batch HPGM 3750 high intensity planetary countercurrent mixer, has one discharge gate that delivers a maximum continuous 140 tons/hour dry-cast production capacity. A second discharge gate facilitates end of the day mixer cleanout. The plant serves a dry cast Hawkeye PipePro96 machine. The ACT plant was factory pre-assembled, pre-wired, pre-plumbed and tested before shipping, dramatically reducing time to install and setup on site. As usual, perfect dry cast concrete was produced with the very first batch.

