

# Hanson Pipe & Products Houston Precast Project

## Time for growth and greater efficiency.

One of the country's most well known and diversified manufacturers of concrete pipe and precast products needed to increase production capacity and efficiency while maintaining the quality of product. Hanson turned to the turnkey mixing and batching plant experts at ACT for a plant that could not only be designed and constructed to their specifications, but tested prior to shipping to the site for fast trouble free startup.



MobilMat Mo 110 Mixing/Batching Plant

## Project Highlights

- *Efficient, compact footprint in a turnkey plant designed for increased output and quality, especially with supplying demanding SCC concrete mix designs.*
- *Maximum SCC Concrete production capacity of 60 CuYd/hour, allowing time for automatic HydroMat microwave water correction and SCC chemical reaction time.*
- *Automatic mixer cleaning system with 10 minute cleaning cycle saves end of day mixer cleanup time.*
- *Automatic concrete flying bucket delivery system saves labor and allows bridge cranes to remain productive with setting up and stripping operations, even while casting and setup of operations in neighboring bays.*
- *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.*
- *User friendly Windows-based, PCS Control system is designed for unattended automatic operation. PCS Control stores detailed production statistics for life on the hard drive, for easy recall. Manual pushbutton panel standard for back-up. Multiple Language interface available (English/Spanish). Customer support available with remote on-line assistance capabilities.*



WE ADD PROFITABILITY TO THE MIX.



Flying Bucket

## Hanson Houston Precast Specs

Single MobilMat Mo110/4-PCS with Wiggert HPGM 3750, 3CuYd high intensity planetary countercurrent mixer serving multiple production operations.

ACT Flying Bucket delivery system with integrated traveling discharge chute having a maximum travel speed of 400 ft/minute and 90 cu.ft. geometric capacity. Flying bucket serves 4 concrete call stations along the crane way. Additional call stations can easily be added in the future. For added plant flexibility a swing chute charges a 3 CuYd crane bucket for large products, staged close to the mixer platform. A Tucker transport vehicle can be charged from a second discharge gate.

4 Compartment aggregate bins, with maximum capacity of 460 tons of aggregates are charged by automatic material handling system.

550 BBL Silo for cement and fly ash.

Windows-based PCS Computer Control system is fully automatic for truly unattended operation.

Automatic mixer cleaning system for 10 minute cleaning cycle. HydroMat mixer probes automatically adjust batch water to maintain consistent W/C ratio of each batch.

Hydrotester aggregate bin probes automatically adjust batch weight to compensate for aggregate moisture.

**MobilMat from ACT delivers labor savings and increases plant output.**



MobilMat Mo 110 Mixer Platform



PCS Windows-based Control

The team at ACT designed a compact, turnkey plant that fit into Hanson's state of the art production building, capable of 90 CuYd/hour wet cast production. The plant features the 3 CuYd/batch HPGM 3750 high intensity planetary countercurrent mixer with two discharge gates. An ACT flying bucket delivery system serves four concrete call stations along the crane way, and a 6 CuYd Tucker is charged directly from a second mixer discharge gate. The plant was factory pre-assembled, pre-wired, pre-plumbed and tested before shipping, dramatically reducing time to install and setup on site. ACT service engineers commissioned the plant with perfect concrete produced first batch. Plant operators were comprehensively trained during the one week startup period.



Admixture Weigh Scale

