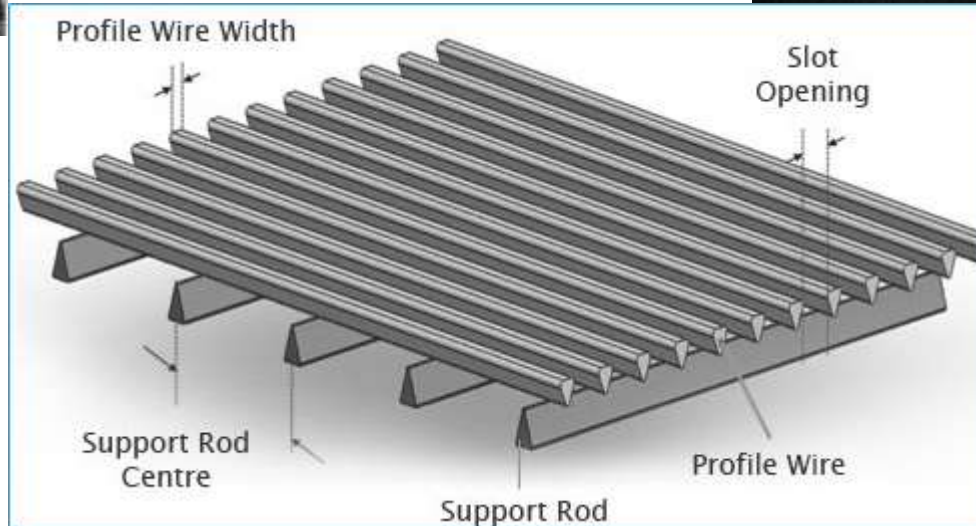
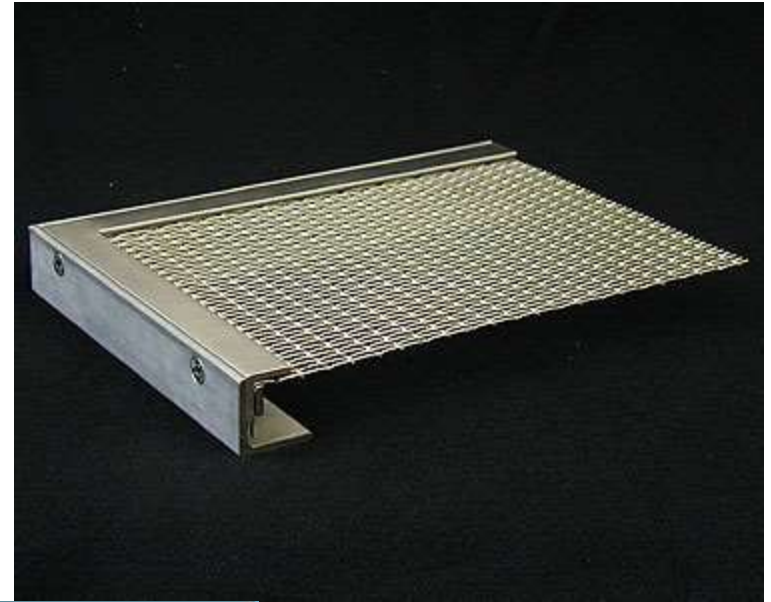
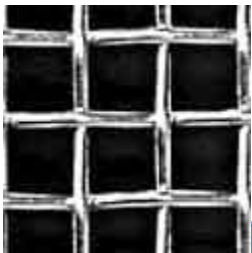




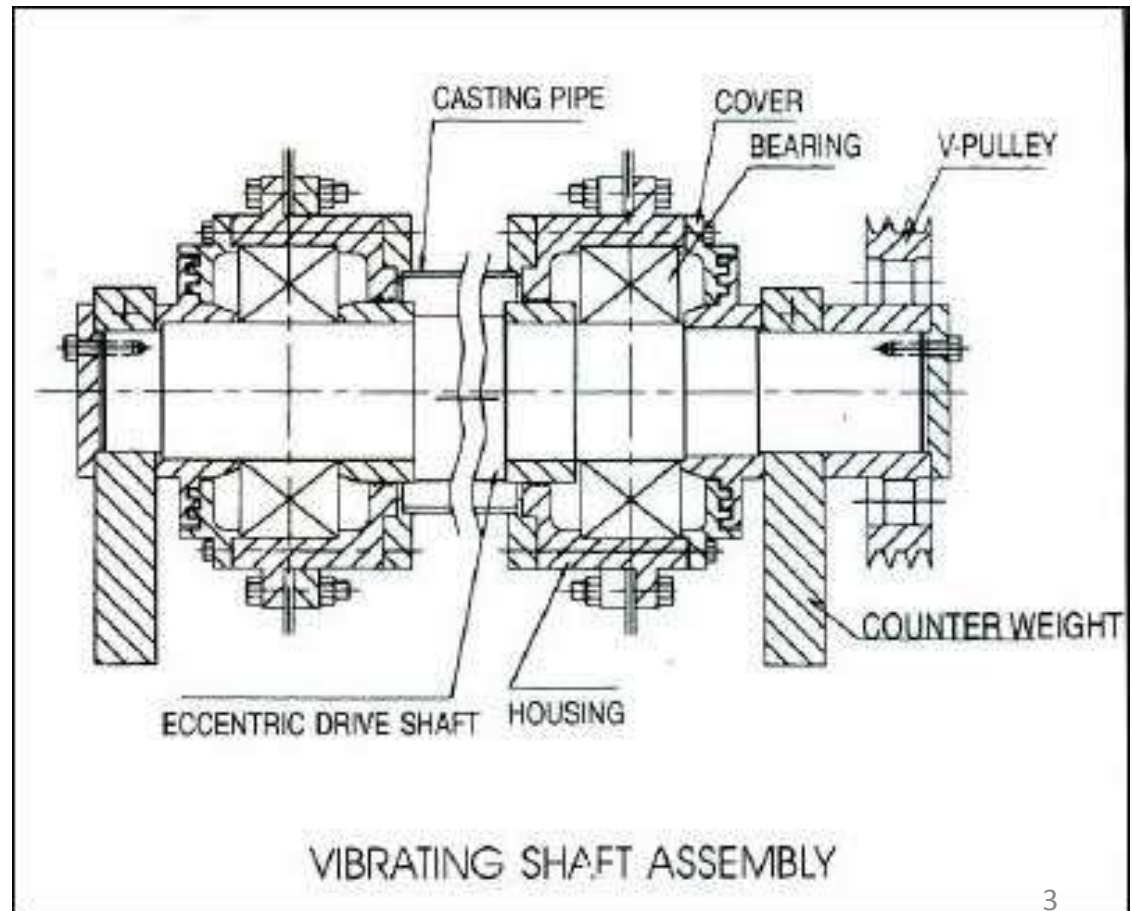
Coking & CatCracking Safety Seminar,
Galveston, TX, May 2013

**Safe, Automated, Pet Coke
Dewatering**

Antiquated Dewatering Screen Technology



Old Screen Technology Incorporating Brute Force Drives



Star-Stop Transient Response

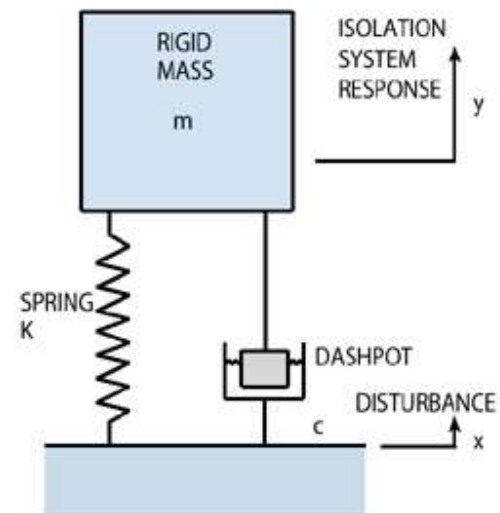


FIGURE 42.1
Typical Isolator Represented as a Mass, Spring and Dashpot

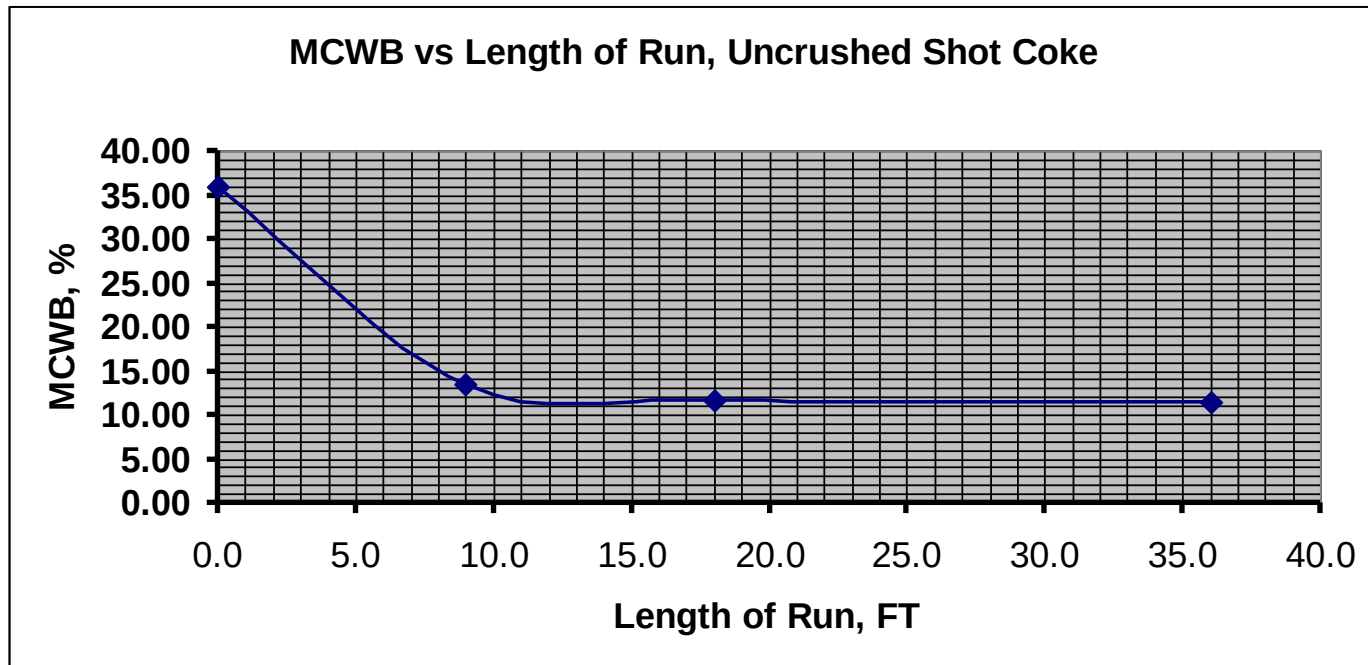
Initial GKC Lab Work



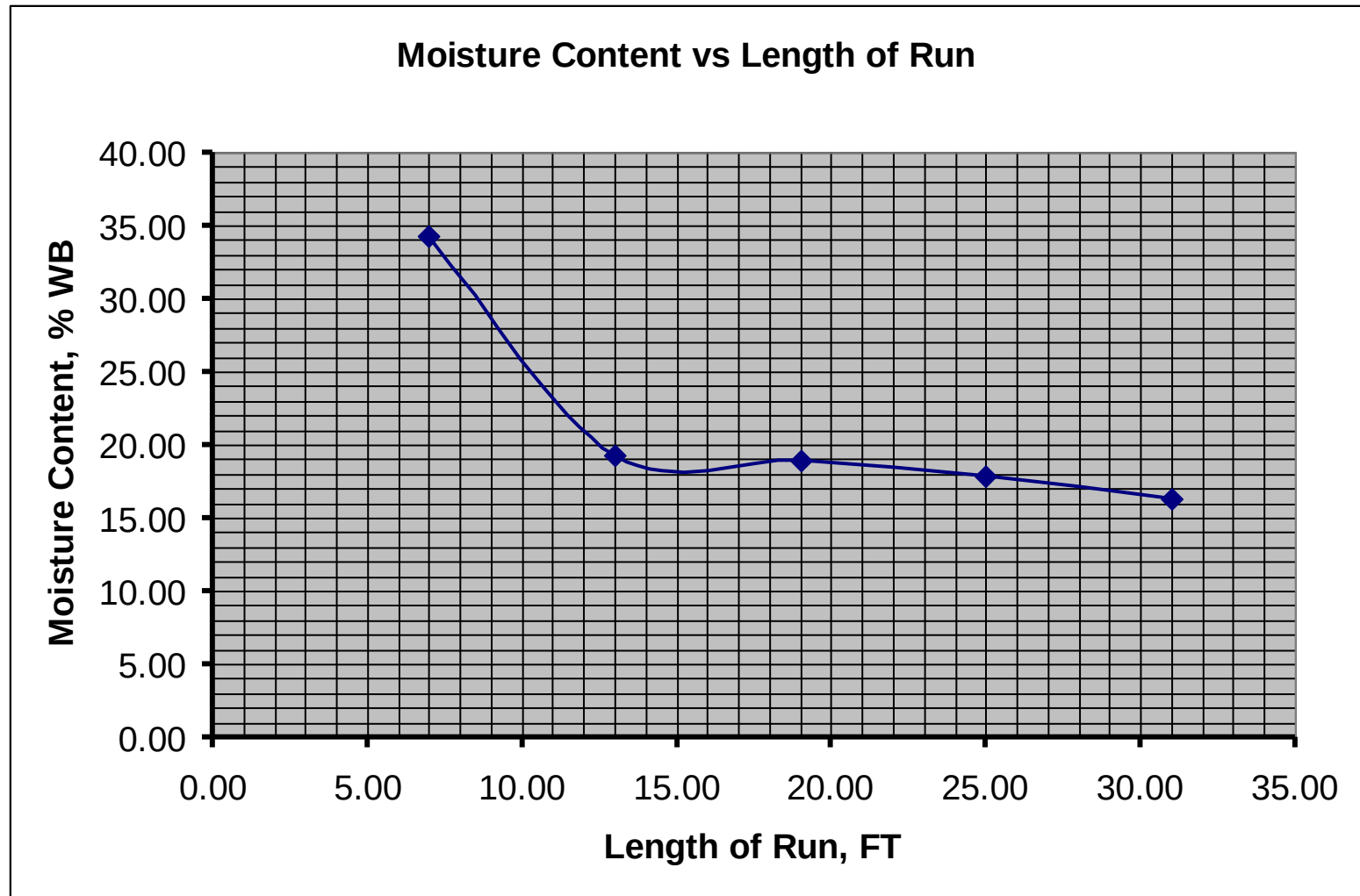
GKC Lab Dewatering



Uncrushed Shot Coke



Crushed Sponge Coke



Savage Port Arthur PabTex Field Work



Savage PabTex Sluiceway Slurry Feed Simulation



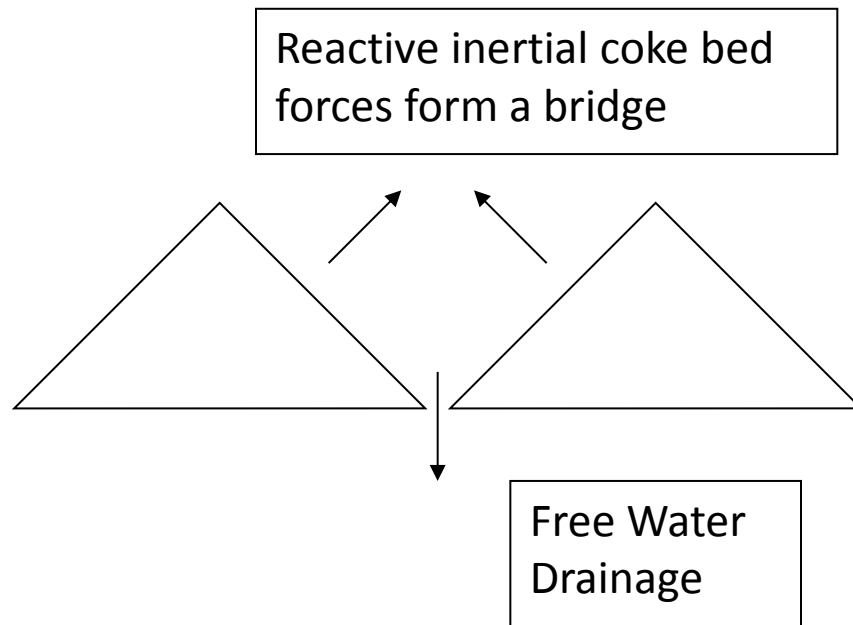
Savage El Dorado Production Unit in GKC Shop



DEWATERING DECK



Material Bridge Formation





GKC Non-Blinding, Patented Dewatering Deck Construction





GKC Natural Frequency Technology



Rotating Unbalance Drive



Soft, Low Frequency Vibration Isolation Springs



Stationary, Track Mounted, or Carriage Car Arrangements



El Dorado Field Demonstration

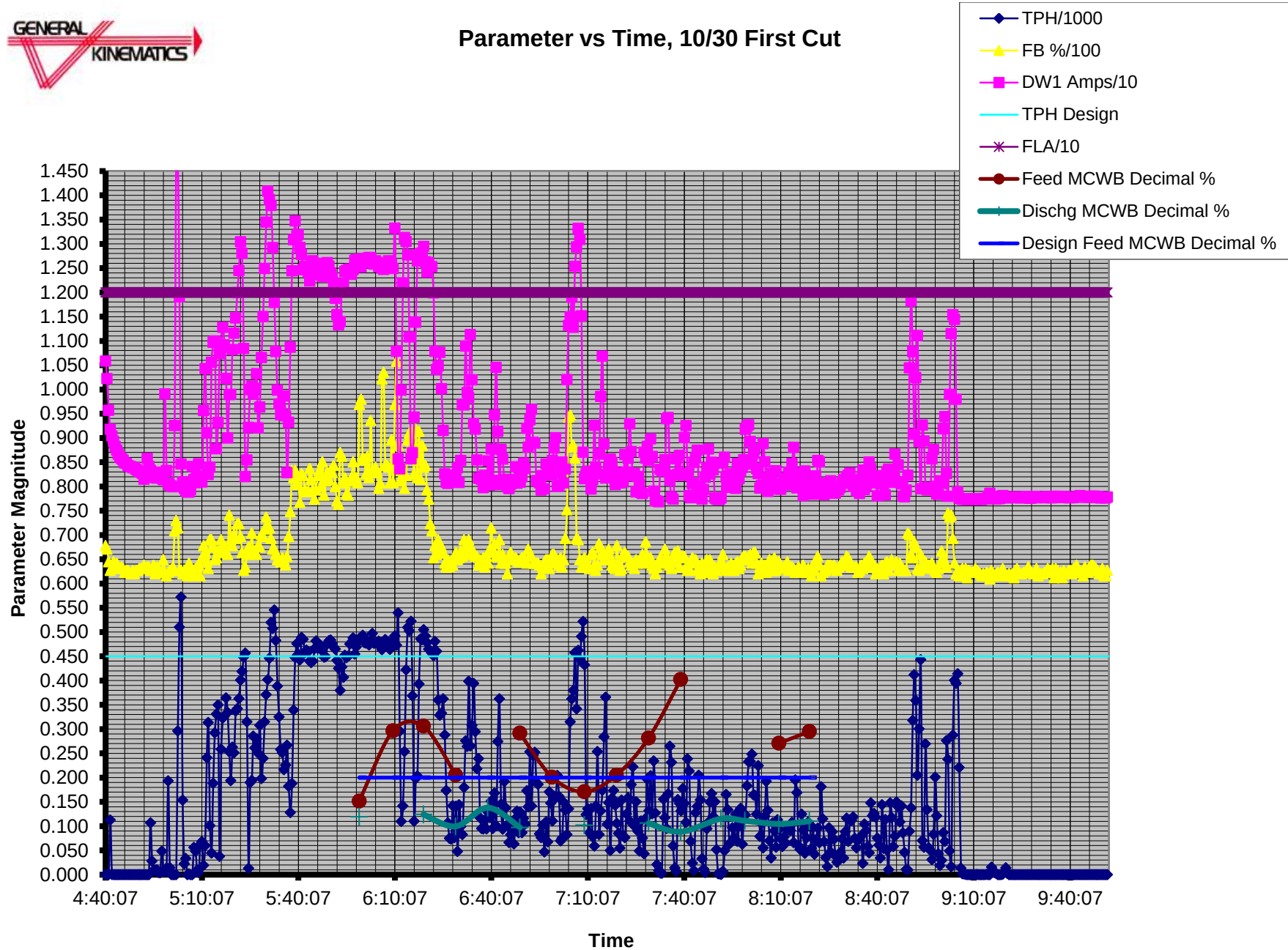


Savage El Dorado Production





Parameter vs Time, 10/30 First Cut



Hot/Burning Coke Upset



Feed Surges



Non-Blinding Deck



Pit Side Clamshell Dewatering, Beaumont TX



Overhead Grid & Hopper



Dewatered Pet Coke to Crusher



Crushed Pet Coke to Pivoting Transfer Belt Conveyor



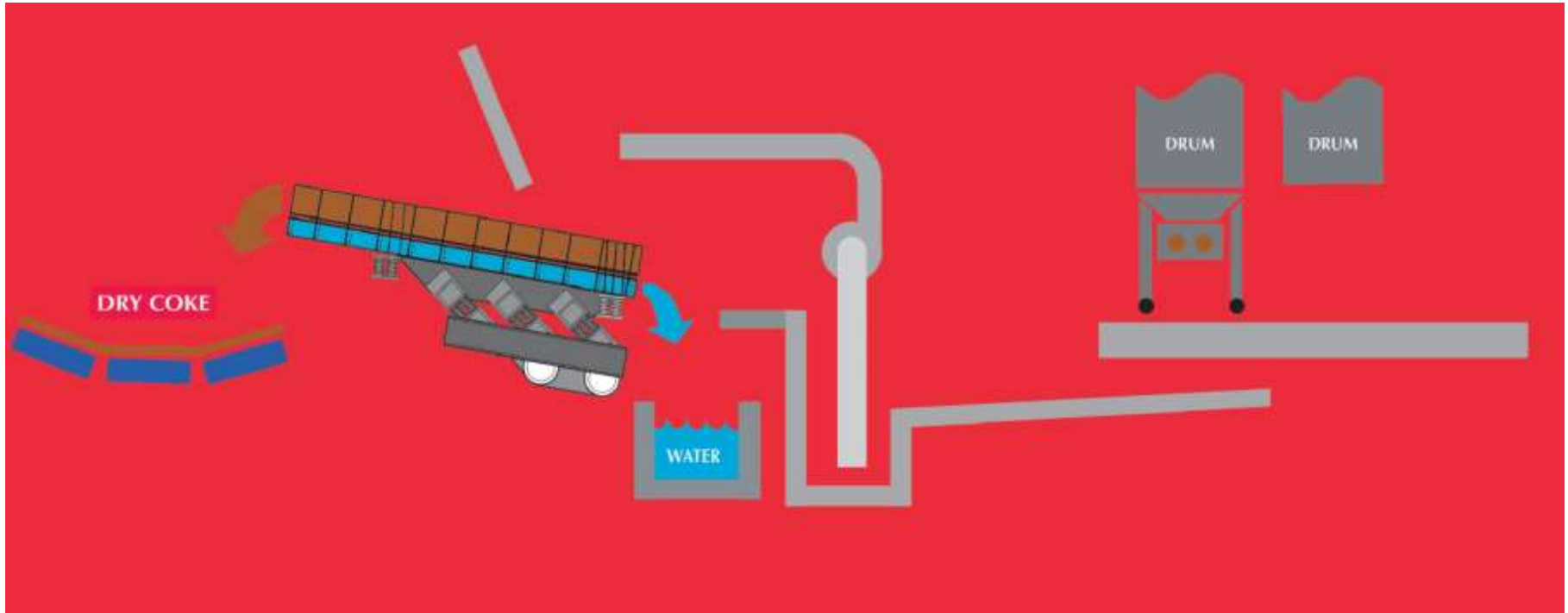
Separated Water Returned to Pit



Powered Rail Mounted Traversing Carriage



Sluiceway Slurry Feed



Benefits

- Safety
- Minimize Coke Handling
- Minimize Personnel Requirements