

# P A P E R

---

## Paper Products



### S O L U T I O N O V E R V I E W

#### **Engineering**

This paper production facility sought to modernize and automate its process while minimizing structural changes and new equipment purchases. Shick's mechanical and process engineering solution incorporated existing structures and equipment with new equipment into a modern process design.

#### **Dust Control**

The existing storage bins in this plant did not include adequate dust collection units. Shick engineered auto-jet dust collectors atop the existing silos and designed a surge hopper with dust collection to enable dust free metering

into an existing use bin. This addition significantly reduced airborne dust and the possibility of a dust-related explosion.

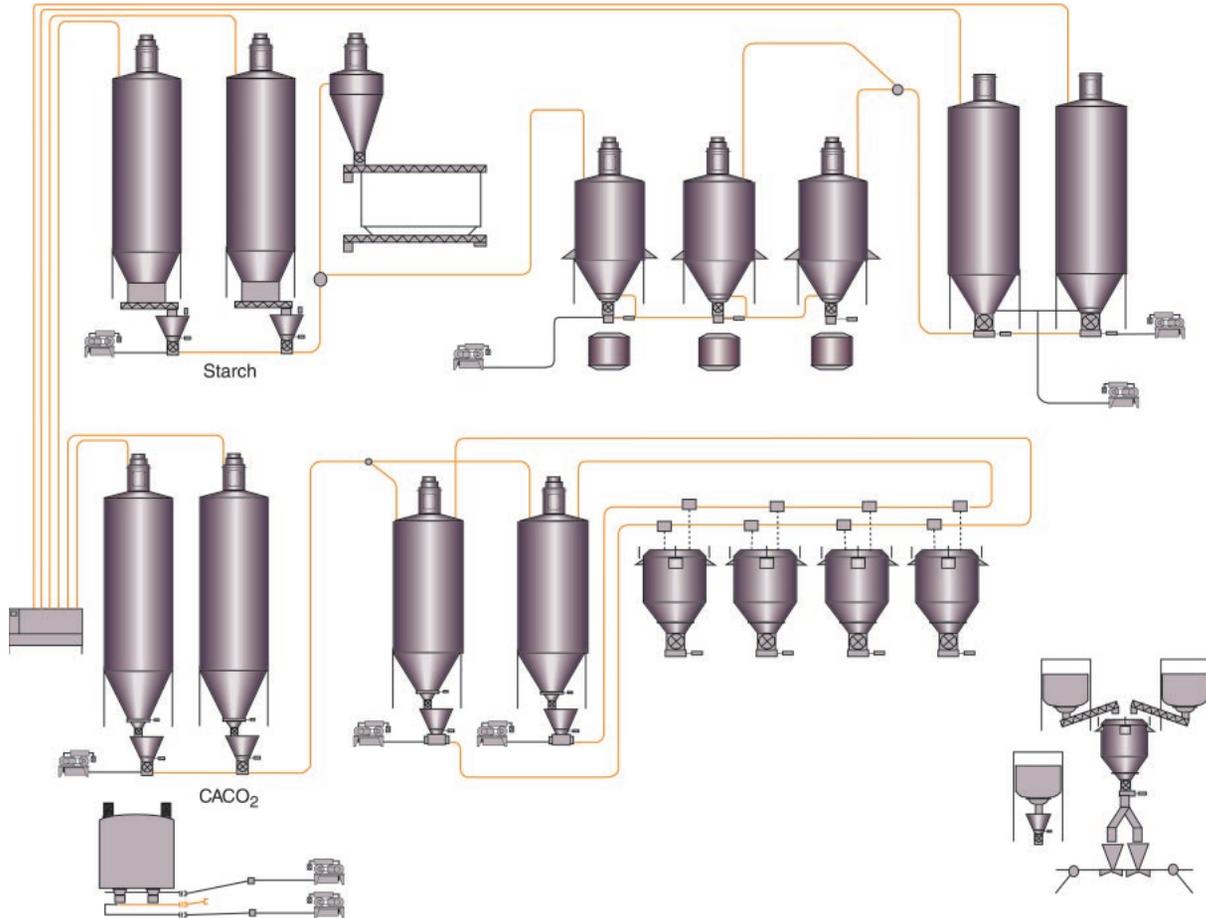
#### **Supersack Materials Integration**

This plant receives Sodium Alginate and PVA in supersacks. The Sodium Alginate and PVA needed to be incorporated into the new process. Shick designed three supersack stands, two of which used two incline screw conveyors to drop material into a scale hopper that measured material before sending it to the existing equipment.

# PAPER

## Paper Products

### PROCESS DIAGRAM



#### Final Product: Paper Products

#### Project Scope:

- Railcar Unloading
- Truck Unloading
- Supersack Unloading
- Bulk Storage (6) 7,200 Ft<sup>3</sup> Silos
- Bulk Pneumatic Transfer Scaling
- Bulk Truck Loadout System
- Dust Collection System
- Bulk Storage Inventory Control System
- Mechanical and Electrical Interfacing with Existing Equipment and Systems
- Explosion-Proof Environment

#### Materials Handled:

- Calcium Carbonate
- Starch
- Sodium Alginate
- Polyvinyl Alcohol (PVA)

#### Purchasing Rationale:

Expansion and automation



#### WORLD HEADQUARTERS

Shick Tube-Veyor Corporation  
4346 Clary Blvd.  
Kansas City, MO 64130 USA  
Tel: (816) 861-7224  
Fax: (816) 921-1901

#### ASIA PACIFIC

Shick Tube-Veyor Asia Pacific Pte Ltd  
Blk 5000 Ang Mo Kio Ave 5 #05-07  
Techplace II  
Singapore 569870  
Tel: (65) 4824600  
Fax: (65) 4818255

[www.shicktube.com](http://www.shicktube.com)