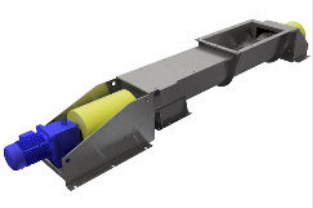


Kaolin is Conveyed at 1,500-Degrees F

High Temperature Screw Conveyor for Burgess Pigment

General Description

Kaolin Clay products are used in hundreds of applications including paper, paints, coatings, plastics, and cement. In 1945, Malcom S. Burgess, Sr. started Burgess Washington Clays to produce Kaolin for the paper Industry. In 1948, the company became Burgess Pigment to provide Kaolin to other markets. Over the years expansion and growth continued until the production facilities were capable of processing more than 100,000 tons of a wide variety of products. Burgess Pigment has always been focused on innovation and customer service.

Design Parameters

Product Type: Kaolin Clay
Material Density: 20 Lbs. per Cubic Foot
Capacity: 600 Cubic Feet per Hour
Design Temperature: 1,500-Degrees F
Duty: Intermittent

KWS Advantages

KWS has over 50 years of experience handling bulk materials at high temperature and has developed specific designs to account for thermal expansion and loss of material strength due to elevated temperature. Burgess Pigment conveys Kaolin at 1,500-degrees F, requiring the use of specialty alloys for the construction of the screw conveyors. KWS designed and manufactured the screw conveyors for the project from 310 stainless steel to handle the elevated temperature. KWS welders are certified to weld on specialty alloys in accordance with ASME requirements.

KWS Special Features

KWS provided a drive pedestal designed to protect the gear reducer and motor from heat and shock loads in the high temperature conveyor. The gear reducer and motor are located several feet away from the heat source and operate at ambient temperature with no potential damage from elevated temperatures. The drive pedestal design also allows the shaft seal, gearmotor, low-speed coupling and pillow block bearing to be easily accessible for maintenance.

KWS shrink-fit shafts that are designed to handle high torque loading applications. The shrink-fit shaft design replaces the standard CEMA bolted connection with a direct shaft to pipe connection providing more strength and less chance of failure. All screws with shrink-fit shafts are straightened to within 0.015-inches total indicator runout (TIR) at the bearing area of the shafts to verify straightness.

A KWS slider base trough end on the tail end of the screw conveyor allows for thermal expansion. Thermal expansion occurs axially along the length of the screw and trough, and if not accounted for can cause excessive stress and fatigue loading, leading to a premature failure. The slider base trough end is designed to handle thermal expansion and can account for axial expansion up to 4 inches.

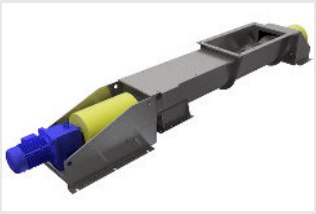
Plant Location
Sandersville, GA

KWS Manufacturing
3041 Conveyor Drive
Burleson, Texas 76028

Toll Free: (800) 543-6558
Phone: (817) 295-2247
Fax: (817) 447-8528

www.kwsmfg.com

More on Next Page »



Kaolin is Conveyed at 1,500-Degrees F

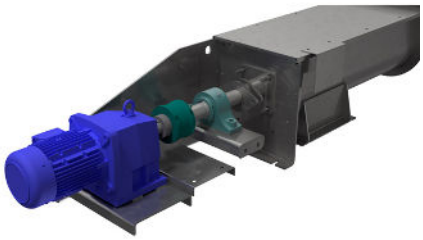
High Temperature Screw Conveyor for Burgess Pigment

Testimonial

Mark Vinson, Engineering Manager – Burgess Pigment

"KWS has been great to work with and produces quality equipment. The KWS high temperature screw conveyor works great! We will be a returning customer for future projects."

Shrink-Fit Shafts Provide Superior Strength



Gear Reducer and Motor are Located Away from Heat

Slider Base Trough End Allows Axial Thermal Expansion

Plant Location
Sandersville, GA

KWS Manufacturing
3041 Conveyor Drive
Burleson, Texas 76028

Toll Free: (800) 543-6558
Phone: (817) 295-2247
Fax: (817) 447-8528

www.kwsmfg.com