



Company News

Ajax Equipment: Powder Handling System for Water Treatment Plant

Edited by on 24. Apr. 2019

Bolton, United Kingdom -

Solids handling equipment specialist, Ajax Equipment, has supplied a leading UK environmental solutions provider, with a plant for processing calcium sulphate filter cake, as part of a water treatment facility. The Ajax equipment includes a hopper, twin screw feeder and screw conveyor.



Filter cake with high moisture content is transferred

from a hopper using a 3.3 m, 300 mm screw diameter, twin screw feeder, fabricated in 304 stainless steel to two inclined feeders, which also accept lime from an existing conveyor to homogenise the two powders. The combined powders are then transferred into a granulator via an inclined screw conveyor in 304 stainless steel. Ajax conducted powder testing to assist in developing the powder handling system. This included bulk density and wall friction measurements, together with shear strength of the filter cake immediately after loading into the hopper and after 16 hours consolidation to represent plant

operations. Commenting, Ajax Equipment's managing director, Eddie McGee, said "Powders with a high moisture content can cause issues with handling as they are prone to stick to surfaces, possibly leading to clogging and process inefficiency. Ajax's tests on the filter cake provided useful information on the material's characteristics, which could be used as a guide to how the material would respond to its environment. Using the test results Ajax designed equipment that works with the materials, resulting in an efficient powder handling system."