Animal Feed

Raw Material Storage System

Overview

To design, manufacture, manage and install an additional 600 tonnes of bulk storage in five galvanised smooth-wall silos.

The problem

The client lacked necessary storage on-site to meet production demands, so was leasing storage units and paying additional transport costs to bring raw materials to site when needed.

The solution

GAME advised the client on the best method to maximise space to gain the necessary storage on-site.

The new plant commences from the existing 400mm diameter screw conveyor on top of 3 grain silos. A feed from here to a new short conveyor transfers the material into a transverse conveyor situated on the top of the new silos. This conveyor has six outlets, five fitted with electro-pneumatic slides and one end outlet with hand-slide.

The five silos all positioned in line have a holding capacity of 120 tonnes each based on cereal with a bulk density of 750kg/m3 and were installed alongside the existing storage facilities.

Each silo has high level indication and access facility. Each expansion hopper fitted with a twin bin discharger to control the product to the chain & flight conveyor. The chain & flight conveyor fitted under the bin dischargers then feeds to a new belt & bucket elevator. A new 400mm diameter screw conveyor positioned above the boiler room transfers the material from the new elevator to existing intake elevator.

The result

Client now has sufficient on-site storage to meet production demands without having to lease extra storage and transport.







