



Case Study

Cement Supply to Remote Construction Sites

Edited by on 10. Oct. 2023

[Published in bulk solids handling, Vol. 1 \(1981\) No. 4](#)

This article describes how the problem of shipping and storing of cement in large quantities has been solved in two particular installations. Large construction projects such as harbours and airports usually consume enormous quantities of concrete, requiring thousands of tons of cement a month. As long as these sites are situated within easy reach of one or more cement factories, such deliveries present no difficulties.

Bulk transporter lorries either equipped with direct pneumatic discharge or else discharging via a stationary pneumatic conveying plant into storage silos, are generally used for delivering the cement. A well organized delivery schedule will minimize the storage silos. In most cases a storage capacity of a few hundred tons will suffice and this can be obtained by installing a number of small storage silos of about 100 tons capacity each.

The problem is entirely different where the construction site is some distance from a cement plant and transport of the cement can be achieved economically only by ship. In many such cases the cement is shipped in bags, at relatively high cost. The packing of the cement involves high costs,, and stowage and lighterage of bagged cement is a slow process. It is of particular importance to note that the transport of bagged cement results in an average loss of 10 % of the quantity shipped, since a number of bags will be damaged and their contents spilt or ruined. If the bags are transferred several times, losses can amount to 25%.