

## Summary

Storage has a very prominent position in the transportation cycle of bulk solid materials. The storage mainly takes place at the port terminal either before the departure or after the arrival at the destination port. For this purpose there are several types of storage yards. Furthermore there are different kinds of covering and enclosing structures to protect the concerning material.

The material has to be stacked onto the storage yard and eventually reclaimed. These two functions are fulfilled either by two separate stacking and reclaiming equipment or a combined equipment.

There are so many choices to be made about the matters mentioned above concerning the storage yard for bulk solids. This report addresses all these matters, one after the other, in order to provide the knowledge required for making any choices in the design process of the storage yard for a coal terminal.

This report firstly describes different storage types. Accordingly these different types have been classified according to their physical structure. Furthermore an overview of different applications of these storage types with some dimensional data is given. According to their respective dimensional data a comparison has been carried out of the (earlier) elaborated storage types.

Furthermore stacking, reclaiming and combined (stacking and reclaiming) equipment has been elaborated and compared at the same pattern as the storage systems.

Additionally several dust suppression technologies have been elaborated, along with their working principal, which possibly could be utilised at a coal terminal.

It has been emphasised throughout the study that the latest technologies have to be included. One has also included the types used for other materials than coal.

The gathered information has for a great part been extracted from the websites of different manufacturing companies. Beside this, one has relied a great deal on recent journals as well.