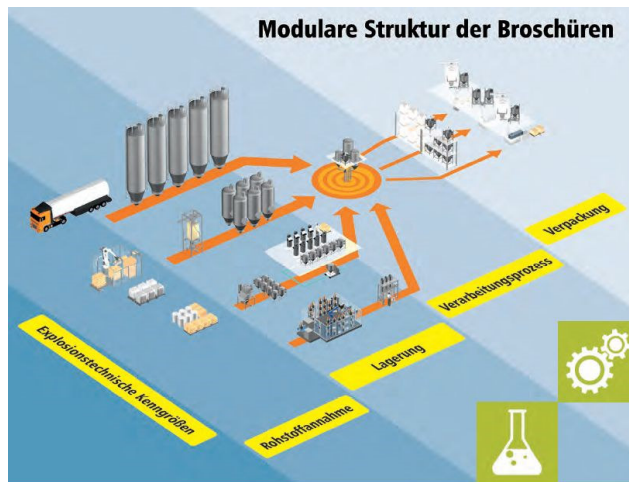


## Explosion safety of bulk material plants

### Module "raw material reception"



The use of complex systems and installations requires a suitable risk assessment for each individual explosion risk.

A modular structure has been developed for the explosion safety of bulk solids systems, which makes it easier to divide the assessment for a system with regard to the explosion risk into smaller units, so-called "modules". In addition to a clear layout, this enables a targeted and process-oriented approach. The overall concept consists of the modules "Explosion characteristics", "Raw material reception", "Storage", "Processing" and "Packaging".

Individual process steps or machines can thus be better evaluated. In the end, only the individual interfaces need to be considered to obtain the overall risk assessment concept.

In the process step "raw material reception" presented here, flammable, dust-explosive products are accepted as loose bulk material or packed. It is assumed that the bulk material does not contain flammable solvents and that there are no flammable gases and vapours to be considered in this area.

This module consists of:

- Raw material reception
- Storage of packaged products
- Emptying of containers
- Loose bulk material reception
- Conveying bulk goods for storage

The modules are currently being translated into English.

Further modules are in progress.