



BEST-IN-CLASS PROCESSES FOR CHEMICALS STORAGE

CASE STUDY

Chemical storage in focus

The storage of chemicals requires a safety compliant infrastructure, adequate PPEs & operational excellence. Chemicals, including toxic substances, can be easily released if containers and other packaging are damaged. Therefore, effective chemical storage practices are essential to minimize the risk of accidents and to protect both people and the environment.

Logistics providers must use appropriate equipment, implement rigorous safety procedures and ensure that all chemicals are handled by trained personnel.

Vertical

Machinery & Industrial (chemicals)

Project type

Tailor-made warehousing for chemicals

The main challenge

Safe and efficient storage and handling of chemicals





Key metrics



customized packaging
and shipping solutions



expert staff working
with chemical products



increased efficiency
and cost savings



just-in-time
accuracy

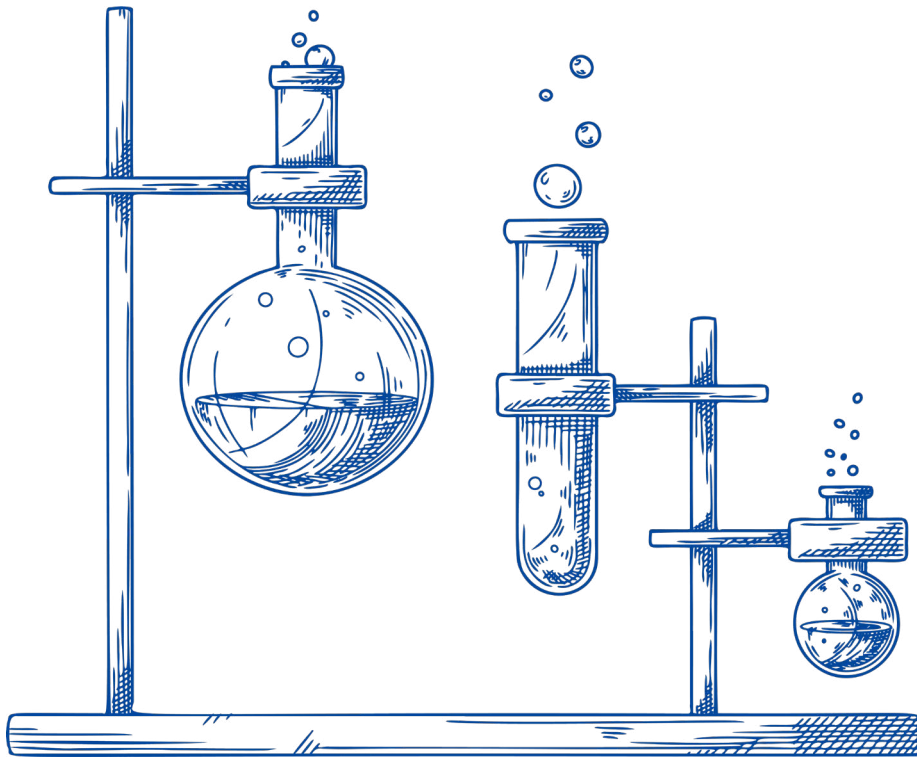


complete regulatory
compliance

Main challenges

The safe storage of chemicals is crucial for protecting people and the environment. All restrictions and regulations must be strictly followed, depending on the hazard classification.

Based on the United Nations hazard class and division system, chemical materials are categorized into classes 1 through 9:



Class 1

Explosives

Class 2

Flammable Gases

Class 3

Flammable Liquids

Class 4

Flammable Solids

Class 5

Oxidizing substances

Class 6

Toxic substances

Class 7


Radioactive materials

Class 8

Corrosives

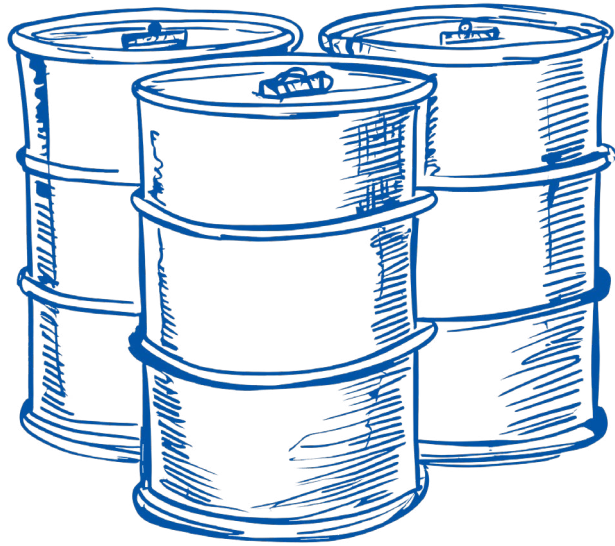
Class 9

Miscellaneous



When dealing with hazardous materials, logistics providers often face challenges related to safety, compliance, training and efficiency. Companies that have multiple chemical product categories often need strict inventory recording, reporting and accounting without manual error, and fulfilment of seasonal peak demand. Chemical warehousing must meet the following demands:

- Enhanced safety requirements and compliances
- Special handling of critical products
- Fulfilment of seasonal peak demand
- A proven record of HSE/safety related processes
- Storage as per compatibility matrix
- Necessary certification (e. g. IATA)
- Management of national and regional centres
- HSE-compliant management for in-plant operations
- Worker training and certification (highly skilled staff)
- Advanced WMS for better inventory control and incident reporting



Rhenus multi-user solutions for chemicals with a strategic shift to customized racked storage and an advanced safety infrastructure helps in meeting unique needs at optimum cost. Advanced IT solutions and inventory control practices are crucial to optimize order fulfilment and inventory management.

For example, the end-to-end supply chain solution makes the direct transportation of containers from the port to the Rhenus warehouse for de-stuffing possible. Even the most demanding goods (such as Quartz material) can be handled properly due to the introduction of the requirements and safety training for staff engaged in the process.

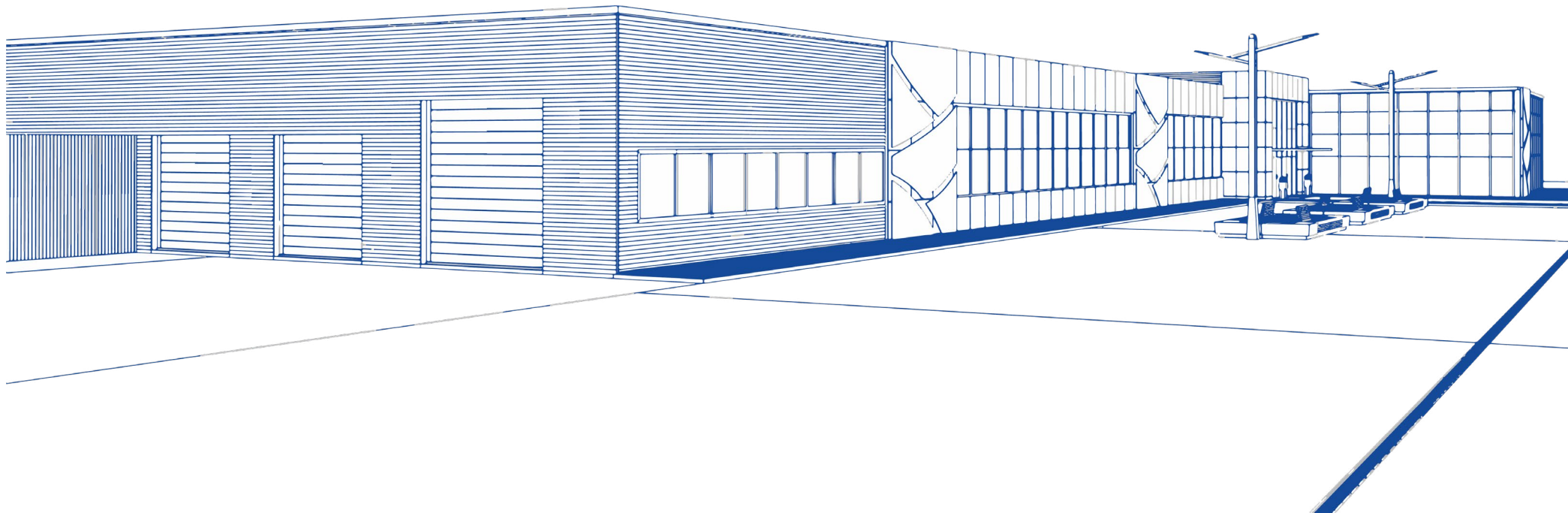
According to the standards, there is always inventory monitoring and transparency 24/7 thanks to mobile CCTV camera access at the warehouses.

While storing and handling chemicals, the Emergency Response Plan may not be enough. In case of an in-stock emergency, high-quality integrated WMS can immediately give information about the incident as well as about the amount of chemicals in the warehouse.



In case of an in-stock emergency, our high-quality integrated WMS can immediately give information about the incident as well as the amount of chemicals in the warehouse.

Tim Jaspert, Global Business Director: Machinery & Industrial



This way the provider can support local authorities and fire brigades to act more quickly and effectively in the event of an accident. Moreover, it is important to carry out regular safety inspections and audits in all chemical storage facilities.

Our team of experts at worldwide locations has a proven record of successfully managing customers' internal logistics, such as the internal movement of goods from raw materials to finished goods and raw materials to production units. This approach allows inventory management inside the customer plant on an AS-IS WHERE-IS basis.

A highly skilled team is always deployed to manage sensitive warehouse operations. Their expertise, dedication to safety and compliance and ability to adapt to changing circumstances are invaluable in ensuring the integrity of chemical products. Moreover, in the internal movement of stock and packaging materials, Rhenus uses dedicated vehicles that help in basic daily operations.

Strategies for handling chemicals

In an increasingly interconnected world, the storing and handling of chemicals, incl. hazardous substances, has emerged as a pressing concern for businesses and communities. Safe management is crucial to safeguard human health and the environment and to avoid potential dangers.

To design customized warehousing solutions specifically tailored to the storage of chemicals, the following solutions can be considered:

- Dedicated logistics centres for the storage of unique chemicals;
- Multi-user warehouses for cost-efficient and flexible solutions;
- In-house logistics with a focus on customer internal processes.

This way businesses in the chemical industry can optimize their operations and achieve a competitive edge in a complex and highly regulated market. Chemical logistics can be additionally enhanced through value-added services, which help increase supply chain efficiencies and achieve cost savings. Mixing, tinting and sampling are just a few examples of additional services Rhenus Warehousing Solutions can provide.





Navigating the shift in chemicals storage

When handling chemicals, the level of complexity in a solution is highly significant. Rhenus boasts top-tier chemical sector experts in Europe, and the US and APAC regions offer not only various warehousing solutions but also valuable market insights and advice. With local expertise supported by a global network, we can assist in creating a productive workplace and efficient staff management at all locations.

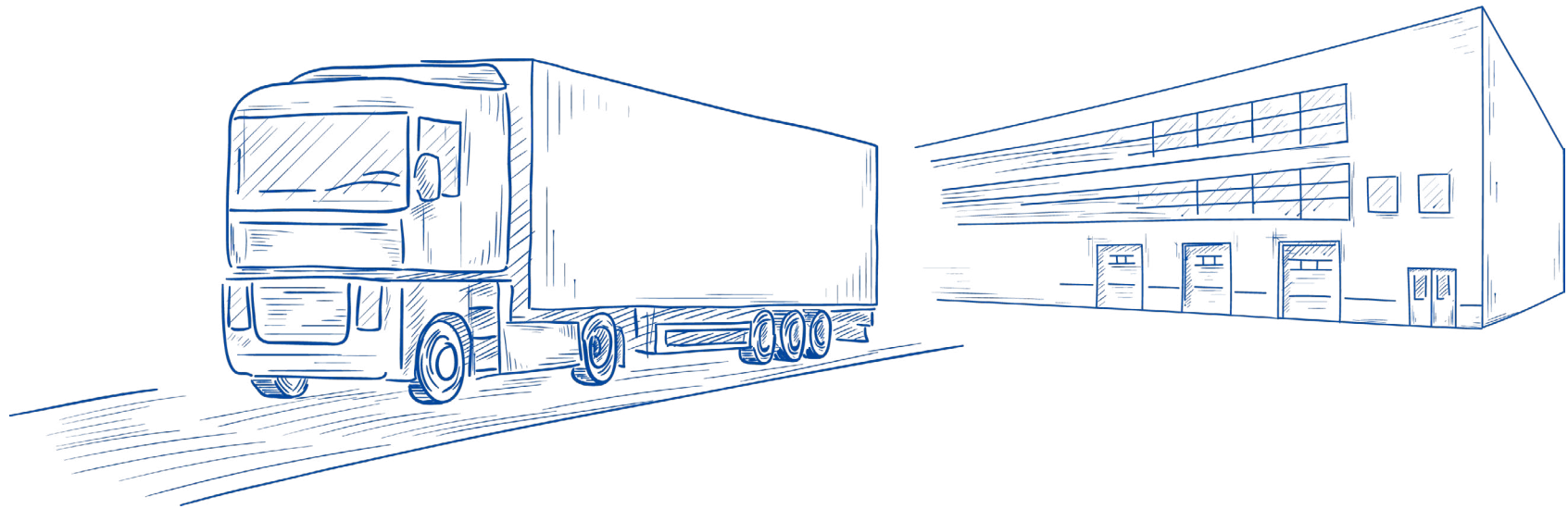
Our clients have reaped the rewards of our tailor-made solutions, crafted with expertise and seasoned experience. For instance, upon commencing collaboration with us, one of our clients:

- managed to reduce storage costs by increasing capacity and handling additional business volume with 100% adherence to all standards;
- enhanced safety compliances and received large-scale support in order fulfilment and inventory control, which also allowed faster responses during the peaks;
- increased efficiency, better storage inventory and just-in-time delivery accuracy;
- and improved the coordination of the process and shortened the time.



Moreover, customized training programs for the enhancement of employees' skills were organized with a view to creating ethical, open and growth-oriented workplaces.. Thanks to end-to-end supply chain solutions, logistics cost was reduced through direct transportation and new infrastructure at the unloading facility.

In an industry where safety is paramount, it is crucial to make sure that chemical storage is done properly. Through the implementation of best practices, rigorous safety procedures and the use of appropriate storage containers and equipment, the likelihood of accidents can be minimized and the safety of workers and the environment maximized.



“ With the right strategies and practices in place, Rhenus India effectively manages the storage and handling of dangerous goods, allowing customers to operate efficiently and responsibly while protecting the safety of their workers and the environment.

Ayush Mehta, Rhenus Contract Logistics India

Ask about warehousing solutions for your business!

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