# BOLK

## Innovating **transport, logistics** and **warehousing**

**24 hours a day, 7 days a week, and 365 days a year, Bolk Transport in Twente** is up and running. With subsidiaries throughout Europe and approximately 400 employees, Bolk is an **innovative transport, logistics** and **warehousing partner** and as such fulfils an **essential role** within the manufacturing industry chain.

Bolk, founded in Almelo in 1934, is an innovative international transport company. Being initially mainly concerned with the distribution of coal and drinks within the city, over the years Bolk has grown into the specialist in exceptional transport. In addition to offering all types and sizes of customised transport solutions, Bolk is the logistics partner of Salt Specialties, formerly part of AkzoNobel Hengelo, for which they have designed the entire warehousing and transport process in an innovative, data-driven way.

## Digitisation

As Business Engineers, Niek Tijink and Hein Langeveld are responsible for continuously mapping the needs, wishes, and requirements of their own organisation and their customers' and partners', in the field of Operations & Supply Chain Management, as well as making improvement proposals to optimise processes and directing their implementation. Hein:

> ***"Basically, we focus on improving and renewing processes. We see that IT, data, and technology are playing an increasingly important role within process optimisation. Due to the growing information need of customers and partners, we are increasingly focusing on the digital transformation of supporting processes, in order to improve and connect the supply chain."***

The optimisation of their own processes also plays an important role. For example, Bolk has developed a real-time decision support system to support order pickers and shippers in daily decisions on the shop floor. By means of real-time information from the Warehouse Management System (WMS), employees are advised about decisions to be taken via screens in the warehouse.

Besides offering transport, storage, and trans-shipment services, Bolk tries to add customer value in various other ways. Niek:

> ***"For example, by using Business Intelligence, all goods are tracked via an in-house developed track and trace system, after they leave the warehouse. This system is filled with real-time information about outgoing freight from customers. In addition, Bolk has developed a quality control system in PowerApps with which containers, products, and equipment are inspected. Deviations are reported directly to managers, customers, and suppliers. The data collected with the app is visualised in a Power BI dashboard. This provides opportunities to discover trends and provides input for operational management discussions."***

## Partnership Salt Specialties

An important partner of Bolk is Salt Specialties. Whoever arrives at the Bolk plant in Hengelo, walks by an impressive logistics operation with large containers and cranes, and directly into the warehouse where the salt from Salt Specialties is stored. This impressive warehouse offers space for 18,000 pallets full of salt for various purposes: bulk salt, process salt, and salt for the end consumer. Every week 7000 pallets are brought into the warehouse (24/7) and 7000 go out (16/5). A large-scale logistics operation, which Bolk Logistics has taken on entirely for Salt Specialties, formerly AkzoNobel Hengelo and now part of the Salins Group France, since September 2018.

> ***"As an innovative logistics specialist, Bolk has optimised the entire warehousing and transport process as much as possible, through digitisation and smart use of data"***

Niek continues: "An Electronic Data Interchange environment that electronically exchanges data between different systems has been developed. This ensures that the primary process can be sped up and the data exchange within the chain becomes more reliable. Another example of Bolk's services for Salt Specialties contains setting up an extensive scanning process. This makes the track and trace process more accurate and more up-to-date data about the movements from, to and within the warehouse is available." Hein adds:

> ***"The inbound process has also been optimised. On several production lines end products are made. The pallets with these products are transported via a driven roller conveyor to the loading station at the production site. From this point on, the pallets are automatically loaded into the Bolk Logistics chain conveyor trailer. After loading, the pallets are transported to the warehouse, where the trailer is connected to the unloading station. From the unloading station, we carry out the internal warehouse activities. During the put-away process, two pallets are scanned, as the forklift is equipped with a double fork board. When a pallet is scanned, the Warehouse Management System checks whether this pallet has been pre-announced. When this is the case, the new status is automatically registered. "***


*Driving on HVO diesel offers many advantages, such as a reduction in $CO_2$ emissions and other harmful substances such as particulate matter, hydrocarbons, nitrogen oxides, and carbon monoxide.*


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This inbound process consists of **four phases:**

### Phase 1

- Getting the **operation under control** (start-up phase, getting to know the process)
- Deployment of **additional equipment, storage space** and **manpower**

### Phase 2

- **Optimising occupancy rate** and **labour productivity**
- Setting up **Power BI reporting platform**

### Phase 3

- Acting as **chain director**
- From **outbound logistics** at the factory to **inbound logistics** at the terminal
- Provides a lot of **data input** for **chain control, track and trace,** and **chain transparency**
- **Central point of information** in the chain
- **Adding customer value** through know-how

### Phase 4

- **Standardisation** and **stabilisation**
- **Lean Six Sigma**
- **Reduce transport movements** between factory, warehouse, and terminal
- **Reducing communication flow (RPA)**
- **Increase product quality** through quality control system
- **Photographing outbound container loads** (app-development)
- **Health, Safety, Environment,** and **Quality (HSEQ)**

## Sustainability

In addition to optimisation and digitisation, sustainability also plays a major role within Bolk. And just as many others, also this process is designed data-driven, with the aim of using data to operate more sustainably. Niek: “There are different ways in which we do this. An example of this is an even more sustainable and efficient planning, so that as few cars as possible ‘drive empty’. Another example is electric driving. Although difficult on the long distances, it is an option for city centres, to generate fewer emissions and bring the cargo to its destination in a sustainable way. We are also looking at the possibilities with alternative fuels, such as HVO diesel. Driving on HVO diesel offers many advantages, such as a reduction in $CO_2$ emissions and other harmful substances such as particulate matter, hydrocarbons, nitrogen oxides, and carbon monoxide.”

People are also an important part of Bolk’s sustainability policy. Hein: “Continuous learning is not an exception, but the norm. In this way, employees can continue to grow and develop themselves. New talent also plays an important role: there are close collaborations with the University of Twente and Saxion University of Applied Sciences, and there are always internship positions available.

## Future

For the future, Bolk aims to increasingly take on the role of chain director within the supply chain, by taking care of the entire logistics process for companies as much as possible. Hein: “An interesting development in this field that will come up, will be the use of predictive analyses for the partnership with Salt Specialties. Planning tools will be developed, with which the actual demand in the chain can be followed, without disruptions. This offers, among other things, advantages for production planning, because the expected stock level in the warehouse can be taken into account. “

Further technological challenges will be robotic process automation and the development of a communication platform that will not only be used internally, but can also be implemented at partner companies. Niek:

> ***“With these tools, we can make the chain more transparent in an innovative way, and improve and develop the mutual daily communication between the various departments and parties.”***