

Intelligent shipping documentation for distribution centers

| **DPD Dynamic Parcel Distribution GmbH & Co. KG** | *Germany*

Online shopping has exploded in popularity in recent years, due to convenience and attractive deals. A big part of the success of e-commerce is also parcel carriers. They are largely responsible for the reliable,

fast delivery of goods ordered online. It's no wonder the market for courier, express and parcel delivery services has grown faster than the German economy as a whole over the past 15 years.





The challenge

Business has also grown steadily positively during this time for Dynamic Parcel Distribution GmbH & Co. KG (DPD) in Germany. As one of the leading suppliers of parcel delivery services in Germany, the DPD operates 75 hubs across the country, where shipments are collected and distributed to deliverers.

At peak times, some of these centers handle up to 100,000 shipments a day. In order to be able to handle these shipments efficiently, the hubs are equipped with the latest technology, such as automated parcel conveyor and scanning systems. Since reliability and security are among the most important quality criteria in the parcel logistics industry, DPD has been deploying video-based systems for some time so it can be able to track individual parcel movements within the hubs at all times.

As part of the modernization of its hub in Heilbronn, DPD decided to install a video solution for documenting, sorting and handover processes. Initially, planning consisted of a specification document drawn up by DPD for earlier projects. This was, to a large extent, oriented around analog video technology capabilities. However, it became clear quite rapidly that modern, IP-based video systems (for example, those using cameras with HD resolution) could better support distribution center processes.

Based on this, a new list of requirements was put together, including simple and user-friendly shipment tracking for clarification in case of lost or missing parcels. Additionally, to optimize organizational processes, the solution needed to be able to monitor the site, including loading bays and access roads.



For DPD, the responsible use of resources plays an important role. The fact that this aspect could be taken into account as part of the introduction of an innovative IP video system to support our business processes makes it even better!”

Heiko Köger

Manager of the Heilbronn DPD Hub
DPD Germany

Fast facts

Vertical market
Logistics

Products
Qognify VMS
Qognify BVI



The solution

During discussions between DPD and M.N.O. Stühler GmbH & Co. KG, which has been providing DPD hubs with video management systems for years and has extensive experience in this area, the focus turned to us.

Hexagon, with one of its development hubs in the Karlsruhe technology region, not only offers scalable and extremely powerful VMS software, together with M.N.O. it has developed an industry-specific video solution, tailored specifically to the needs and processes of parcel logistics companies. Those responsible for deciding on the right were particularly impressed by the system-concept for equipping DPD locations. The Hexagon logistics solution uses only one server for the complete system, which reduces energy costs by up to 50% compared to a recorder-based system.

Thanks to its flexible architecture, the system can be extended at any time through the addition of new modules, e.g., if intelligent image analysis needs to be deployed to secure a perimeter fence or if vehicles driving onto the site need to have their number plates automatically identified and recorded.

Manfred Gügel, managing director at M.N.O. pointed out a further benefit, saying, "By separating hardware and software, system components can be exchanged or extended independently of each other. This way, technological innovations, such as more powerful servers, can be taken into account at any time, which makes the investment sustainable going forward."

The result

The Hexagon logistics solution was integrated seamlessly into the processes at the DPD hub. Complete parcel processing within the distribution center to delivery, from delivery to sorting and distribution to the final handover to delivery companies is documented and recorded in the video system, using network cameras with HD resolution. In addition, the video system is synchronized with the automatic conveyor belts used to transport the shipments through the building.

All incoming parcels are recorded and automatically processed in the system as they are unloaded. If a final delivery transaction is missing or faulty, the shipment number is recorded by the ERP system in an error report that serves as the basis for the manual investigation. As a rule, the error report is processed once a day by the DPD employee responsible for tracking missing shipments, by selecting the corresponding shipment numbers through the search screen in the Hexagon logistics solution.

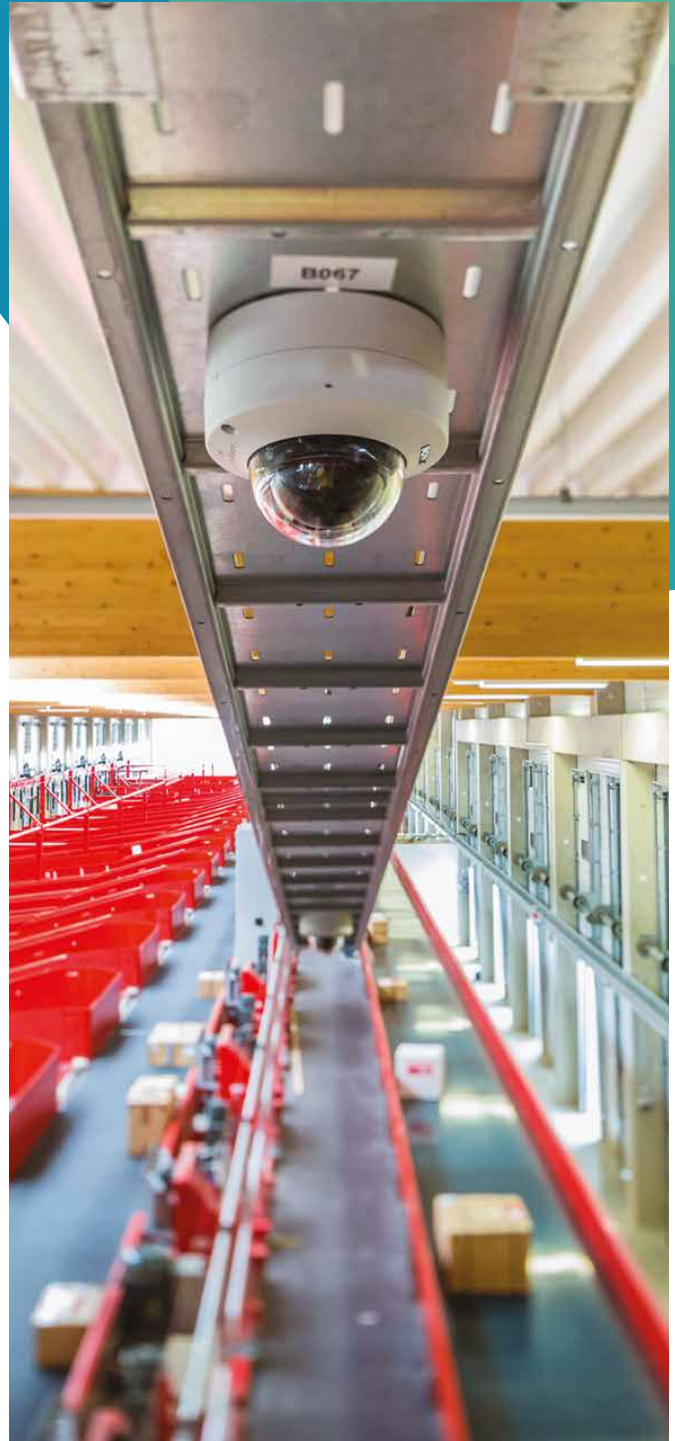
Since the video system can use the scanned data and is also aware of the operating speeds of the conveyor belts, it always "knows" when a parcel is within viewing range of a monitoring camera and displays the corresponding preview pictures. Starting from the last image where the shipment was visible, the employee can locate the error source quickly and easily.

The customer

Thanks to the jointly conceived solution, it is easy to trace where a single parcel is at any given point in time. For example, wrongly sorted parcels can be located again easily, which keeps losses to an absolute minimum – a convincing argument for the parcel logistics service provider.

DPD is also happy with the fact that in addition the modern IP solution saves energy and therefore costs in comparison to conventional recorder systems.

DPD is convinced by the implemented concept, and together with M.N.O. as its partner is equipping further depots in Germany with the Hexagon logistics solution.



Hexagon is the global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector and mobility applications. Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Safety, Infrastructure & Geospatial division improves the resilience and sustainability of the world's critical services and infrastructure. Our solutions turn complex data about people, places and assets into meaningful information and capabilities for better, faster decision-making in public safety, utilities, defense, transportation and government.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.2bn EUR. Learn more at [hexagon.com](https://www.hexagon.com) and follow us [@HexagonAB](https://twitter.com/HexagonAB).