



BEUMER
technology in motion



Conveying technology Loading technology Palletising technology Packaging technology Sortation and distribution technology

Sortation and distribution technology for Hermes Logistik
Efficient system solutions for satisfied
customers.





You can count on us.

With the BEUMER Group as their general contractor, Hermes Logistik Gruppe Deutschland has a partner on their side with impressive individualised solutions. Reliable, fast and successful.

**BEUMER sortation and distribution technology
To help you arrive swiftly and smoothly
at your destination.**





**The BEUMER Group –
Impressive expertise.**

As an international leader in the manufacture of intralogistics products – conveying, loading, palletising, packaging, sortation and distribution technology, we know the routes goods and products take and understand what matters most.

We meet the constantly increasing demands in the field of sortation and distribution technology with sophisticated concepts, individualised system solutions

**High performance at the right time,
at the right place.**

The BEUMER Group's product range comprises fully automatic conveying and distribution systems for all kinds of piece goods. Our computer-controlled sorter systems stand for high levels of availability, low maintenance costs and a top performance of up to 40,000 packages per hour.

Specific customer demands, such as “on-the-fly” optical character recognition (OCR), certified weighing on the induction unit or certified volume measurement on the sorter, are no problem.



and user-friendly software. Complex material distribution technology, flexibility in sorter tasks, the ability to adapt to local conditions and efficient order picking all play important roles. For more profitability, speed and precision.

**Hermes and BEUMER –
Partnership for success.**

Hermes Logistik Gruppe Deutschland is one of the most successful logistics companies in Europe and is Germany's largest privately-owned parcel courier in the B2C and C2C sectors. With over 14,000 locations, the company has the largest national network of drop-off points for parcel shipments in Europe. Delivery six days per week also allows packages to be transported quickly to recipients.

The BEUMER sortation and distribution technology ensures a smooth process with high profitability at the highest sorter capacities for a wide range of item sizes.



At a glance

- Location: Hückelhoven, North Rhine-Westphalia, Germany
- Overall size: 12,000 m²
- Premises: 1 hall
- Time for completion: 11 months
- Sorters:
 - 2 BEUMER Parcel Sorter BS 25 ET
 - 1 BEUMER Small Goods Sorter BS 7 BT
- Total capacity: 27,500 shipments/hour

Hermes Logistik Gruppe Deutschland/Hückelhoven
**The journey is our objective –
safely and promptly.**



Hückelhoven



Big challenges demand individualised ideas.

Hermes Logistik Gruppe Deutschland established the first main turn-over station, or hub, with their logistics centre in Hückelhoven within the scope of the new Hermes corporate structure. The business segments are: parcel and sack shipping, business process outsourcing and returns handling for corporate and private customers. The BEUMER Group was responsible for the engineering, supply, installation and integration of all systems, as well as for creating the



application software. One of the most important key accounts is the local home-shopping network QVC, which is connected directly to the Hermes Logistics centre via a conveyor bridge, supplying 11,000 packages per hour.

We know the way.

The goods arrive at the hub in trucks and are sorted for processing in the 61 Hermes branches as well as the export branches.

In the goods receipt department, boxes, bags and small goods in various sizes and materials are loaded onto the induction conveyor belt leading to the parcel sorter, either using a tilt tray station or by hand.

The shipments are identified utilising the latest barcode reading technology and integrated, weighted volume measurements. This type of measuring is first applied to the running sorter and allows for, among other things, calculation of the sorter capacity. This means vehicles are used more efficiently and route planning can be optimised.

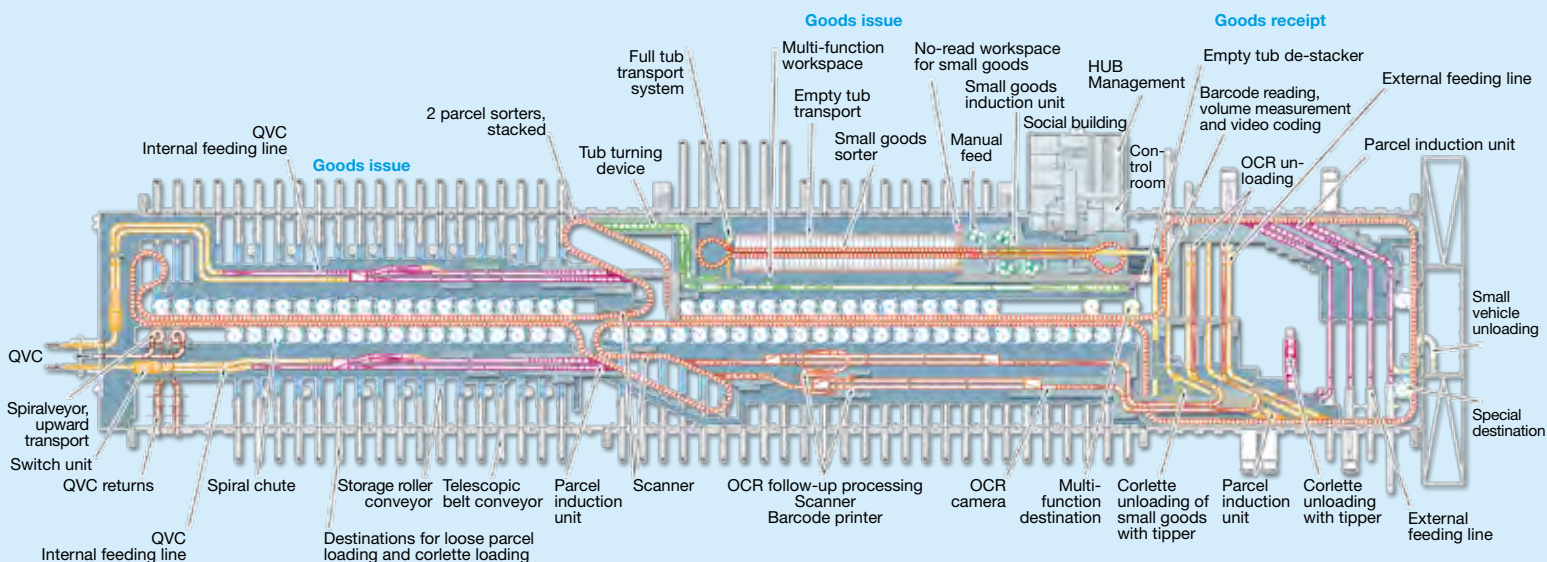
Packages without a barcode are sent through OCR (Optical Character Recognition), where handwriting or printed lettering is automatically recognised, then labelled and entered in the Hermes database.

Both parcel sorters run in two stacked layers throughout the entire building. They are each fed by eight induction units from external and internal areas, as well as two induction units each from the OCR and



No-Read (unrecognised barcode) areas. The shipments are discharged across 80 spiral chutes.

In the returns area, up to 10,000 – 15,000 shipments are processed every day.



Technical layout of the WEST-HUB of Hermes Logistik Gruppe Deutschland



The outstanding features of the BEUMER Belt Tray Sorter are:

- power supply on demand, due to the contactless energy supply system
- modular design
- standard PLC with world-wide service
- minimal maintenance requirements, easy access
- considerably lower maintenance costs compared to conventional energy supply systems

Hermes Logistik Gruppe Deutschland/Hückelhoven
The guarantee for success:
excellent cooperation.



Hückelhoven



High performance with the latest technology.

The BEUMER Group was given the task of creating a robust, powerful complete system in just 11 months, which adapted to the local conditions and impressed through creative solutions, while gently handling all piece goods.

Both parcel sorters, each 681.7 m in length, run at a speed of either 2.27 or 2.5 m/s. All piece goods are quickly and safely transported and discharged accurately. The 164 m long small goods sorter, which gently processes bagged goods and small parcels, contributes to the capacity of this large-scale system.



BEUMER sortation and distribution technology – everything runs smoothly.

The tilt element of the BEUMER E-Tray Sorter is driven by an electric motor. The tilt elements are powered by a contactless energy supply. Therefore, tilting and running are particularly quiet, with low wear. The drive unit with linear motor drives for the sorter is also contactless.

Defective linear motor drives can be easily turned off during operation without disrupting the performance of the system.



The IT systems are also designed to be redundant. All controls are hierarchical and have a wide-ranging network level. From the control station, every remote control, motor, switch and lamp can be reached at any time. That means simple operation, high capacity and minimal



In order to eliminate downtime, all crucial components of the system are redundant. Every line is, for example, equipped with a switch unit that redirects parcels automatically to the other sorter when one sorter comes to a halt.

standstills, for an efficient sortation and distribution system – from BEUMER.

Technical data	BEUMER Parcel Sorter BS 25 ET	BEUMER Small Goods Sorter BS 7 BT
Quantity	2	1
Sorter length (m)	2 x 681.7	164
Sorter speed (m/s)	2.27/2.5 (optional)	1.5
Tray pitch (mm)	850	800
Tray width (mm)	800	-
Number of trays	2 x 802	-
Belt width, belt tray (mm)	-	600
Belt length, belt tray (mm)	-	800
Number of belt trays	-	205
Tray performance (per hour)	2 x 9,600/10,500 trays	6,750 belt trays
Overall nominal capacity (per hour)	22,000 shipments	5,500 shipments
Spiral chutes	80	-
Sorter chutes	-	80



At a glance

- Location: Friedewald, Hesse, Germany
- Overall size: 20,000 m²
- Premises: 2 halls
- Time for completion: 12 months
- Sorters:
 - 2 BEUMER Parcel Sorter BS 25 ET
 - 1 BEUMER Large Goods Sorter BS 55 ET-LIN
- Total capacity: 26,000 shipments/hour

Hermes Logistik Gruppe Deutschland/Friedewald
Think big – System solutions that make it big.



Friedewald



Central and powerful, for all sizes.

The logistics centre in Friedewald – the largest of seven facilities in Germany, located directly on the A 4 – is the central hub of Hermes Logistik Gruppe Deutschland. Equipped for parcel shipments, business process outsourcing for notable customers, returns management, international shipments and baggage services, the hub has two parcel sorters and a large goods sorter. Shipments up to 2 metres in length and weighing up to 60 kg can be transported at a capacity of up to 4,200 items per hour on the large goods sorter and distributed to 84 destinations. In total, 300,000 packages are recorded, sorted and loaded every day.



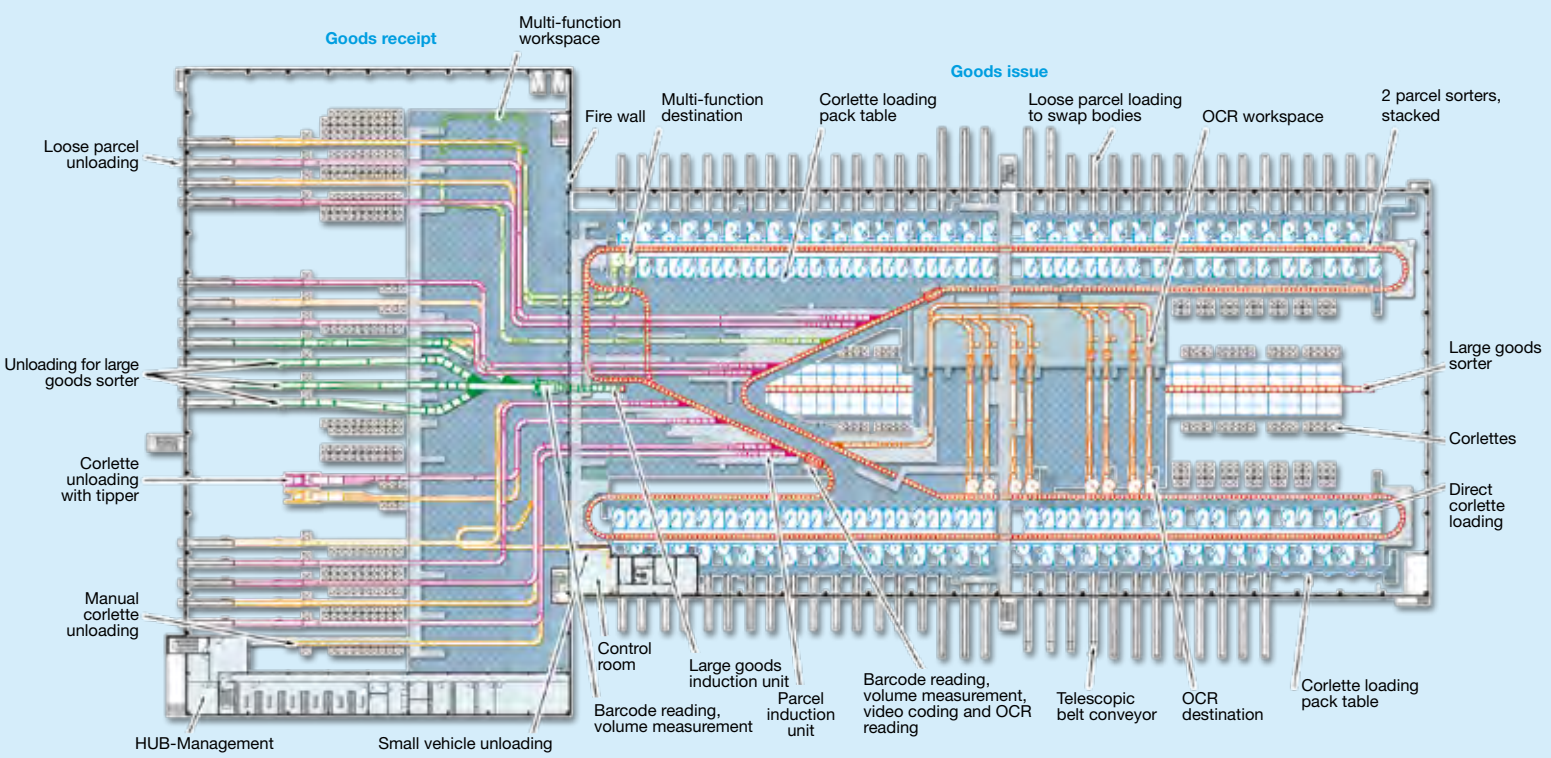
All stations always on the move.

From the loading docks, the shipments are fed directly to the sortation system via telescopic belt conveyors. Smaller packages delivered in roller containers are fed onto the belt conveyor at the tilt tray station.

In Friedewald, two BEUMER BS 25 ET high-capacity tilt tray sorters sort standard shipments on two stacked layers. Large and bulky goods, on the other hand, are conveyed to the large goods sorter after a height and length check. The dynamically regulated induction units ensure precise allocation to empty sorter trays.

Line-scan cameras read the shipment barcodes as they run through the sorter. Shipments with No-Reads are video coded by staff at a separate location.

Using the certified volume measurement, the freight volume is calculated in advance in order to ideally utilise loading space and verify the calculated freight costs.



Technical layout of the central HUB of Hermes Logistik Gruppe Deutschland



The outstanding features of the **BEUMER E-Tray Sorter** and large goods sorter are:

- exceptional sorting quality
- gentle item handling
- robust design
- low-maintenance, motor-driven tilt element
- guided, two-dimensional discharge
- low-maintenance and low-wear linear motor drive
- low-noise tilting and operation
- modular design

Hermes Logistik Gruppe Deutschland/Friedewald
We know the demands of the market.



Friedewald



Robust, efficient, space-saving systems.

As the general contractor, BEUMER's task was clear: integrate a complete high-capacity sortation system into an already designed hall at a low cost.

In just 12 months, BEUMER, together with qualified sub-contractors, was able to install a powerful and space-saving conveying and sortation system, which is suitable for standard shipments, as well as large and bulky packages.

The most modern technology and the latest version of software standards impress, as does the use of the tried-and-tested contactless energy supply, which helps to reduce service and maintenance costs. This is what makes BEUMER sortation and distribution systems low-noise, robust systems for profitable corporate success.



XXL – Extraordinary dimensions call for extraordinary systems.

For the Friedewald logistic centre's extraordinary demands, BEUMER developed a vertically circulating, elongated large goods sorter – a combination of tried-and-tested components of conveying and sortation technology. This large goods sorter provides the capability of sorting packages as large as 2.00 x 0.95 x 0.95 m (L x W x H) and weighing up to 60 kg.

The motor-driven tilt elements on the sorter create a nearly seamless surface and prevent baggage or oddly shaped items from becoming stuck. The steel wire belt, used as a traction element, allows for low-noise and energy-efficient operation.

BEUMER – putting a spin on things.

Together, the two parcel sorters service 90 internal destinations – where roller containers are loaded – and 70 external destinations – where the swap bodies are loaded – directly using telescopic belt conveyors.



To create passage routes to the gates, spiral chutes with rotation reversal are used as a shared destination for the stacked sorters.



Technical Data	BEUMER Parcel Sorter BS 25 ET	BEUMER Large Goods Sorter BS 55 ET-LIN
Quantity	2	1
Sorter length (m)	2 x 651	-
Sorter centre distance (m)	-	130
Sorter speed (m/s)	2.27/2.5 (optional)	1.4
Tray pitch (mm)	850	1,200
Tray width (mm)	800	1,000
Number of trays	2 x 766	219
Tray performance (per hour)	2 x 9,600/10,500	4,200
Spiral chutes inside/outside	90/70	-
Destinations	-	84
OCR spiral chutes	8	-
No-Read	1	-
Returns	1	-
Shipment parameters		
Shipment length (mm)	max. 1,200	max. 2,000
Shipment width (mm)	max. 600	max. 950
Shipment height (mm)	max. 600	max. 950
Shipment weight (kg)	max. 31.5	max. 60



At a glance

- Location:
Langenhagen, Lower Saxony, Germany
- Overall size: 11,000 m²
- Premises: 1 hall
- Time for completion: 11 months
- Sorters:
2 BEUMER Parcel Sorter BS 25 ET
- Total capacity: 20,000 shipments/hour

Hermes Logistik Gruppe Deutschland/Langenhagen
High availability at all times.



Langenhagen



Operating day and night.

The last logistics centre for Hermes Logistik Gruppe Deutschland in Langenhagen – located near the A 352, the A 2 and the A 7 – is a centrally located hub, which has been officially recognised for its ecologically sustainable design.

The HUB, 245 m long and 52 m wide, processes shipments such as packages and boxes, bags/bag containers, letters and catalogues, letter containers, courier parcels and oversized baggage. These are shipments from external clients, that are primarily conducted on a daily basis.

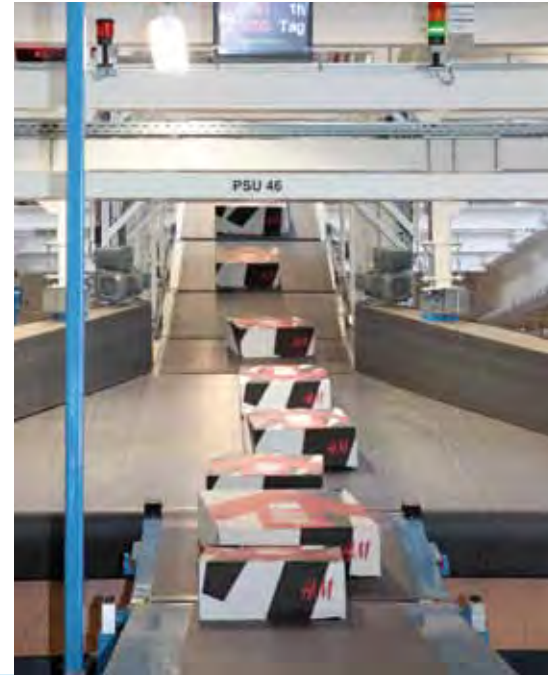
The shipments are brought to the HUB via lorry or small vehicles, then sorted

destination for distribution in the Hanover area. There are 108 gates for this purpose.

In addition to HUB operation, the logistics centre in Langenhagen also acts as a branch for the Hanover region.

Speedy door-to-door delivery.

Shipping and receiving can be loaded individually with telescopic belt conveyors, as well as on small vehicles or in roller containers. Shipments that are dropped off from around the region are delivered individually in small vehicles or, in the case of larger clients, in roller containers and are automatically accounted



Shipments for their own branches are primarily sorted at so-called satellites (SAT). Satellites are external companies with fixed delivery zones in the greater Hanover area. They take on the task of distributing shipments directly to the customers' "door steps".

Additionally, Hermes shops in the region are serviced on so-called "shop tours".

and reloaded. From there, they are brought to other Hermes branches or HUBs by lorry or small vehicle, or they are sorted out directly to the respective

for in Hermes' own shipment processing and tracking system when being unloaded.



Hermes Logistik Gruppe Deutschland/Langenhagen
You'll always be well received.

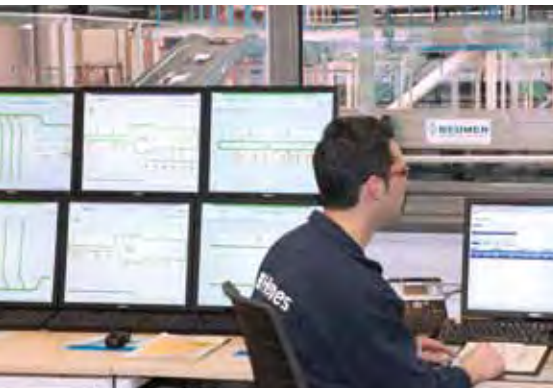


Langenhagen



Tested a million times over.

BEUMER, as the general contractor and system integrator, designed and installed a sortation and distribution system for Hermes North HUB in Langenhagen in eleven months. Here, two parcel sorters are used to sort and distribute 20,000 shipments per hour. That's 60 million shipments each year.



Shipment stations.

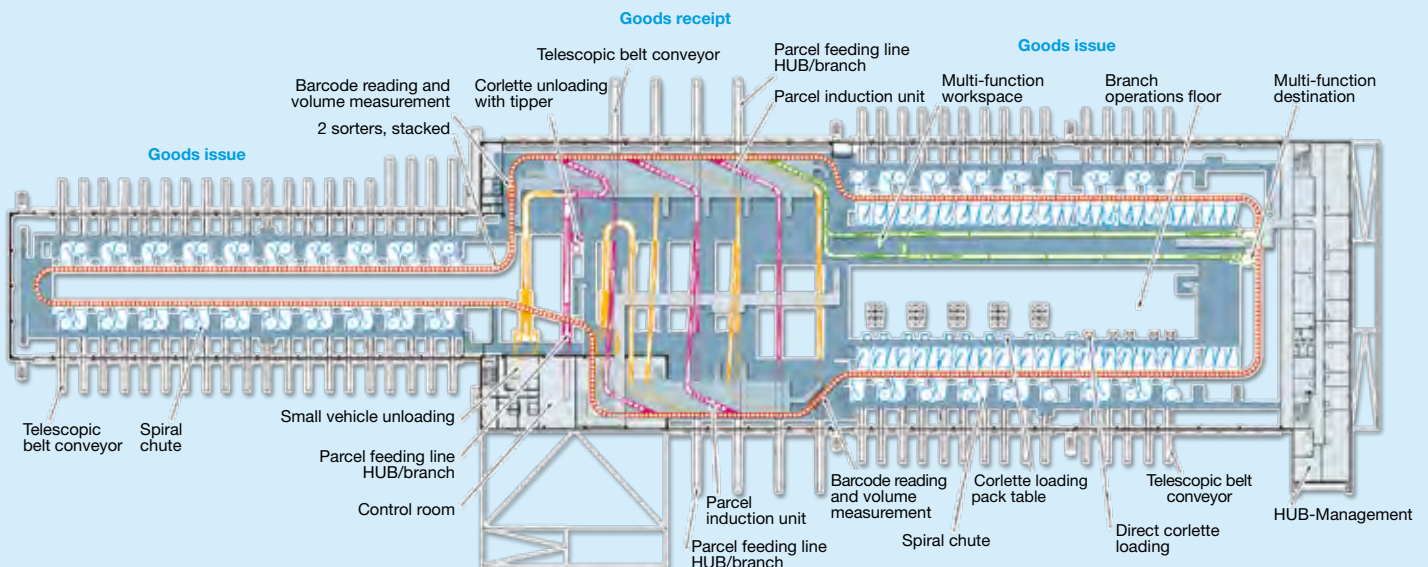
After arriving, the swap body docks at the hall. An employee places the shipments on a previously positioned telescopic belt conveyor so that they are readable.

In order to prevent items that are too large, from entering the sorter, they are first measured. Then, the induction unit carries the items to the sorter, where the barcodes are read and the volumes are measured. The shipment is then taken to the corresponding telescopic belt conveyor via a spiral chute and transported to the swap body. This is how all items are transported gently, quickly and safely to the customer.

BEUMER sortation and distribution technology – reliable system solutions for satisfied customers.



Technical Data	BEUMER Parcel Sorter BS 25 ET
Sorter length (m)	2 x 519.35
Sorter speed (m/s)	2.27/2.5
Tray pitch (mm)	850
Tray width (mm)	800
Number of trays	2 x 611
Tray performance (per hour)	2 x 9,600/10,500



Technical layout of the NORD-HUB of Hermes Logistik Gruppe Deutschland



BEUMER
technology in motion

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BEUMER reserves the right to make modifications that serve technical progress.