GROENEWOUT

P.O. BOX 3290
4800 DG BREDA
THE NETHERLANDS

NIJVERHEIDSSINGEL 313
4811 ZW BREDA

T +31 (0)76 - 533 04 40
MAIL@GROENEWOUT.COM
WWW.GROENEWOUT.COM

Hitachi Data Systems due to move into larger, more efficient and more sustainable DC

An interview with mr. Paul Dalderop, director European logistics of Hitachi Data Systems in Waardenburg (The Netherlands) by Marcel te Lindert.

In 2011, having continued to grow year on year despite the financial crisis, Hitachi Data Systems decided to build a new European distribution centre in Zaltbommel, The Netherlands. Groenewout designed the layout for the DC and developed a new process for supplying components to the assembly area. As a result, Hitachi Data Systems moves in April into a new DC which is not only larger and more sustainable, but also more efficient than its existing one.

Paul Dalderop, HDS

The Hitachi Data Systems (HDS) storage systems are not standard products which are sitting on the shelves in the European distribution centre, ready and waiting for customers to need them. On the contrary: each data storage system is only assembled in Waardenburg when it is ordered by a customer. Only then are the hard disk drives with the required technical specifications and the relevant cabinets picked and assembled into an integral system. "A storage system can be made up of as many as six cabinets. The hard disks mounted inside can vary widely in terms of both their speed and their capacity, which means that there are countless possible combinations," explains Paul Dalderop, Director European Logistics at HDS.

The cabinets and the hard disks are all produced in the Hitachi factories. A lorry leaves France every day, for example, on its way to replenish the stock of components in Waardenburg. "In addition, we store components here which we source externally, such as switches from other suppliers which we sometimes need to deliver a complete solution. Furthermore, we have centralised the spare parts inventory here for the whole of Europe, the Middle East and Africa (EMEA)," says Dalderop.

Prepared for the next 15 years

HDS's strong growth is a reflection of the continuing increase in demand for storage capacity. The DC in Waardenburg receives an average of 800 orders for data storage systems every month and 5,000 orders for spare parts. "Those figures are growing by 15 percent per annum. When we started here in 1994, we spoke in terms of gigabytes. That evolved into terabytes, and nowadays it's petabytes," recalls Dalderop. The company's success was causing it to outgrow the 12,000m^2 DC in Waardenburg. "Based on our 18 years' experience in Waardenburg, we've calculated that our warehousing space needs to increase by 4 percent each year in order to be able to continue to meet future demand levels.

That's why we decided to build a 28,000m^2 DC a couple of kilometres down the road in Zaltbommel. That should be enough for at least the next 15 years," says Dalderop, adding that the new DC is now close to completion.
Dalderop turned to Groenewout for help with designing the new DC's logistics operation. "This new-build DC is a 15-year commitment, so it's important that it is properly designed. It's better to obtain professional advice beforehand than to face logistics problems afterwards, and we'd already worked with Groenewout on several occasions."

Intermediate pick location in assembly area
The contours of the new DC were already in place before Groenewout became involved. In addition to offering more floor space, the Zaltbommel premises have a ceiling height of almost 13 metres as opposed to the current 7 metres at the DC in Waardenburg. The assembly area will account for 6,000 square metres, which is almost twice as much as now, while the storage area is being increased from 9,000 to 22,000 square metres. Groenewout's calculations have included precisely how much storage capacity is required, which storage systems are most suitable and the optimal arrangement for those systems.

In addition, the consultancy firm has developed a new process for supplying components to the assembly area. HDS warehouse employees were used to picking the components on an order-by-order basis, unpacking them and placing them ready for assembly. However, that resulted in an inefficient and often ineffective order picking process – assembly employees regularly discovered that they did not have enough components and had to subsequently ask for more to be brought to them.

On Groenewout's advice, HDS will place a roller racking system in the assembly area to serve as intermediate pick locations. Several times a day, a tool will use data about the orders received to calculate the optimal level of inventory to be held there and how many extra components need to be picked. This will create a structured process offering several benefits, both in the warehouse and the assembly area. Since warehouse staff will be able to pick for several orders at once, they will no longer need to walk through the entire warehouse for each individual order. Meanwhile, assembly workers will spend less time waiting around for components since the intermediate pick locations will always have sufficient stock. "If this process works well, there is a good chance that it will be adopted by our DCs in Singapore and the USA too," states Dalderop.

Compelled to consider the details
HDS is due to move into the new DC in Zaltbommel on 1 April 2013. From that moment, the company will be operating from a new facility which is not only larger and more efficient but which is also more sustainably designed. The roof, for example, will be fitted with solar panels which will generate enough electricity to power the whole operation. The entire building is constructed from concrete, which offers better climate control properties than steel. For heating and cooling, HDS makes use of a thermal storage system. And finally, in a space-saving measure, the company park is located on the roof of the assembly area, which is lower than that of the rest of the DC. "Thanks to all of these measures, the building has been awarded three-star BREEAM certification," says Dalderop with pride.
So far, Dalderop has nothing but positive things to say about the entire new-build project, thanks not least to Groenewout's involvement. "The cooperation has been excellent. Groenewout spent a lot of time thoroughly examining all the information and evaluated all the possibilities down to the finer points. We would never have been able to do that so precisely. Groenewout's specialists put their knowledge and experience to good use in compelling us to consider the smallest details. While we were often quick to think that we already had all the answers, they continually ensured that each aspect was discussed – and this produced an even better end result."

About Hitachi Data Systems:
Hitachi Data Systems provides high-quality data storage infrastructures, application optimisation and services which make an active contribution to reducing its customers' operating costs. The company's technology drivers are: virtualisation, automation, cloud and sustainability. Customers already using the company's innovative solutions include leading organisations such as ZIGGO, Stads Archief Amsterdam and Kennemer Gasthuis/Spaarne Ziekenhuis. More details: www.hds.com

By Marcel te Lindert
Marcel te Lindert is a journalist with over ten years of experience in logistics. He was editor-in-chief of the Dutch magazines Transport+Opslag and Logistiek. Today he works freelance for magazines like Supply Chain Magazine and Logistiek Totaal.

More information
If you have questions or if you would like to offer your feedback to this article, you can contact Isabel Schouten-van Dilst, schouten@groenewout.com/ +3176 533 04 40.