Bulk Norway:

building the world's largest data centre campus on renewable energy

Bulk is an industrial group with operations in the areas of Real Estate Logistics, Real Estate Data Centre, Data Centre Services and Fibre Infrastructure. Working together with Minkels as strategic partners – to innovate sustainable hyperscale solutions – was a logic choice, according to Peder Nærbø (President and Founder of Bulk Infrastructure AS). Both companies are very customer oriented and focus on innovation, creative power, sustainability and ethics; solid ground for building the world's largest data centre campus on renewable energy!

Peder Nærbø, President and Founder of Bulk Infrastructure AS

SHARED DNA

Minkels and Bulk share a lot of DNA, according to Nærbø. "That's why we decided to work together on building the world's largest data centre campus on renewable energy – according to the new EN 50600 standard. At first, we discussed a completely standard solution: the Free Standing Corridor. We saw the Free Standing Corridor as an easy starting point for our project. We liked this particular solution because it has proven itself to be an innovative, scalable and efficient solution that has been implemented by many market players. We also saw it as a good platform when customers decide for wholesale colocation and to support converged IT."

SECOND OPTION

After some discussions, the engineers of both companies came to a second option: Minkels' cooling concept Vertical Exhaust Duct (VED) in addition to the Free Standing Corridor. "Both options can be used in the data centre depending on the customer requirements. Due to the diversity of customers, much flexibility is required. There are customers that require a high degree of standardisation, which means that the Free Standing Corridor fits better and there are customers who demand a high degree of diversity (completely other load per rack). The VED is the ideal solution in this situation. With VED above our racks, there is an ambient temperature which is consistent throughout the room. This enhances the performance of other infra and fits well with the restrictions that we had concerning the design for cabling and power."

Bulk data centre site in Kristiansand, Norway. First building of the campus is ready!

52U RACKS

Bulk is the first company in Norway to use 52U racks for its data centre. "The racks offer more space and are completely separated from each other. They are also pre-equipped before they are transported into the room. During installation, there's no interference with other cabinets in the rows – ensuring their performance isn't impacted. Because of the plug & play installation there is also no need to change any walls or panels."

FAST COMMUNICATION AND ORDERING PROCESS

Bulk and Minkels were able to reach a customer-specific solution based on standard elements. "We also put together a custom 'Bulk catalogue' with all the specific solutions that we co-developed. So, in a way we standardised customised solutions to ensure a fast communication and ordering process. The chosen approach also decreases delivery times and will make frequent mutations in the data centre easier for us."

OPTIMISING LOGISTICS

To achieve Bulk's goal – building the world's largest data centre campus on renewable energy – more is needed than just the technical solution. "We need to have optimised logistics. That's why we have consignment stocks on site to support

quick changes in the data centre and to meet SLA's. We made special agreements on this topic and merged supply chain processes to support this."

RECYCLING AND UPDATING RACKS

Besides logistics another important topic for Bulk is recycling. "Our philosophy is more of a cradle-to-cradle approach. At some point in time, the racks used in the data centre will be removed and transported on the campus to a recycling point. Racks will be partly disassembled and locally recycled and/or updated (refurbished & upgraded) to the latest specifications – to be used in another cycle. From a product point of view, we really liked the fact that the Minkels racks are very eco-friendly and can consist of up to 80% recycled aluminium."

BEST RESULTS

According to Nærbø the match between the companies and the willingness to cooperate and really work together led to the optimal solution. "It's not only about a product, there is so much more to it – like the relationship, knowledge sharing and creating a win-win situation. To get the best results for all parties, it is necessary to work together from an early stage on: from strategy to operations. It also makes the certification process a lot easier when a data centre is designed according to a standard from the very beginning."

CERTIFICATION

The Bulk data centre is one of the first to be designed and build according to the new EN 50600 standard [page 18]. "The standard covers not only technology but risk management and sustainability as well. The 'European Code of Conduct for Data Centre approach' is also covered in the EN 50600 – ensuring a sustainable and energy-efficient design. Our design is a textbook example of an EN 50600 implementation. That's why we are quite confident that we will be EN 50600 approved in the near future." ■

New to the Norwegian market 52U racks

In the Norwegian market, 42U racks are still the standard. Bulk is the first company to use 52U racks, creating an extra 25% rack space on the same footprint. This is a major USP for Bulk.

52U racks

because m² are expensive!

Minkels has an extensive portfolio of housing solutions for your data centre and / or server room – such as the 52U racks. These higher racks are ideal when the floor space (m2) is limited or if you want to make a more efficient use of the available space.
The Minkels housing solutions are very suitable for the installation of (blade) servers, switches, patch panels, routers and storage equipment. Modularity and flexibility are always key in the design of our products.

MORE SPACE

The 52U rack offers up to 25% more space than a standard rack.

SAVE M2

A higher rack allows for more space thus enabling you to save on expensive data centre m2.

REDUCTION OF ENERGY CONSUMPTION

Airflow management accessories allow for an energy-efficient solution.

ULTIMATE FLEXIBILITY

The 52U rack is a mass customised solution and can be configured as desired.

HIGH LOAD

The 52U rack has a maximum (static) load of 1,500 kg.

PROPER CABLE MANAGEMENT

Better performance and optimal availability through proper cable management.

MORE INFORMATION?
www.minkels.com/solutions/housing/mass-customised-cabinets