

Pressmeddelande 2015-08-25

RITTAL Scandinavian ab Rittalgatan 1 SE-262 73 Ängelholm ≅ +46(0)431 442600 ♣ +46(0)431 442644 Tel filialkontor: ा Stockholm: +46(0)8 6807400 ⊠ Göteborg: +46(0)31 7101500 ⊠ info@rittal.se @ www.rittal.se

Rittal outfits one-of-a-kind European data centre

## The industrialisation of data centre starts with Rittal

Understatement should not be on the agenda here: the Lefdal Mine Datacenter (LMD), a 120,000 square metre installation is under construction near Måløy on Norway's west coast and is going to be the European's largest data centre, producing a capacity of 100 megawatts. According to its operators, their goal is to become Europe's number one in terms of cost-efficiency, security, flexibility and sustainability. In order to reach it, LMD is using standardised data centre infrastructure based on Rittal's modular and standardised RiMatrix S data centre portfolio. The first units are planned to be completed and put into operation by 2016, a year that will mark the beginning of the industrialisation of data centres by Rittal.

Herborn/Oslo, 25 August 2015 – The Lefdal Mine Datacenter (LMD), a 120,000 square metre, five-level installation is under construction in an old mineral mine near Måløy (550 km north-east of Oslo) and is going to be the world's largest data centre. It will run 100 percent on renewable energy (wind and water power) and features a cooling system based on seawater coming from the adjacent fjord. The Norway-based operators offer a solution that boasts maximum energy-efficiency – a PUE (Power Usage Effectiveness) of less than 1.1 – combined with traditionally low electricity costs, culminating in 40 percent cost savings compared to an average cloud data centre in Germany.

Rittal together with LMD and IBM have developed the standardised data centre modules based on RiMatrix S required for the site's infrastructure, and are going to ensure they are delivered pre-assembled, tested, scalable and fast.

The Rittal solutions includes the delivery of five different modules in total, each of them consisting of ten to twelve server enclosures and one network enclosure, respectively, complemented by Rittal's climate control solution Liquid Cooling Package (LCP). LCP extracts the heated server exhaust air at the rear of the enclosures, cools it by using high-

ENCLOSURES

POWER DISTRIBUTION

CLIMATE CONTROL

L > IT INFRASTRUCTURE

SOFTWARE & SERVICES



performance heat exchangers and blows the cooled air back into the cold aisle in front of the server level. The data centre modules also feature redundant power supply and backup, which means customers can choose between 5, 10 or 20 kW of output per rack depending on what they actually require. Customers also have two redundancy options: n+1 and 2n. The data centre modules are suitable to be transported directly into the mine and can be fitted for instance in either containers or secure rooms depending on the protection level needed by the customer.

Lefdal Mine Datacenter (LMD) opted for a solution that combined the convenience of flexibility with the benefits of standardisation: a pre-assembled data centre that is shipped within a shorter time but is based on the tested, pre-certified components you expect from volume production. The Rittal solution also offers benefits in terms of scalability because customers can draw on practically unlimited resources should they require more data centre capacity.

LMD offers qualities that are unique in the European market and is a response to the rapid rising demand for data center space. Independent sources foresee a need for 60 new large scale datacenters in Europe until 2020. This calls for massive investments in a marked expected to grow annually up to 12 per cent, says Egil Skibenes, Chairman of the Board of LMD. As a supplier in this market, it is important to have capacity available. Companies will need cost efficient datacenter capacity, this calls for standardization, security and short delivery time. LMD has it all.

"The standardised and yet scalable modules we can offer are exactly what our customers need," says Andreas Keiger, Executive Vice President, Sales, Europe, at Rittal. "Factors such as operating costs and energy-efficiency are drivers when it comes to selecting the perfect data centre location."

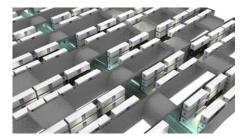
(3,976 characters)



Images



Gruva\_300.jpg: The Lefdal Mine Datacenter (LMD), a 120,000 square metre, five-level installation planned to be constructed in an old mineral mine near Måløy (550 km north-east of Oslo) is going to be the world's largest data centre.



Lefdalmine\_20022014\_03.jpg: The data centre modules are suitable to be transported directly into the mine and can be fitted for instance in either containers or secure rooms depending on the protection level needed by the customer.

May be reproduced free of charge. Please name Rittal GmbH & Co. KG as the source,



## About Rittal

Rittal, headquartered in Herborn, Hesse, Germany, is a leading global provider of solutions for industrial enclosures, power distribution, climate control and IT infrastructure, as well as software and services. Systems made by Rittal are deployed across a variety of industrial and IT applications, including vertical sectors such as the transport industry, power generation, mechanical and plant engineering, IT and telecommunications. Rittal is active worldwide with 10,000 employees and 58 subsidiaries.

Its broad product range includes infrastructure solutions for modular and energy-efficient data centres with innovative concepts for the security of physical data and systems. Leading software providers Eplan and Cideon complement the value chain, providing interdisciplinary engineering solutions, while Kiesling Maschinentechnik offers automation systems for switchgear construction.

Founded in Herborn in 1961 and still run by its owner, Rittal is the largest company in the Friedhelm Loh Group, The Friedhelm Loh Group operates worldwide with 18 production sites and 78 international subsidiaries. The entire group employs more than 11,500 people and generated revenues of around €2.2 billion in 2014. For the seventh time in succession, the family business has won the accolade "Top German Employer" in 2015.

Further information can be found at www.rittal.com and www.friedhelm-loh-group.com.