

Magnezit Group digs out business benefits with IBM and SAP.

Overview

Challenge

As mining and refining company Magnezit expands into new markets, its growth is in danger of outstripping the capacity and performance of its core SAP software. The challenge is to continue to deliver real-time information on orders, payments and deliveries from a reliable, flexible, low-cost infrastructure, ready for future growth in a manner that responds rapidly to market demands.

Why Become an

On Demand Business?

Worldwide competition is intense in the raw materials marketplace. Constant pressure on costs means it is essential to find systems and processes that provide highly efficient information management systems that are also capable of meeting ambitious growth plans.

» On Demand Business defined An enterprise whose business processes – integrated end-to-end across the company and with key partners, suppliers and customers – can respond with speed to any customer demand, market opportunity or external threat.



Solution

Magnezit selected SAP software on IBM @server[®] iSeries[™] servers, offering very low server and database administration and maintenance costs.

Key Benefits

The new solution delivers improved sales and material management; reduced inventory levels, monitored from a single, integrated environment for information management and reporting. Magnezit also reports improved delivery capabilities and greater production efficiency; faster delivery of new projects, through better investment and project management. Magnezit Group is one of the world's largest producers of high-stability refractory materials from raw magnesite (magnesium carbonate). The group's main manufacturing site, in Satka in the Chelyabinsk region of Russia, handles all production stages from the mining and refinement of magnesite, through to the preparation of fire-proof materials, including bricks, mortar and cement.

On Demand Business Benefits

- Improved sales and materials management
- Single, integrated environment has allowed reduced inventory levels
- Increased production efficiency
- Improved time to market

Founded in 1901, Magnezit (www.magnezit.ru) serves more than 1,000 customers in Europe and China, principally in the metallurgic, cement and glass industries. Its annual turnover is around USD 380 million.

Having initially implemented SAP R/3 software on IBM AS/400° servers in 2000, by 2004 Magnezit had started to outgrow the capacity of this infrastructure. The introduction of new SAP solution functionality, the codepage conversion from EBCDIC to ASCII, and a general increase in business volumes had all put a strain on the system, which supported 150 users. Magnezit wanted more capacity and better performance for its production planning and logistics processes, designed to improve customer service and internal efficiency.

Alexey Sobolev, Director of IT and Controlling Department at Magnezit, comments: "We were completely satisfied with the functionality provided by the SAP software, and the reliability of the AS/400 servers had been outstanding during four years of continuous operation. When we looked at the options for modernizing the system, we saw no reason to move away from SAP software or from the iSeries family of servers."

He adds, "With the improved performance and increased capacity of our new iSeries systems, Magnezit can use SAP software to provide information to customers more quickly and reliably, with a real-time view of the status of orders, payments and deliveries."

Powerful new infrastructure

Working with technical advisors from IBM and SAP, Magnezit has introduced mySAP ERP software and replaced its AS/400 servers with the latest IBM @server iSeries systems.

"With the improved performance and increased capacity of our new iSeries systems, Magnezit can use SAP software to provide information to customers more quickly and reliably."

Alexey Sobolev, Director of IT and Controlling Department, Magnezit Group

An IBM @server iSeries model 570 with four IBM POWER5[™] processors has replaced the original 8-way production server for Magnezit's industrial organization, and a 2-way model 550 has been deployed to serve the national Magnezit sales force. IBM Tivoli[®] Storage Manager–running on one of the old AS/400 systems–is used to manage backup to internal disk and to two IBM TotalStorage[®] tape libraries.

"The new iSeries systems provide very high reliability and fault tolerance, together with low server and database administration costs," remarks Maxim Kolganov, Senior iSeries Specialist at Magnezit. "The iSeries servers also offer tremendous flexibility in the use of processor capacity, with the ability to increase capacity as required through features like 'dynamic Logical Partitioning' and 'Capacity on Demand.' They also have a built-in capability to run multiple operating systems, IBM i5/OS," IBM AIX" and Linux," on the same server, and we consider using this Linux capability as a future option, running i5/OS and Linux on our iSeries i5 systems. This will enable us to increase the capacity considerably without significant expenses."

Kolganov continues, "Using SAP solutions, we have improved sales management, and better planning of consolidated industrial orders has enabled us to make regular deliveries to our customers and reduce delays."

Improved planning, better information

Magnezit uses SAP software to manage most business-critical functions, including financial accounting, cost management, sales and distribution, material management, and investment management. Says Alexey Sobolev, "Prior to the introduction of SAP software at Magnezit, we used a variety of separate systems, making it difficult to organize the internal flow of information. The SAP solutions now act as a central store of information for complex analysis, helping us to improve efficiency and reduce production costs. It also helps us to plan and control costs, ensuring competitive pricing, and has enabled us to reduce stock levels in our warehouses. In addition, improved efficiency in industrial planning has helped us to reduce the frequency of costly customization to equipment."

Key Components

Software

- IBM DB2[®] Universal Database[™]
- IBM Tivoli Storage Manager
- SAP R/3
- mySAP ERP

Hardware

- IBM @server iSeries models 570 and 550
- IBM TotalStorage 3581 and 3583 tape libraries

Magnezit is currently engaged in a wide-ranging strategic initiative to modernize its production facilities, increase manufacturing capacity and develop new production methods to meet the needs of its customers. By using the investment and project management functionality in its SAP system, the company expects to accelerate the completion of new initiatives, enabling faster response to customer requirements.

Constructing the future

Building on its success with SAP software on iSeries, Magnezit plans to extend the functionality of the system by introducing the production planning module (PP). The company is also considering the deployment of IBM software for document workflow and collaboration, to help its distributed workforce to operate as efficiently as possible.

Says Maxim Kolganov, "The combination of SAP and IBM technologies offers an ideal information and production management solution for Magnezit. The solution is very cost-effective for our organization, because the iSeries server requires very little administration or maintenance, yet offers extremely high reliability. Furthermore, the DB2 Universal Database is fully integrated in the operating system, with unlimited users. DB2 offers excellent performance and reliability in support of our SAP solutions."

Alexey Sobolev concludes, "The support we receive from IBM and SAP is a critical factor in the success of the solution. Magnezit is currently the only Russian company running SAP software on iSeries servers, so the experience, knowledge and global resources of SAP and IBM helped us considerably during the implementation."

For more information

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