



*Siemens uses SimulationX to supply their customers demand for energy-efficient motors*

Siemens AG is a global powerhouse in electronics and electrical engineering, operating in the industry, energy and healthcare sectors.

For over 160 years, Siemens has stood for technological excellence, innovation, quality, reliability and internationality. The company is the world's largest provider of environmental technologies, generating €23 billion – nearly one-third of its total revenue – from green products and solutions.

In fiscal 2009, which ended on September 30, 2009, revenue totaled €76.7 billion and net income €2.5 billion. At the end of September 2009, Siemens had around 405,000 employees worldwide.



*»SimulationX allows a flexible and fast engineering of heat dissipation and by this, it supports standardized as well as customized components.«*

Frank Seibicke, Principal Engineer/ Industry Sector Drive Technologies Division, Large Drives DW, Siemens AG

### **Challenge**

#### **Improving motor efficiency**

For Siemens, sustainability means acting responsibly on behalf of future generations to achieve economic, environmental and social progress. It has been an element of the company culture for generations: now, it is one of many other ambitions to improve the efficiency of the high voltage motors, which are produced at the Business Unit Large Drives and have power up to 100 MW.

### **Solution**

#### **SimulationX Professional Edition**

Analysis with SimulationX becomes a part of the dimensioning of the large drives and its components. It is used for calculation of heat dissipation and cooling, which are essential elements for ensuring required power, safety and durability of high voltage drives.

### **Benefits**

#### **Reducing energy consumption**

Through rapid development of simulation models we are able to create customized solutions detailed and short dated. The analysis with SimulationX supports the electrical and mechanical design, helps to reduce material usage and consumption of electrical energy by perpetuation of the same output power of the drive. It helps directly to reduce operating costs of our customers.