



# Siemens

## Standards sustaining product innovation

The global company known today as Siemens AG was founded in 1847 as the Telegraph Construction Company of Siemens & Halske in Berlin, Germany. The company subsequently became a world leader in the field of electrotechnology and further diversified into medical devices and household appliances.

Today, Siemens AG is divided into three sectors: industry, healthcare and energy. Siemens Energy is a world market leader in the development and provision of energy plants for power generation, transmission and distribution.

The assessment focused on switch technologies, a line of business belonging to the Siemens Energy branch.

**Company name:** Siemens AG  
Switch technology sector

**Country:** Germany

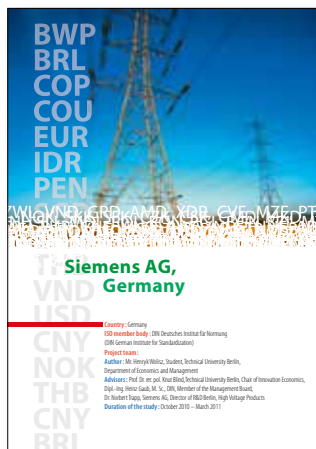
**Industry:** Electrical power transmission

**No. of employees:** Total employees of Siemens AG : 405 000

**Revenues/profits:**  
Total revenue of Siemens AG :  
EUR 75.98 billion/net profit EUR 4 billion  
(USD 100.68 billion/net profit USD 5.3 billion) (in 2010)\*

**Main products/services:**  
Power switches and switchgear. These include high-voltage switches used predominantly in power transmission and mid-voltage switches for power distribution. The portfolio of Siemens switches includes outdoor and indoor switchgear, air- and gas-insulated switchgear, as well as circuit-breakers, current disconnectors and earthing switches.

**Main use of standards:**  
Design, production and sale of power switches



**Most important standards used:** Siemens has a long history of using standards and a broad experience with standardization. All of Siemens' switchgear devices meet or exceed existing standards (primarily DIN EN standards) and are known on the market for their high level of safety, reliability and durability.

For this reason, the assessment focused on the incremental benefits to Siemens arising from its migration to the latest edition of a particular series of standards, the DIN EN 62271 series on high-voltage switchgear and controlgear.

**Economic benefits generated by standards:** Between 1.1% to 2.8% of the EBIT of the relevant business units in Siemens.

**Key qualitative benefits:** Standards brought a notable change in management culture.

## **What were the major benefits for Siemens of using standards?**

Using standards allowed Siemens to:

- Become aware of changes to procedures for developing and approving switches
- Implement changes to technical requirements for switches and switchgear
- Embrace quality and service requirements
- Adopt changes to recommended and mandatory values, in particular those relevant to tendering
- Take early steps to implement the standards in cost-effective ways and thereby acquire a leadership position over its competitors

## **How did standards lead to these benefits?**

Through active participation in standards development, Siemens is able to influence their content and remains informed of any upcoming changes in new editions. The company is therefore in a position to take early measures to accommodate the changes and find cost-effective ways of implementing them in its products.

By implementing the new edition of the DIN EN 62271 series early, Siemens was able to make savings and generate profits, in particular when its competitors struggled with the transition to the new standards.