

ABB wins overall Wall Street Journal technology award

ABB was presented with the gold award for technology at last year's European Innovation Awards held November 22 by The Wall Street Journal Europe. ABB received the accolade ahead of 190 individuals, organizations and companies in 20 countries, for its development of wireless sensor technology.

The technological advance, said the newspaper, "promises to make cabling, including power cables, on electronic equipment a thing of the past."

ABB unveiled its award winner 'Robbie' at the technology fair in Hanover, Germany, early last year. Robbie is an assembly-line robot fitted with wireless sensors that allow performance data to be sent to a central computer. The data are sent using radio rather than being transmitted via a heavy cable.

Robbie also had a wireless power supply rather than a conventional cable, with energy from a magnetic field being converted into electrical power. Faulty cabling is the dominant cause of downtime, and wireless technology can make assembly-line robots more reliable.

Frederick Kempe, editor and associate publisher of The Wall Street Journal Europe, said: "The need to innovate is a

crucial part of good business practice, and this is never more important than during an economic downturn. The ability to develop creative ideas and see new opportunities to fruition differentiates companies that simply survive from those that thrive."

ABB's entry came first in the communications equipment category, and won the overall gold award for technology ahead of Infineon Technologies in Germany, and Cambridge Display Technology in the UK. The awards are given to individuals or organizations which, in the judges' opinions, develop the best new ideas, products, inventions, services

or business methods that improve the quality of life or enhance productivity.

"We received a large number of very high-caliber entries," said Kempe. "It's very satisfying to give recognition to those who are leading European thinkers and creators."

Snorre Kjesbu, head of

ABB's corporate research program for communication/wireless technology, says: "From nuclear plants to melting facilities and challenging pulp and paper operations, we've tested the limits of wireless technology and learned what applications are possible in today's industrial environment."

Markus Bayegan, ABB's chief technology officer, answered questions about the award. "We are very pleased to have

won this award. It recognizes the success we've had by teaming our researchers with customers, and the business solutions we are creating through innovation. It is further confirmation that we are on the right track with our research and development work, and will inspire our researchers around the world."

ABB is one of the first companies to apply wireless technology to industrial applications. It is highly challenging, and it has to be 100 percent reliable. Bayegan continues: "As you know, we have successfully developed the wireless proximity sensor for such things as robots. We have also developed hand-held terminals for a number of applications. This gives plant operators a great deal of flexibility. We are working within the 'Bluetooth' consortium, which sets standards for wireless communications, but we are now in a position to adapt to any platform technology in this field.

"Flexibility and simplicity of operation are among the main benefits. Wireless technology means that control and operational functions can be carried out anywhere. We are not bound by cable plug connections. Doing away with cables also means cutting out installation work and the risk of failure. This clearly saves time and money."

Plants using wireless technology can be operated more reliably and efficiently. Besides the clear cost saving quality is improved, too, while the ability to be online all the time and anywhere also has customer benefits.

ABB's moves to introduce wireless technology in industrial applications have been well received and aroused a lot of interest. At the Hanover fair this year, customers showed a high level of interest in ABB's proximity sensors, and pilot installations in an automotive factory in Sweden are also operating well.

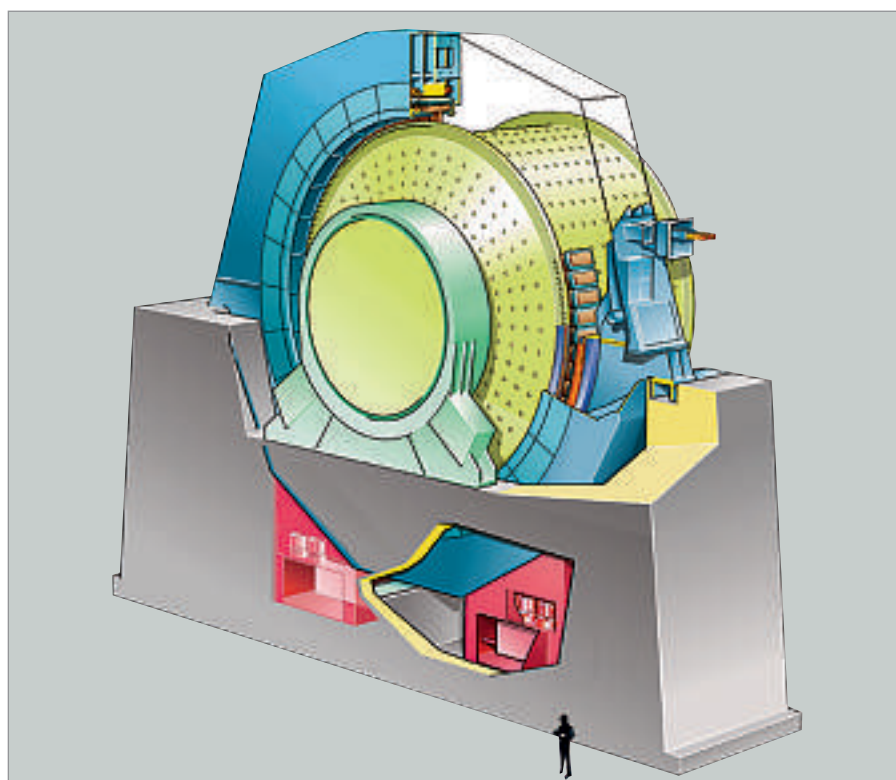


CVRD in Brazil orders drive system

ABB has received a 6 MUSD order for a large drive system from CVRD of Brazil. It is the first so-called 'gearless mill drive' to be delivered to that country.

Companhia Vale do Rio Doce (CVRD), the global leader in iron ore and pellet production, has moved into the strategically new area of copper production. In the past, the major mining activities in Brazil have been concentrated in the state of Minas Gerais. However, recent geological studies and exploration have uncovered enormous mineral deposits with a high copper ore content in the Serra do Sossego region, in the state of Pará in northern Brazil. CVRD, as the owner of Mineração Serra do Sossego, recently approved construction of the country's largest ever copper mine along with a new copper concentrator. The total investment is over 400 MUSD.

To produce copper concentrate, the ore first has to be reduced in size by grinding in SAG and ball mills. The throughput capacity of the SAG mill for this project is 1800 tonnes per hour, requiring a gearless mill drive system



Drive system for an SAG mill. The colossal motor measures 25 meters from top to bottom and weighs more than 600 tonnes.

with a rating of 20 MW (29'000 hp) and an extremely high torque of 21 MNm.

The drive system will be delivered in 2003, with the plant due to start operat-

ing in 2004. The contract includes assembly and start-up supervision as well as technical assistance.

