

## Harvesting the results of R&D

**N**owhere is the saying “the proof of the pudding is in the eating” more true than in the world of R&D. No matter how sophisticated or advanced a new technology is, what counts in the end is how it shapes up in practice. That is why, each year, we showcase the return on our substantial investments in R&D.

Some examples of achievements underscoring this R&D commitment are presented in this issue of

*ABB Review*:

- Robots able to perform heavy-duty tasks, like handling auto body parts, with the highest precision.
- Robots that can expertly sort and load baggage in airports.
- Turnkey substations, pre-engineered for delivery in record time.
- A universal adapter designed to connect intelligent devices to any kind of fieldbus.
- Soft starters that improve the performance and lifetime of motor drives.
- New insulation technology enabling protection functions to be integrated in high-voltage products.

The area we give most attention to in R&D is Industrial<sup>IT</sup>. Industrial IT is the thread that runs through everything we do, and has at least three important dimensions:

- Through Industrial IT, we commit to helping ABB customers in their quest for next-generation automation and information



solutions. Automation and information technologies working together across an enterprise – seamlessly and in real time – require ‘plug and produce’ functionality, from the basic products to complex automation systems.

- Our products and systems will be certified ‘Industrial IT Enabled’. This certification describes various levels of compatibility, from a detailed description of product aspects to full interoperability.
- Our Industrial IT approach is based on innovative, protected technology, the Aspect Object<sup>TM</sup> platform and the related architecture. During 2001 we introduced a whole range of product suites, for example Operate<sup>IT</sup>, which facilitates the interaction between automation systems and human operators, and Optimize<sup>IT</sup>, which supports the tuning of processes in industry, plus many more.

ABB has a unique opportunity with Industrial IT solutions, and we are rearranging our R&D activities in the Group to fully support this major ABB initiative.

To focus our ‘Brain Power’ and utilize the worldwide strengths of our R&D, we have formed four global R&D laboratories for automation, power, engineering and manufacturing, and oil and gas technologies.

These global R&D labs integrate the best available resources inside and outside ABB in order to move quickly toward our vision of the future with Industrial IT. We are increasing our activities in this area in the USA and in Asia, and we are opening an Industrial IT Center in Bangalore, India, where excellent software development capabilities exist.

Welcome to ABB’s Technology World and its Industrial IT roots.

A handwritten signature in black ink that reads "H. Janka, Bayegan". The signature is written in a cursive, flowing style.

Markus Bayegan  
Chief Technology Officer