

SIEMENS

Joergen Ole Haslestad,
President of the Siemens Industrial Solutions and Services (I&S) Group,
Erlangen

Statement

on the occasion of the trade press conference held on
3 March 2005 in Frankfurt/Main

- Check against delivery -

The company

With engineering and plant construction for industry and infrastructure, the integration of electrotechnical products, software made by Siemens and technical services for the operating phase, the Industrial Solutions & Services Group recorded new orders of nearly 4,4 billion EUR in the past fiscal year. Roughly 60 per cent of this volume was won abroad. I&S employs approximately 30,000 staff worldwide, with the majority working on our customers' premises.

I&S possesses industry knowledge as well as process engineering know-how, both of which are necessary for the successful integration of electrical engineering. The I&S service portfolio ranges from plant construction engineering via plant modernization all the way to support throughout the life cycle of the plant. Thus, unlike so many others, we are able to gather experience – positive and sometimes less positive – which we can then use to design plants and develop electrotechnical products and systems.

I&S is the global service provider for the entire plant business of Siemens.

I&S is also the global sales outlet for the product business of the Automation & Drives (A&D) and Power Transmission and Distribution (PTD) Groups.

The future in plant engineering and operation

A lot has been achieved in recent years in the field of electrical engineering. Considerable costs have been saved by automating plants within the production chain. The optimization of business processes has also helped to almost double productivity per head in Germany over the past decade. Although conventional automation technology has not yet reached its physical limits, it is increasingly coming up against financial restrictions. Progress must remain affordable, and it must pay. Plant engineers such as Industrial Solutions and Services must take up this challenge. It is no longer what is technically feasible that sells. Rather, customers require a low-cost solution which meets the purpose, is risk-free and can be used throughout the life of the plant.

Companies are nowadays competing on a global scale; not only must they deliver flexibly and in time, but also produce at low cost. This means that the entire production chain is put to the test, with the weakest link determining whether or not profit targets are met. Ongoing rework, exchange, upgrading or replacement of drives, software, or new control systems is consequently the order of the day. A green-field factory may become obsolete just a few years after commissioning. To a plant engineer and provider of technical services such as Industrial Solutions and Services, this means that, as early as the plant design phase, care must be taken to provide for modernization at a later point.

There is no future in one-off engineering feats and individually designed plants. Keeping abreast of technological advance and adjusting the plant to the latest state of the art on an ongoing basis may entail entrepreneurial risks. Customers are consequently now demanding modular and parameterizable standard packages and plant components which are easy to maintain and adapt to any new environment, while above all remaining modernizable. This is because plants live longer and have to integrate several generations of new technologies in the course of their service life in order to remain competitive. For this reason, plant operators must take the modernizing risk into account in their long-term planning, and bring down the cost of modernizing in order to secure their investment in the long term.

Plant design will in future no longer be based on individual electrotechnical products, but instead on modular building blocks and assemblies. From the electrical design perspective, drives for paper mills are basically the same as those for steel mills. The only difference is in their industry-specific design, i.e. in their tailoring to suit the respective industrial application. We provide such modular assemblies with electrotechnical standard cores for a number of industries. These modules enable us to provide customized solutions much more quickly than in the past; they can be commissioned much faster, and we can ensure that any modernization or refurbishment at a later date will be less risky and more economical than ever before.

As a system and solution integrator, Siemens I&S now supplies modular building blocks and assemblies with an electrotechnical core that is only supplemented by components required to meet the specific demands of the respective industry. In future, these plant modules will provide an even broader base for engineering, designing, commissioning and operating plants. Customers' specifications and requirements for individual sites can be taken into account as before. There are a number of variants of this modular plant concept. Plant operators can base their purchasing decision on different brands, just as when buying a car. Among our plants, there is room for BMW and Mercedes, as well as Honda and Volkswagen.

This modular building block concept, from which I&S has created industry-specific product families, not only results in faster and safer project management and commissioning in the design, construction and operation of plants. The use of tried-and-tested technology ensures reliability as much as flexibility. This is a great advantage to a plant operator who is planning to extend or modernize his plant. At the same time, the modular character of product families enables what is referred to as "plug and produce", since defined attributes and interfaces make integration in complex plant processes easy. The concept of using plant building blocks and complete plant functions, rather than electrotechnical components only, allows plants remain future-oriented and production competitive.

One of the core competences of Siemens lies in electrotechnical products and systems for plants in all industries around the globe. We hold a leading position in the market. As a plant designer and system integrator, I&S plays a major role within

Siemens worldwide. We use the experience gained in the design and operation of plants in order to further advance electrical engineering, to develop interfaces, and, last but not least, to jointly introduce state-of-the-art technology on the market. Short communication paths between ourselves and those responsible for products in A&D or PTD give us a crucial competitive advantage in this context.

One key requirement in plant engineering is to serve global customers with what is essentially the same technology. This is resulting in the increasing centralization of plant layouts, and hence a high degree of standardization of electrotechnical products and plant building blocks with the aim of implementing them effectively and at a competitive price. These plant building blocks also require a modular design to suit the respective local conditions.

Demanding customers, a large number of interfaces, ever more complex tasks and increasing time and cost pressure are the main features of today's plant engineering and its concomitant technical services. Growing complexity is a determining factor in projects. Coping with this complexity requires clearly structured portfolios such as the product families of I&S. With these modular and tailored plant building blocks, we are now in a position to supply plant operators with state-of-the-art technology in new construction and modernization alike.

Electrotechnical knowledge and a wide range of products and software are no longer enough to achieve success in plant construction and commissioning. The really crucial factors for success are competence in the industry and knowledge of production flows. Without this process engineering expertise, success cannot be guaranteed. This also means that a plant designer such as I&S has to extend its knowledge on an ongoing basis. With USFilter, we have acquired know-how and solutions to enable the industry to handle scarce and expensive water resources properly.