

**Increase your productivity –**  
Industry-specific solutions with a bite

... your profit

Maximize ...

Industry  
Suite

# food & BEVERAGE

**SIEMENS**



know-how



# know

# know-how



## Understanding **business needs**

Whatever you produce – whether it be pasta or beverages, dairy products or sausages, sweets, bread and cakes or cigarettes and coffee, or even ready-to-eat meals – we have a deep and wide-ranging understanding of your particular needs. This is based on the know-how we have gained over a period of many years in the food and beverage industry but it is also the result of a continuous dialog with specialists in your industry and our broad-based expertise in the areas of automation and power. For a long time now, we have been taking into account your experience and needs in order to develop and improve both our products and systems. And we have always aimed to meet the challenges this entails as efficiently and effectively as possible in order to create automation solutions that generate additional benefits for you as the customer. In this respect, we have taken a decisive step forward:



## Sectors on which we focus

### Food

- Dairy products
- Ice cream
- Cooking oil
- Coffee
- Confectionery and bakery
- Sugar

### Beverage

- Breweries
- Malt factories
- Soft drinks, mineral water
- Spirits

### Tobacco

- Cigarette production

know-how



*The challenges entailed by the great variety of products, the need for reproducible quality and the obligation to verify compliance with regulations and quality standards can only be met by a continuous process of optimization. Here, we can help you – all the way down the line.*



*The challenges faced by modern manufacturers of dairy products necessitate constant modernization and greater integration into the area of automation. We can provide you with help in all areas of your production process – from the handling of untreated milk when it arrives at the plant to packaging of the finished product.*



### New potential for more productivity

Creating benefits for our customers has always been our main mission. In concrete terms, this means that we do everything in our power to develop additional potential which will increase your productivity. In order to achieve this objective more effectively, we have now combined our competence and know-how in the fields of automation systems, power supply and services to form the **Food & Beverage Industry Suite**.

With this new power base, we are now in a position to offer you a portfolio of solutions that is exactly matched to your needs. The portfolio completely covers the four stages of your production process – incoming logistics, primary processes, secondary processes and outgoing logistics – and enables efficient generation of overall solutions as well. Apart from increasing your output over the whole life cycle of your equipment, these solutions will maximize your profit and lead to a lasting improvement in your competitive situation.

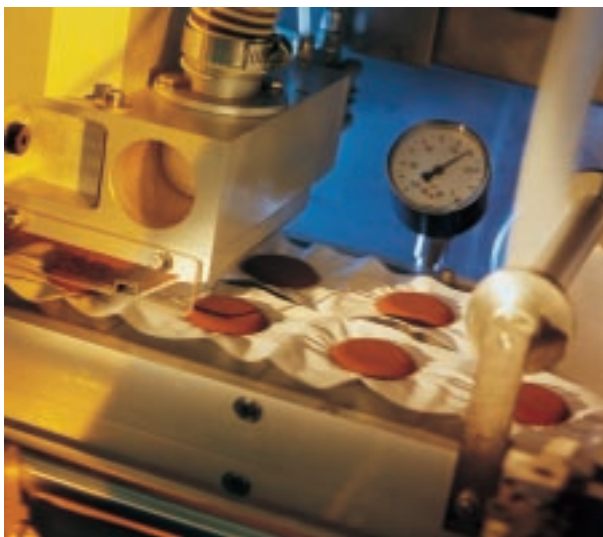
And, of course, we will commit all our experience and know-how to help you optimize and create the partial solutions you require.



*For large and small breweries, we design all-inclusive automation systems for every aspect of production – from the incoming malt to the brewing room and the filling plant. This also includes acquisition and logical link-up of all operating data as well as the advantages of our expertise in electrical and control systems.*

## know-how

Market studies, legal stipulations, the quality of raw materials and trends in plant construction are all factors that have to be integrated in your corporate production strategy. The automation for incoming goods, process engineering, the production process and outgoing goods must also act as an integrative system for all stages of the production process and on all levels of the company. With this as the standard, Siemens has spent years in constantly expanding its range of products and services specifically for your industry – in order to generate solutions that speed up your processes and help you to perform even more successfully on the market.





### **Increasing output and maximizing profit**

Our recipe for taking advantage of new market potential is to increase productivity. We can offer you just the right ingredients in the form of modular products, systems and services that can be integrated across all production and business processes to form an overall solution which will meet the demands of the future. This results in integral solutions which comprehensively improve your processes and, at the same time, make them transparent – from incoming raw materials, metering and mixing to weighing and distribution of the finished products. All this allows maximum variety, reproducible quality and guaranteed quality standards – in other words, what is referred to as Good Manufacturing Practice (GMP).



### **Successfully reducing the costs of ownership**

Greater productivity goes hand in hand with reducing the costs of ownership. This can be achieved by means of integral and long-term automation concepts that promise maximum profitability in all areas of your company – in planning, engineering and ongoing operation as well as in the servicing and retrofitting of existing equipment. We therefore keep a close eye on the whole life cycle of your plant and endeavor to reach maximum economic efficiency in each stage of the process, firstly by applying comprehensive technological standards and, secondly, by providing a globally available infrastructure for servicing and support.

## Offering **holistic solutions**

Our Food & Beverage Industry Suite is a unique and precisely coordinated range of products and systems, hardware and software, services and process know-how with which you can successfully meet the challenges faced by your industry. We not only provide you with comprehensive support during and beyond the whole life cycle of your plant, we also help you with our considerable pool of know-how and matching resources in order to solve all your problems quickly and reliably. It is up to you to decide what we can do for your success – an all-round solution, a partial solution or, simply, an individual package. But one thing is clear: an Industry Suite facilitates and accelerates development of specific plant solutions and it also makes your task simpler and more flexible when you have to expand your equipment.

solutions

# solutions

### **Modularization, standardization and integration**

Our industry modules are based on standard products. Standards, after all, are not incompatible with individually created solutions. Thanks to our open platforms – Totally Integrated Automation and Totally Integrated Power – the heart of Industry Suite – and thanks to uniform interfaces, the individual components can be configured, used and integrally combined for your particular company. And the more systems that are integrated, the easier it is to keep the processes transparent and ensure they run better, safer and more profitably.

# ons

#### The benefits for your sector

- Higher productivity
- Shorter time-to-market
- Improved quality in production
- Higher availability of the plants
- Better asset management of plants or entire production networks



**Process know-how:**

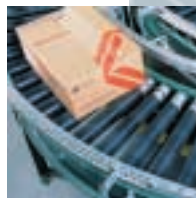
**Understanding technological requirements**

Our many years of working together with mechanical engineering companies and customers have resulted in our solidly based understanding of processes and our technological know-how in the manufacture of beer, soft drinks, dairy products, tobacco and many other related areas. We have consistently applied our experience and competence in your branch of industry to design products and automation solutions that are relevant to your branch of industry.



**Logistics solutions: Maintaining the flow of goods and streamlining logistics**

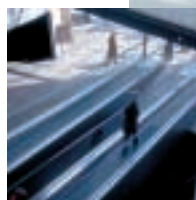
Cleanliness and hygiene in the milk industry, dynamic processes in the beverages industry, versatility in the dry goods industry or special know-how in the installation of cold chains – all these are areas where we, as the No. 1 in logistics, can provide you with a variety of logistics solutions for your branch of industry: e.g. the “MASTER Food & Beverage” warehouse management system, which features dynamic stock management, perfect logistics, guaranteed economic efficiency and compatibility up to the ERP level.



**Energy concepts:**

**Tailor-made power supply for processing plants in the food and beverage industry**

From incoming supply to the consumer, from energy management to emergency power supply – with our modular NXAir and NXAirPlus switchgear, we can design and implement reliable, fault-tolerant power supplies exactly to your needs. Our comprehensive know-how guarantees secure, stable and economical compliance with all process-related requirements. And we offer you solutions with maximum flexibility for expansion or production changes, selective protection of your supply systems and seamless integration in management and control systems. For optimum efficiency and productivity over the entire life cycle of your plant.



**Building services automation: For an outstanding production climate**

In the area of building services automation, we can supply you with specific solutions and technologies – from the high-technology clean room to the modern office. With our many years of experience and our excellent know-how, we create building management systems which comprehensively fulfill all validation requirements and enable you to enjoy an optimum combination of low power costs, maintenance costs and operating expenses.

# Industry Suite P

**Totally Integrated Automation**

**Innovations for more productivity**

With Totally Integrated Automation, we offer you an automation platform for process and manufacturing automation that is still unique in the world. Just like the information flow, all the partial steps in production can be integrated system-wide, from the field level right up to the corporate management level. This promises more cost-effective engineering and efficiency as well as increased profitability across all processes.

[www.siemens.com](http://www.siemens.com)

**MES solutions:**

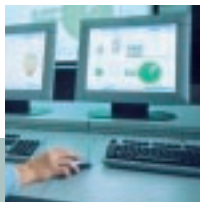
**Horizontal and vertical process optimization**

In the MES area, we can supply you with a wide range of products for optimizing factory management. Our SIMATIC IT Framework and the modular SIMATIC IT components form the backbone of our components approach and are unique throughout the world. On

# Food & Beverage

## IT-solution providing: Transparency on all levels

Once the production process has been optimized, it is important that relevant information is always available at the right time and in the right place. Here, our solutions for IT integration can help you by ensuring transparent processes, coordinating individual machine functions, monitoring the various processes or linking corporate management to the shop floor production level. Highly developed enterprise resource planning and supply chain management systems streamline the whole workflow – even beyond the borders of the company.



## Machine solutions:

### Building machines faster and cheaper

For many years now, we have been setting standards in machine construction and actively promoting the development of innovative ideas for manufacturers of packaging machines, machine builders as well as for the user. At the same time, our constant goal has been to noticeably reduce your costs of ownership with innovative products such as the motion control systems. SIMOTION, for example, ensures easier engineering, simpler integration, enhanced quality, greater safety and shorter shut-down times. With the help of modular machine concepts, you can react very quickly to changes in the market and smoothly integrate the modules in distributed automation solutions. Or there is also SINAMICS, our new all-round family of drives for modular and scalable drive solutions which cover the whole range of power and performance levels, can be flexibly adapted for individual applications and are also very easy to expand.



## Totally Integrated Power

### Power distribution and management from a single source

With Totally Integrated Power, we offer you integrated solutions for power distribution in utility buildings and industrial buildings, from medium voltage to the outlet. Equipped with the same communication and visualization standards as Totally Integrated Automation, all the resources for automation, power distribution, power management, and building automation can be integrated, and cross-boundary solutions for your sector can be implemented.



## Life cycle services:

### Services for the whole life cycle

Siemens can provide you with services in every phase of your project; from conception, engineering and operation to maintenance and retrofitting of equipment. This means optimized solutions to improve your processes while making them more profitable at the same time. Our range of services stretches from individual tasks to complete maintenance contracts and operator models – in fact, they include everything you could wish for in terms of service and support for maintaining your equipment and reducing your life cycle costs.



## /food-beverage

## System integration: Our partners in your neighborhood

Our close collaboration with solution providers and system integrators has resulted in a widely spread network of automation professionals that you can use to your advantage – even in your own neighborhood. Throughout the world, the quality seal of Siemens Solution Providers has long been a guarantee for world-class services.

the basis of standardized products, it is possible to create industry-specific modules as well as individual solutions in a very short time. This makes it easier to optimize factory management with a link-up to the business processes, to alter production processes and thus to lower the actual life cycle costs.



reliability

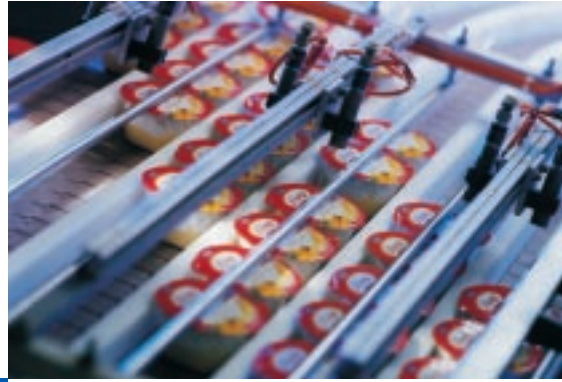
# reliability

# mbility



## **Totally Integrated Automation – A stable basis, capable of expansion**

Today more than ever before, it is necessary to consider the workflow as a whole in all parts of the company and to link up production processes and commercial and planning procedures as closely as possible. For all three dimensions – vertical integration, the life cycle process and the supply chain – we can offer you an all-inclusive system platform: **Totally Integrated Automation**. This system enables concepts that are considerably more productive for mechanical engineering and plant construction. It also ensures maximum productivity on all levels of your company aside from the actual automation aspect. And what's more, it grows as technology changes and, thanks to its stability, safeguards your investment over the long term.



## Totally Integrated Automation Update

### SIMOTION

The all-round, modular and scalable motion control system for complex motion control.

### SINAMICS

The new, all-round and complete drive generation for all performance, design and voltage classes.

### PROFINet

The new standard for industrial Ethernet communication.

### Component-based Automation

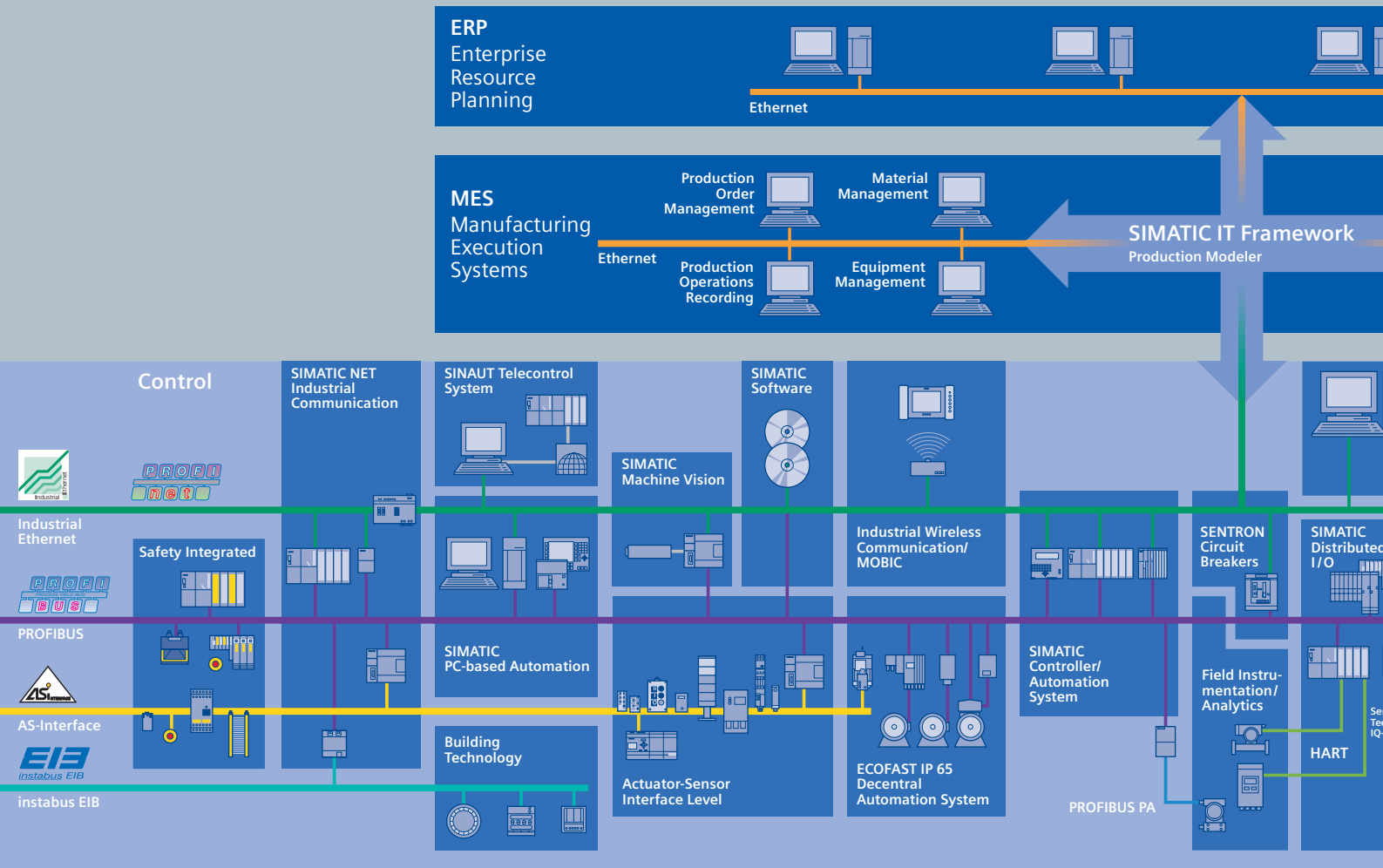
Simple-to-replace machine or equipment modules ensure shorter start-up and conversion times.

### Safety Integrated

The integrated safety technology via PROFIBUS and AS-Interface.

### ECOFAST

The integrated, standardized connecting system for communication and power distribution with a high degree of protection.



**This is Totally Integrated Automation:**  
**Integrated software tools ...**

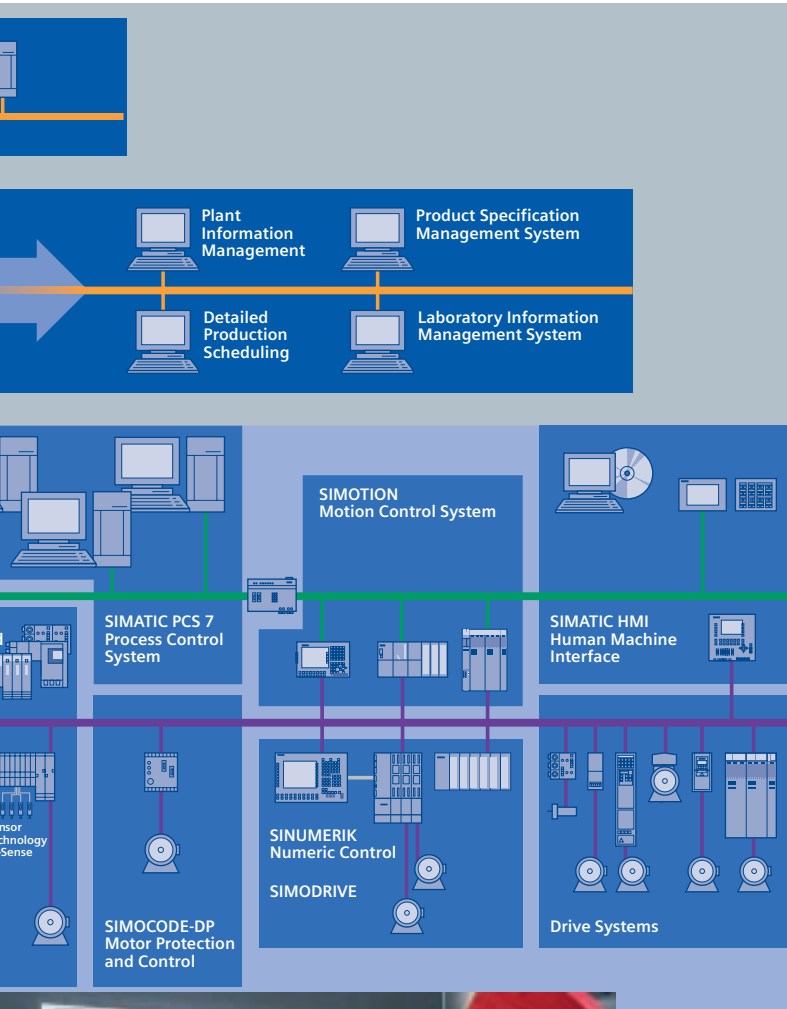
From the planning phase to intelligent maintenance strategies during ongoing operation, you can use integrated software tools that make use of a shared database. This ensures that your data remains consistent at all times.

**... and uniform communication mechanisms**

All hardware and software components incorporate a variety of communication functions. Connections, even via different networks and between different platforms, are extremely easy to configure. Communication thus reaches all the way, from the subordinate field level to the corporate control level. It is based on internationally recognized standards and uses Internet technology to support the worldwide flow of information.

**... across the whole spectrum**

Totally Integrated Automation covers the whole spectrum of tried-and-tested, innovative automation and drive systems – from the field level to SIMATIC controllers, from PC-based Automation and the operator control and visualization system to SCADA and SIMATIC PCS 7 process control systems. With the help of SIMATIC IT, it also links the automation to the corporate control level. Minimum engineering overhead and maximum productivity. That is what we mean by Totally Integrated Automation.



# Has all this given you a taste for our products?

Our Food & Beverage Competence Center will be pleased to help you further.

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