



How can we make sure we  
always take the right parcel?

**For further information contact:**

Siemens AG  
Industry Sector  
Mobility Division  
Infrastructure Logistics  
Postal Automation  
Bücklestr. 1– 5  
78467 Konstanz, Germany  
Phone: +49 7531 86-01  
Fax: +49 7531 86-2421  
E-mail: postalautomation.industry@siemens.com

Siemens  
Energy & Automation, Inc.  
Postal Automation  
1401 Nolan Ryan Expressway  
Arlington, TX 76011  
USA  
Phone: +1 817 436-7000  
Fax: +1 817 436-7476

The information provided in this brochure contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

Order No.: E10001-PA-A33-V1-7600  
Printed in Germany  
Dispo No.: 21655 K No.: 1227  
GB 080968 WS 12082.0  
Subject to change without prior notice

© Siemens AG 2009  
All rights reserved.

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

**With Advanced Technology, Outstanding  
Performance and Competitive Price.**

[www.siemens.com/infrastructure-logistics](http://www.siemens.com/infrastructure-logistics)

Answers for mobility.

**SIEMENS**

A fast and efficient sortation is of vital interest in parcel logistics. For more than three decades Siemens has been providing the market with sound and reliable solutions in this sector.



## Successful history – a complete portfolio

Two key factors affect the transportation of parcels to the right recipient within the shortest possible time: flexibility and speed. Regardless of their size, origin, or destination, all parcels must be routed quickly, reliably, and safely through the sortation center – not just to reach the customer on time, but also in the interest of in-house productivity. Already designed for the greatest possible flexibility, our sortation systems and control solutions create a solid foundation for meeting exactly these needs.



### Three decades of logistics expertise

For over 30 years, Siemens has been developing material handling solutions.

We have installed more than 6,000 logistics systems worldwide – and we don't just deal with parcels, but can also point to numerous projects and patents in related areas, from high-speed mail sortation to integrated air cargo solutions.

### Complete solutions

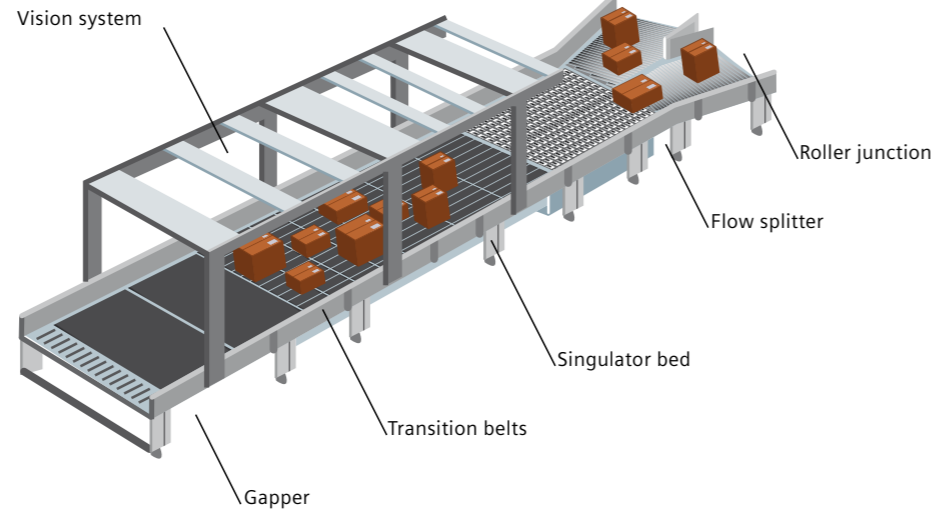
We've always been known for our ability to offer even the most complex projects. Backed by our internationally successful SIMATIC automation system and extensive standardization and modularization, we create tailored solutions that seamlessly integrate material flow control with material handling technology incorporating the upstream and downstream logistics processes.

In addition to pure product business, we also make our decades of expertise available. From consulting and planning to implementation, we support you in building new sortation centers and in optimizing existing ones.

### Even more flexibility to come

The logistics solutions we've developed in the past are an excellent basis for expanding our share of the cargo parcel market – supplemented by a new and broader product range. Whereas our primary business was always comprehensive global solutions, we now also offer our own sorters and conveyors as material handling products. This opens up new, far-reaching possibilities to both customers and partners for developing their own solutions under ideal conditions.





# Singulator Visicon

More intelligence, less space

Until now, current singulation solutions implied large systems of roller conveyors, chutes and recirculation lines – all of which take up valuable floor space, increase noise and are self-limiting with regard to scalability.

To cope with this problem, we have developed an advanced singulation technology. Our new flagship Visicon optimizes package singulation in a single pass, over a length of not even 6.5 meters. Using less than one quarter of the floor space of conventional systems, it handles up to 9,000 packages per hour.

The singulator processes incoming bulk streams of packages in a continuous flow without recirculation and delivers them single-file, directly onto take-away conveyors for scanning and sortation.

### Vision system

Visicon utilizes highly sophisticated image processing and a special multibelt conveyor bed to singulate, align and gap parcels for sortation. The vision system detects, measures and tracks the real-time position and orientation of parcels and works in a closed loop with the singulator controls. Thus Visicon tracks and controls the conveying speed and orientation of each individual item.

The gapper unit creates both lateral and longitudinal gaps between adjacent packages.



Singulator Visicon

### Singulator bed

The singulator bed consists of a series of variable-speed belt actuators, each controlled by a servomotor. The actuators move independently, allowing each parcel to be manipulated in order to optimize speed and orientation for singulation. The servomotors accelerate and decelerate each belt so as to pull parcels away from the incoming flow in a sequence determined by the main control algorithm and monitored by the vision system. Parcels can be aligned lengthwise or crosswise in order to optimize gaps and to move the parcels through the downstream system more smoothly. Gaps are produced between the parcels at a nominal output speed, so that all sides of the parcels can be scanned in sorter applications.

An optional steering wheel diverter moves parcels away from the center line of the singulator. Used with a roller junction, it can redirect the entire flow toward a single take-away conveyor or split the flow.

Visicon's high throughput and small dimensions make it the perfect solution for expanding the capacities of existing sortation centers.

# Solutions for sorters and conveyors

We're ready to meet your demands

Our product line comprises a broad selection of industry-proven material handling components for all related applications. Highly standardized elements and a solid, cost optimized design allow us to offer solutions with excellent value for money. A short list of our leading products is presented here. Of course, this is only a small section of our complete portfolio of high-performance line sorters, shoe sorters for sorting parcels of different dimensions as well as high-rate mechanical singulators with a throughput of up to 11,000 parcels per hour. Just tell us what you need and we'll show you our solution!

Variobelt 2.0 conveyor



Variosort EXB120 cross belt sorter



Multi Product Sorter MPS



### Variobelt 2.0 conveyor

#### A modular and reliable conveying solution

Demands for faster delivery, increased volumes, and seasonal peaks all impact the throughput of material handling systems in postal, parcel and airport facilities.

The new Variobelt 2.0 conveyor system from Siemens is designed to handle singulated and bulk flows smoothly and reliably for a wide range of products. It is based on our extensive experience as a contract partner for most of the world's leading logistics enterprises, for whom we have developed large, standardized conveying solutions.

The new modular system is easy to operate and requires little maintenance. Its length and inclination can be tailored to your specific requirements. Utilizing common parts, Variobelt 2.0 offers very high availability, low maintenance and high performance at up to 4 meters per second. And because it can be manufactured globally, production and delivery costs are extremely reasonable.

### Variosort EXB120 cross belt sorter

#### The highest value for your investment

The high-performance sorters available today have a reputation for being highly sensitive, complicated, failure-prone, and expensive mechanisms.

That's why Siemens has developed an electric cross belt sorter that is sturdy, simple, reliable, and competitively priced. It provides users with all the essential features necessary to meet their sortation requirements. The sorter draws upon our over two decades of in-depth application engineering experience and features a straightforward mechanical design, utilization of numerous off-the-shelf components, a "future-proof" industrial standard communication and control system, and flexibility to fit variable system designs.

The carrier design allows for easy adaptability to custom product dimensions, while highly standardized components guarantee a reliable and cost-effective operation.

### Multi Product Sorter MPS

#### Cost-effective, automated sortation of a broad mail spectrum

The Multi Product Sorter allows to sort into various types of destination containers and adapts to your workflow and space requirements. It provides you with variable operation times for sorting of multiple types of mail into different containers. Its flexible layout saves your floor space.

The MPS is designed to sort manual mail, automation rejects, low-volume mail classes which were before not justifying automation as well as changing mail mixes. Its high versatility allows for an efficient automated sortation and secures your investment.

The simple and robust sorter backbone, proven in more than 30 installations worldwide, combined with Siemens' most advanced automated feeder and OCR technology give you a sorting solution you can depend on.



# System integration from the market leader

When it comes to optimizing sortation centers, high-performance conveyor systems are just one side of the coin. Smooth process control is every bit as important, because it prevents any unnecessary idling, distributes peak loads in the material flow, and guarantees a uniformly high parcel throughput.



### Experience worldwide

As an international leader in industrial automation, we offer you a unique combination of IT expertise and process know-how. Almost all express services today are using our software solutions. We're also accustomed to working in even the most complex environments where heterogeneous conveyor technologies, evolved over decades, must be adapted to changing market conditions.

### Tailored solutions of all sizes

What is new is that we've expanded our range of services. In the past, we've focused mainly on large-scale market-induced projects. By extending our portfolio and having the entire supply chain in our hands, we're now able to offer even smaller projects at a competitive price. Thanks to our international presence, we're not only available to you directly on site, but are completely familiar with all local requirements.

**The bottom line: whatever your requirements, you can rely on Siemens to implement your project on time and within budget.**

### References

We are looking back to a history of more than 20 years in successfully completing large integration projects within the logistics industry. Major milestones were several huge USPS tray management systems implemented in the mid-90's, the world's largest material handling project, for Deutsche Post, the German postal service 33 parcel sorting centers finalized in 1997, as well as multiple multifunctional mail centers in Asia commissioned shortly before the turn of the millennium. The early twenty-first century provided new challenging projects, like DHL's International Air Express Hub in Cincinnati, USA; Royal Mail's Heathrow Distribution Centre; and the UPS Air Express Hub in Cologne, Germany which we all delivered on time and within budget. Our most recent large-scale project, the automation of Swiss Post's new mail processing centers "REMA", is almost completed as scheduled. The award of the automation contract for Itella's four major mail centers in Finland at the end of the year 2008 continues our success story.

