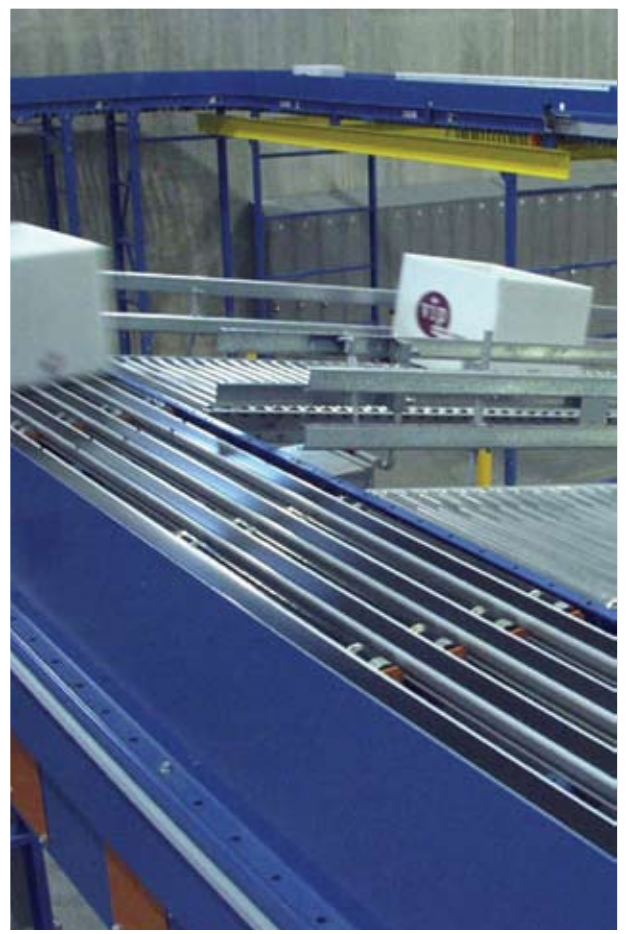




Achieving Logistics Excellence™



Innovation. Expertise. Services.

Services and guarantees

Our associates have the experience, technology, and commitment to provide the best solutions for your material handling needs. This commitment includes supporting you long after the sale is completed. At TGW-ERMANCO our goal is to provide an outstanding customer experience through:

- Technical design reviews
- Application testing
- Systems engineering and project management
- On-time, correct, complete delivery
- Customer support 24 hours a day, every day
- Two-year warranty
- Guaranteed system performance
- Customer education and training

Technologies:

TGW-ERMANCO products are recognized worldwide as among the highest quality available in the material handling industry. Innovation is a hallmark of our products, many of which incorporate patented technologies.

- Carton, tote and unit load conveyor systems
- Automated order-fulfillment systems
- Sortation systems
- Pick modules
- Automated storage & retrieval systems for mini-loads and unit loads
- Equipment Controls
- Visualization Systems
- Warehouse Control Systems

System solutions

To implement a system that works perfectly for your application you need innovative, reliable technology fully supported by superior expertise and services.

Innovation. Our innovative technologies take material handling to new levels of efficiency and reliability. For example, our proprietary narrow belt sorters reduce energy use by 60% compared to conventional sorters. Our stacker cranes have an anti-oscillation drive that greatly enhances both speed and accuracy. These are just two examples of the many TGW-ERMANCO innovations which will result in the best value solution for your application.

Expertise. Experience with a broad range of applications has given us a high level of expertise that will be applied to your design to create the best system solution. During technical design reviews we analyze your material handling requirements, your problems, and your “worst case scenarios” to make sure your system will handle any situation. Often our project managers suggest alternatives that increase productivity and save money.

Services. TGW-ERMANCO'S Sales Team and Project Managers go beyond the sale to proactively manage your solutions, making certain that fulfillment and delivery go smoothly and that your system is operating as promised. You also have access to a variety of services including technical design reviews, engineering and project management, continuous customer support, controls design, PLC programming, software and integration, and customer training. You have not experienced exceptional customer service until you have experienced TGW-ERMANCO.



visit www.tgw-ermanco.com
for complete capabilities



Achieving Logistics Excellence™

Carton & Tote Systems



At TGW-ERMANCO we believe in innovation that contributes to the success of the system. You'll see the results of our innovations in measurable terms such as increased throughput, improved accuracy in order fulfillment, and savings on labor and energy costs.

- **IntelliROL**® motorized-roller conveyor zones are powered and controlled independently to run-on-demand for maximum control, improved safety, and energy and noise reduction.
- Every one of the 400 **NBS**® Narrow Belt Sorters we've supplied are performing reliably at or above the specified sortation rate. In many cases investment payback was six months or less.
- **Pick Zone Modules** achieve high throughput by using a "velocity transfer" to transfer without stopping. The entire Pick Zone Module is driven by one motor which saves costs.
- **CRUZ**™channel conveyor frame is an open C-channel used on all belt and roller conveyors. It facilitates pre-piping, pre-wiring and testing before shipment. A protective shroud protects controls from damage and dust.

Innovation with purpose.



Achieving Logistics Excellence™



visit www.tgw-ermanco.com for complete carton & tote handling capabilities

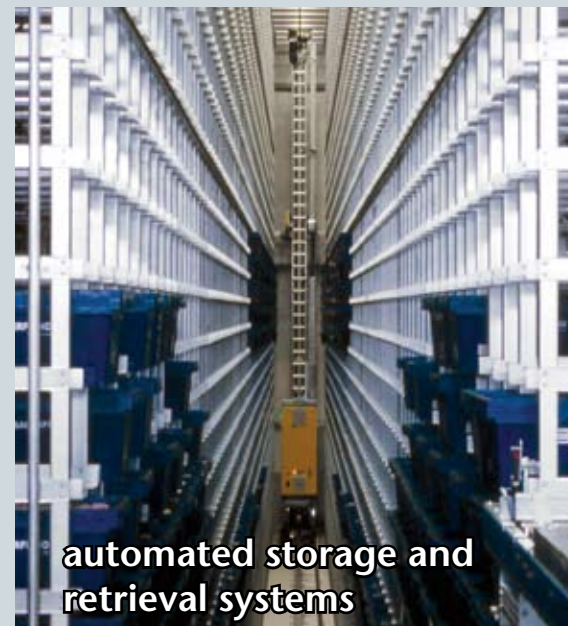
Carton & Tote Systems



Achieving Logistics Excellence™

We are committed to providing the best value every time. Each system is customized by applying proven standard technology to meet the your specific system requirements.

- **TGW-ERMANCO Induction Conveyors** are available with a variety of drive configurations to provide just the right speeds and gaps for each application.
- The innovative drive system of **NBA®23** accumulation conveyor offers efficient zero-pressure accumulation of mixed weight and size products - even for long lengths with minimal horsepower and energy consumption.
- **GAPmaster™** performs the same functions as a brake meter belt at a much lower cost. It's driven by the same belt as the adjoining NBA 23, eliminating a motor, clutch brake, controls and wiring for significant savings.
- Cost-effective **CRUZcontrol®** accumulation logic package utilizes a unique electronic sensor control system that accommodates all accumulation control requirements.
- The efficient **Mustang** mini-load crane stores and retrieves up to 150 loads per hour. The optional anti-oscillation drive enables rapid positioning at the highest speeds and accelerations available.



Expertise for results.



Achieving Logistics Excellence™

We are more than equipment suppliers. We “think systems” and will provide you with the technology and services you need to implement your system and to make it meet or exceed your expectations.

- Our complete line of **ULC™** Unit Load Conveyor technologies includes conveyors for transportation and accumulation, transfer devices, transfer cars, vertical lifts, turntables, sizing stations and automated storage and retrieval systems - everything you need for a pallet handling system.
- Modular **ULC** components are thoughtfully designed to be easily integrated into a highly efficient customized system. Interchangeable standard components guarantee minimal stocking of spare parts.
- **ULC** Unit Load Conveyor technology has been used extensively and with excellent success in Europe for 25 years.

Services for success.



unit load accumulation conveyor



visit www.tgw-ermanco.com for complete unit load handling capabilities



Achieving Logistics Excellence™

Unit Load Systems



horizontal transportation
and accumulation



automated storage and
retrieval systems



transferring



automated load handling

Innovation in the details results in superior performance. The little things are important, and sometimes even critical to the optimum operation of mechanical equipment. Reliability, speed, and versatility are inherent by design in all TGW-ERMANCO technologies.

- Both drive and carrying chains on **ULCTMcc** Chain Conveyor are adjusted to exact specifications with torque-limiting chain tensioners.
- **ULCTMvLB** Vertical Lifts transport pallets between multiple elevations. Versatility is achieved through single or dual load positions and choice of roller or chain conveyor as the load handling device.
- Maximum drive to each roller of the **ULCTMRC** Roller Conveyor is achieved by a precision roller chain which positively engages the roller sprocket.
- Horizontal as well as vertical movement of pallets by the **ULCTMRT** Roller Transfer transfers loads smoothly and reduces pallet damage while improving throughput.
- Rugged **ULC** conveyors and transfers move loads up to 3,300 pounds and can operate in temperatures as low as -22°F..
- Innovation resulting in exceptional system performance is demonstrated by the **Magnus** automated storage and retrieval system which can reach heights up to 60 feet and can store and retrieve up to 50 loads per hour.

Innovation with purpose.



visit www.tgw-ermanco.com for complete unit load handling capabilities



Systems for Individual Products

Accuracy, speed and flexibility are key to the success of any system. The best designed system fails if any one component does not perform as needed. Our Individual Product technologies provide picking accuracy up to 99.9% for fast, accurate order fulfillment. We have such confidence in all our technologies that we guarantee system performance.

- The **NBS®90SP** Narrow Belt Sorter - Small Products conveys products at speeds up to 300 feet per minute and achieves a sort rate of 120 products per minute. A series of narrow belts, each with individual take-up, enables the system to precisely track products as they reach specified divert points. High-friction rollers then rise to grip and gently divert products at a 90-degree angle in either direction.
- The **A-Frame** Product Dispenser processes up to 1800 orders per hour and can eject up to 6 products per second. It handles products as small as 1-1/2" X 3/4" X 5/8". The unique stock monitoring scanner allows both a dynamic refilling strategy and seamless production batch tracking.



Expertise for results.



visit www.tgw-ermanco.com for complete individual product handling capabilities



Achieving Logistics Excellence™

We believe that your success is our success.

To successfully implement a system you will require expert advice on selecting, applying, installing and controlling the technologies that comprise your system. We have that expertise and are willing to use it to your best advantage.

Pre-Sale Services

Sales Team

Besides providing proposals and sales assistance, your Sales Manager will facilitate our many services such as applications engineering, technical design reviews, and training. Our goal is to give you an "outstanding customer experience".

Technical Design Reviews

Knowledgeable Application Engineers will review your system design, making suggestions to ensure you are using the best and most cost-effective technologies and efficient layout to implement the optimum system for your application.

Application Testing

Once a system is conceptualized, testing in the TGW-ERMANCO Technical Center verifies the system will reliably handle your products and consistently meet operational requirements.

Controls

Software and controls are defined to integrate your entire system for seamless operation.

Implementation Services

Project Management

TGW-ERMANCO has field-proven success in managing system implementation for a wide variety of applications. Our experienced project managers make the process worry-free.

OTCC Delivery

One of the critical steps of implementation is delivery of the right hardware and services at the right time. We deliver your order on time, correct, and complete.

Installation

Take advantage of our efficient installation services. Then let us fine-tune your system with commissioning services.

System Launch Support

TGW-ERMANCO will provide skilled associates to stay on your site after startup to ensure a smooth transition to your new system. On-the-job training of operating and maintenance personnel is also available.

Lifetime Services

Comprehensive System Audits

We will perform an audit of your system operation and your maintenance procedures.

Maintenance

We provide comprehensive preventive maintenance services. Or, if you prefer, we also offer on-site staff who will assume responsibility for the maintenance of your system.

System Upgrades and Expansions

TGW-ERMANCO engineers are always ready to assist when your existing system needs updates or expansion.

Technical Support and Emergency Services

Customer Support is provided 24/7/365 to help keep your system running at peak performance. If necessary, TGW-ERMANCO will dispatch a trained field engineer to help get your system back to full operational capacity.

The Conveyor Institute

Useful seminars on TGW-ERMANCO technologies, proposals, and applications are led by our experienced material handling professionals. We offer on-line training, layout, and technical design review meetings.

Services for success.



Achieving Logistics Excellence™

Mission

To meet or exceed all customer expectations by providing the highest quality products and services, on time, at exceptional value, in an environment which promotes safety and personal development.



Transportgeraete GmbH, Wels, Austria



TGW-ERMANCO INC., Spring Lake, Michigan

Profile

TGW-ERMANCO INC. had its beginning as Ermanco Inc. which was founded in 1964. Ermanco developed and patented break-through line-shaft-driven live roller conveyor technology. Another Ermanco innovation is the superior NBS® Narrow Belt Sorter.

In 2005, TGW GmbH of Austria purchased Ermanco to form TGW-ERMANCO INC., making us part of a global company and expanding our product offerings. Since joining TGW, the Spring Lake location has continued to grow with the addition of ULC™ Unit Load Conveyor manufacturing in 2005. TGW-ERMANCO expanded into an additional facility, The Assembly and Technology Center (ATC) in 2006. The ATC expands manufacturing space by 75% and increases the size of the Technology Center 250%.

Over the years we have provided hundreds of material handling systems to the world's largest companies. We look forward to the future and to fulfilling our commitments to innovation, product development, and unparalleled customer service.



Achieving Logistics Excellence™

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