**Focusing on sustainability: TGW Smart Energy Strategy**

* **Low energy consumption and recuperation are the TGW standard**
* **Potential savings of up to 17 percent with storage and retrieval machines or conveyor**
* **Intelligent software adapts the system energy output to the individual performance requirements as needed, also reducing mechanical wear**

**(Marchtrenk, Austria, 20 March 2023) Ecological, economic, and social sustainability are central factors in future-oriented materials handling. For TGW, being environmentally friendly manner is vital to its corporate responsibility. The leading warehouse automation specialist has consolidated its energy-saving initiatives for systems, modules, and products into the TGW Smart Energy Strategy.**

Reducing resource consumption is not only a matter of corporate responsibility but also yields concrete economic advantages, especially when raw material prices are high.

**Intelligent software adapts power as needed**

Warehouse automation systems are designed for maximum throughput and capacity. With TGW, if the system’s maximum performance is temporarily not required, due to order structure or capacity utilization, the output of storage and retrieval machines, shuttles, and sorters can automatically adapt. In the case of KingDrive® conveyors, reducing the speed from 1.2 m/s to 0.8 m/s lowers the energy consumption 15 percent. This smart kinematics function also decreases the wear of mechanical parts so they can last longer.

Automatically switching off system parts or entire systems and then restarting them in a controlled manner also enables significant energy savings. The interplay of all these measures leads to lower operating costs over the fulfillment center’s lifetime, i.e. a lower total cost of ownership (TCO).

"As a company with over 50 years of experience in warehouse automation, conscientious use of resources is a central guiding principle for TGW, whether it be during the development of new systems, modules, and products or the revision of existing ones. Energy efficiency is an essential criteria for a growing number of our customers as well," points out Thomas Gruber-Blanka, Director of Product Management at TGW. "Using energy-efficient components such as IE3 drives or brushless DC motors with gearless rollers is standard practice in our portfolio."

**Potential savings of up to 17 percent**

The KingDrive® conveyor system for cartons, totes, trays, and polybags, named after TGW co-founder Heinz König, makes use of maintenance-free, gearless motorized rollers, as well as an integrated 48-volt power supply. The innovative technology uses the braking energy of the rollers to power other rollers in the network. Consequently, the energy stays within the system and is reused on the same site. As a result, KingDrive® uses up to ten percent less energy than classic conveyor technology.

The storage and retrieval machines in the Mustang family are equipped with powerful mechanical components, sophisticated controls software, and intelligent drive technology. With this setup, braking energy can be recovered along the horizontal or vertical travel axis and used for travel on the respective other axis. This enables a reduction of up to 17 percent on the overall current demand.

**Shuttle with recuperation function**

Shuttles accelerate and decelerate several hundred times per day; the potential for saving energy is therefore especially high in this area. Their braking energy is stored in power capacitors and can then be used by all vehicles on the same level for acceleration. Moreover, all shuttle and tote lifts are equipped with a standard recuperation function, allowing unused energy to be fed back into the power network.

[www.tgw-group.com](http://www.tgw-group.com)

**About TGW Logistics Group:**

TGW Logistics Group is a leading systems integrator of automated warehouse solutions. With over 50 years of experience the automation specialist designs, manufactures, implements, and maintains end-to-end fulfillment solutions for brands such as URBN, the Gap, and TVH.

TGW Logistics Group has subsidiaries in the US, Europe, and China and employs more than 4,400 people worldwide. In the 2021/22 fiscal year, the foundation-owned company generated a revenue of $924 million US dollars.

**Pictures:**

Reprint with reference to TGW Logistics Group GmbH free of charge. Reprint is not permitted for promotional purposes.

**Contact:**

TGW Systems Inc.

3001 Orchard Vista Dr SE STE 300, Grand Rapids, MI 49546

T: 616-970-7163

tgw@tgw-group.com

**Press contact:**

TGW North America:

Lisa Weilharter

Director of Marketing & Business Development

T: 616-970-7163

lisa.weilharter@tgw-group.com