



LOGISTICS

AUTOMATED WAREHOUSING



MEGADYNE

AUTOMATED WAREHOUSING

INDUSTRY

LOGISTICS

APPLICATIONAUTOMATED
WAREHOUSING**PRODUCT**

MEGALINEAR QST

**SITUATION/APPLICATION**

In logistics, continuous improvement is essential in helping distribution centers to handle increasing volumes of goods. Efficient processing and storage optimisation are key priorities, alongside reducing labor and costs. To meet these demands, demands, more and more supply chain managers are adopting automated storage and retrieval systems (AS/RS).

AS/RS systems use computer-controlled mechanisms to place and retrieve loads from designated storage locations. Ideal for high-volume operations where space is limited, they maximise storage density while improving warehouse organisation. By reducing unnecessary inventory and streamlining storage, AS/RS systems lower warehousing costs. The operational accuracy of these systems is crucial in preventing damage to valuable products, and safety remains a top priority when handling heavy loads, particularly at significant heights.

THE PROBLEM

A manufacturer of AS/RS systems contacted the Megadyne application engineering team for assistance with their drive system. They needed a clean, economical, quiet and lightweight system that guaranteed smooth, precise movement in a compact space with a minimum amount of componentry. Chain drives were the solution in the past but in testing they proved unable to achieve the demanding high performance requirements of the customers' new modern equipment.

MEGADYNE SOLUTION:

MEGADYNE MEGALINEAR QST14 WITH XHP STEEL CORDS

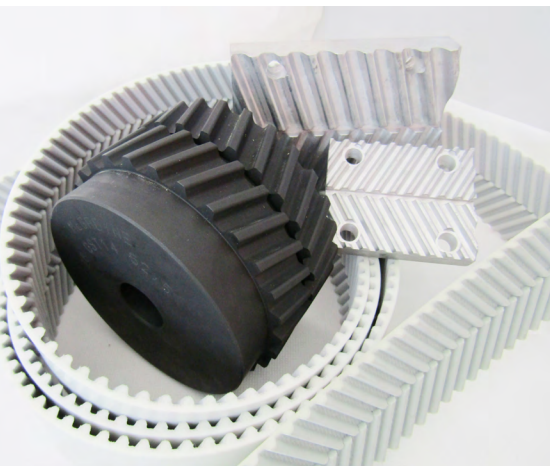
Engineered with an advanced double helical tooth design, the Megadyne QST system ensures precise product movement and low-noise operation through precise meshing between belt and pulley.

Its self-tracking properties eliminate the need for pulley flanges, while the wear-resistant 92 Shore A thermoplastic polyurethane belt body offers a lighter weight and lower inertia than chain drives. Additionally, the XHP (Extra High Power) steel cord tensile member enables the safe movement of heavy loads.

THE RESULT

- Reduced noise level compared to chains or traditional types of toothed belt designs
- Dimension stability
- High torque capacity
- Reliable trouble-free system compatible for fabrication with other thermoplastic materials
- Customisable to handle any type of product as needed

Megadyne supplied a complete drive solution featuring the QST system of belts, pulleys, and clamping plates, engineered to work seamlessly together and to meet the performance demands of modern AS/RS systems.



Contact our experts
to find out more.