



# LOGISTICS

VERTICAL LIFT MODULES



**MEGADYNE**

## VERTICAL LIFT MODULES

### INDUSTRY

LOGISTICS

### APPLICATION

VERTICAL LIFT  
MODULES

### PRODUCT

MEGALINEAR QST

### SITUATION/APPLICATION

With the surge in logistics demands, modern warehouses face the growing challenge of storing more goods safely while ensuring quick and error-free retrieval. As space becomes increasingly limited, the focus has shifted towards maximizing storage capacity and efficiency. The OEM, already in the design phase of a new solution, sought to address these challenges by reducing the space occupied by vertical storage modules while enhancing their overall performance.

The goal was clear: develop a next-generation vertical lift modules that would occupy 90% less space than a traditional ones (with the same amount of stored goods), operate more quietly, consume less energy, and ensure fast and secure retrieval of goods.

### THE PROBLEM

The current solution for moving shelves involves chains, but they present several issues. They are noisy, create dirt, and require continuous lubrication and maintenance. Additionally, the chains lack precision and can only operate at limited speeds, all of which hinder the smooth and efficient operation of the warehouse system.

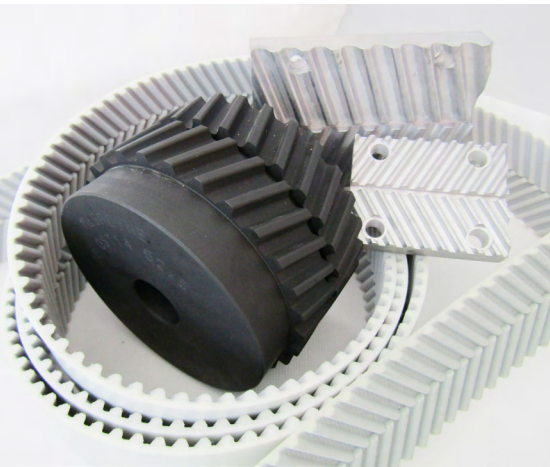
## MEGADYNE SOLUTION:

### MEGALINEAR QST

To address these challenges, the OEM turned to Megadyne and its innovative QST System technology. QST 14 M pitch is designed for heavy-duty applications and available with standard steel cords or XHP cords for applications requiring maximum torque transmission and strength such as warehouse automation. The system includes belts, pulleys and clamp tailored to ensure optimal performance: maximum compatibility, secure installation, minimum risk of operational errors.

### THE RESULT

This solution offered a significant reduction in noise levels, requiring less maintenance while remaining highly resistant to heavy loads. With high torque capacity and positive engagement in bi-directional movement, the QST technology provided the precision and speed necessary for optimal warehouse performance. This solution not only improved operational efficiency but also contributed to a quieter, cleaner, and more energy-efficient warehouse environment.



Contact our experts  
to find out more.