



## INDUSTRIAL POSITIONING SYSTEMS

### The Tandem Operation of Cranes or Trolleys Increases the Functionality and the Operating Efficiency of Your Installation

Optional add-on for the ARATEC® Positioning Solution System



**The tandem functionality is a modular add-on for PSI Technics' ARATEC® Positioning Solution System.**

The module enables two independently driven bridge cranes to operate in tandem. Using this method two cranes or trolleys can transport certain goods like a single machine and the permissible skew is freely configurable.

Production and warehousing facilities usually have a parallel layout where multiple conveyor systems are installed side by side.

The cranes operate independently of each other within their particular workspace and the dimension of transported goods is limited to this working space.

Cranes that are transporting long goods, for instance, can quickly reach the available space limits as well as their rated load capacity.

#### Advanced skew control during tandem operation – YOUR ADVANTAGE:

- >> Increases the capacity of cranes beyond the rated load.
- >> The system can flexibly switch from single axis to tandem mode during regular operation.
- >> Increased profitability due to a more efficient use of personnel resources.
- >> Optimized use of existing crane installations.





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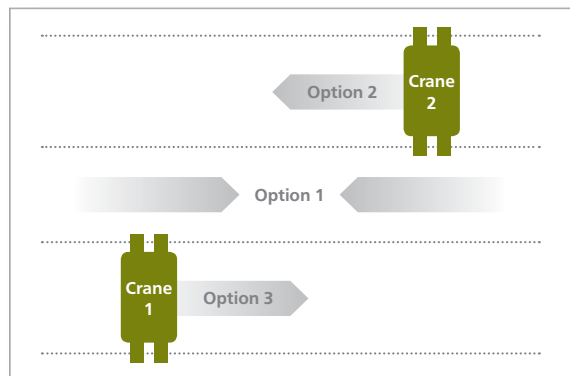
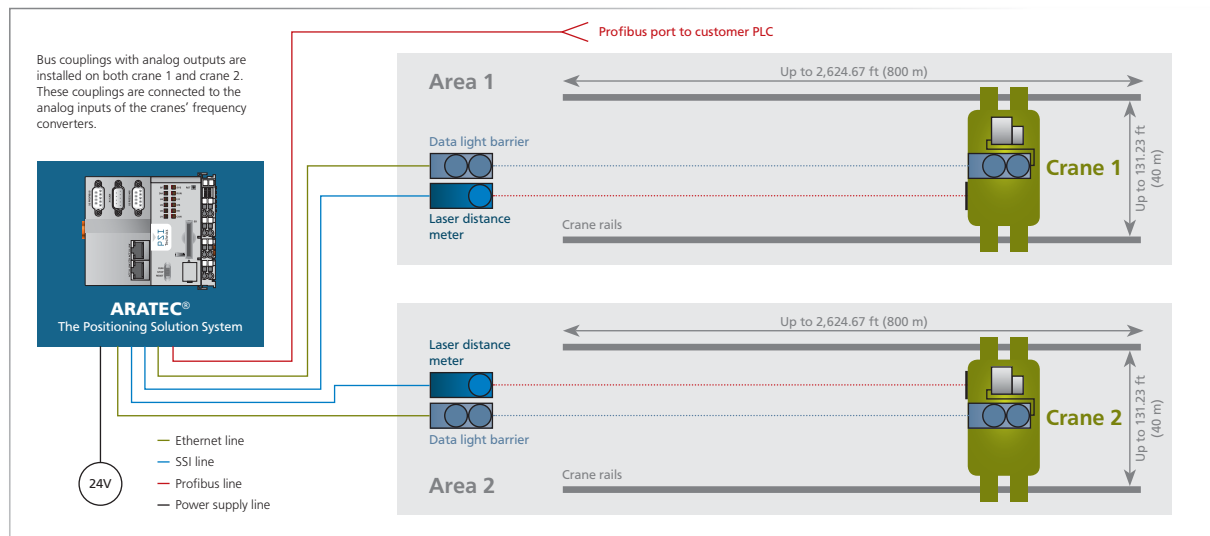
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## Excellent Reliability, Optimum Travel Profile and Minimum Wear

### Travel profile of a system configured for tandem operation:

During regular operation, cranes travel independently of each other. With the ARATEC® Positioning Solution System from PSI Technics, two cranes can now be coupled to operate in tandem mode for the transport of unusually dimensioned goods or loads that exceed the cranes' rated capacity. ARATEC® couples the cranes automatically by squaring both machines,

driving them to identical positions. Once coupled, the cranes move in tandem, while simultaneously compensating for certain irregularities, such as those due to mechanical differences like slightly different travelling wheels, motors or drives. Once the positioning task has been completed, the system can be switched back to regular operation as needed.



The coupling mode is freely configurable:  
Option 3, Master mode  
Option 2, Subordinate mode  
Option 1, Master-Subordinate mode

- Master mode:** The master crane moves to the position of the subordinate crane.
- Subordinate mode:** The subordinate crane moves to the position of the master crane.
- Master-Subordinate mode:** Both cranes move to a predefined position.

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