ATIS
MANIPOLATORI PNEUMATICI

ATIS Industrial pneumatic manipulators for glass industry

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Index

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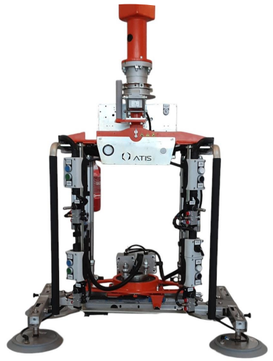
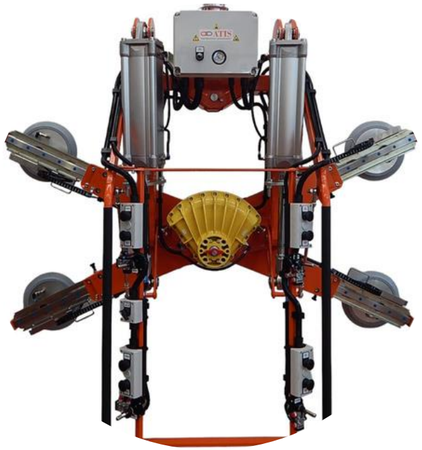
General features



Flexibility

In the dynamic world of glass manufacturing, flexibility is key to maintaining efficiency and quality. ATIS manipulators are designed with this in mind, offering unparalleled adaptability to meet the diverse and ever-changing demands of the glass industry



From Delicate to Heavy Loads

ATIS manipulators can handle a wide range of glass products, from thin, fragile sheets to large, heavy panes. Whether you're dealing with curved glass, laminated glass, or coated surfaces, our manipulators can accommodate various shapes, sizes, and weights with ease.

Precision in Complex Operations

ATIS manipulators provide precise control, allowing operators to maneuver glass materials with exceptional accuracy. This precision is crucial in processes that require alignment, such as cutting, assembling, or installing glass components

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Main advantages

ATIS Glass manipulator can help you solve all your production problems, from safety to productivity and quality.

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Main advantages

Improved Safety

Pneumatic manipulators are designed to minimize manual handling, significantly reducing the risk of injuries associated with lifting heavy or awkward glass panes. This ensures a safer working environment for operators

Controlled Movement

The smooth and controlled operation of pneumatic systems helps prevent accidents during the lifting, moving, and placing of glass materials. The manipulators offer precise control, reducing the likelihood of drops or collisions.

Gentle and Precise Handling

Pneumatic manipulators apply consistent pressure, ensuring that even the most fragile glass sheets are lifted and moved without causing damage, such as scratches, chips, or cracks.

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Main advantages

Precision in Placement

The accurate control provided by pneumatic systems allows for precise positioning of glass, which is crucial in processes like assembly or installation, where exact alignment is necessary.

Speed and Efficiency

Pneumatic manipulators enable faster handling of glass materials, reducing cycle times and increasing overall productivity. This efficiency is particularly beneficial in high-volume production environments.

Minimized Downtime

With fewer mechanical and electronic components, pneumatic systems are generally more reliable and easier to maintain, leading to less downtime and more consistent production.

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Main advantages

Versatility and Adaptability

ATIS pneumatic manipulators can easily adapt to lift different types of glass, from small, thin sheets to large, heavy panes. This versatility is essential for manufacturers dealing with a wide range of products.

Minimal Environmental Impact

With fewer electronic components, pneumatic manipulators often have a smaller environmental footprint, contributing to more eco-friendly production practices.

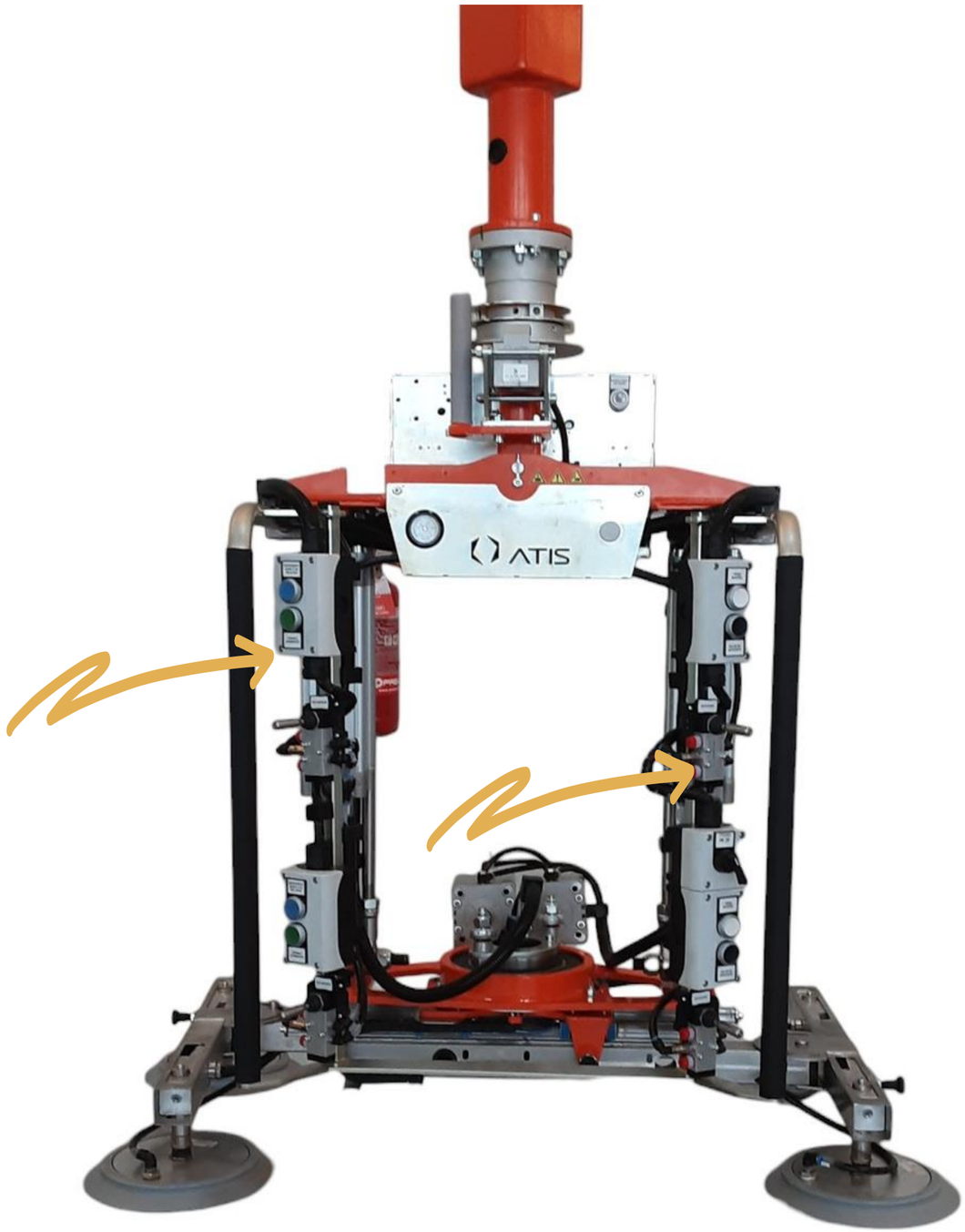
Lower Energy Consumption

Pneumatic systems are typically more energy-efficient than their electric counterparts, especially in facilities where compressed air is readily available. This can lead to cost savings over time, making your operation more sustainable.

Enhanced Operator Control and Ergonomics

Intuitive Controls & Ergonomic Design

ATIS manipulators are designed with user-friendly controls that offer operators precise and responsive handling. This ease of use reduces the learning curve and increases productivity, ensuring that your team can quickly adapt to new tasks. Our manipulators are built with operator comfort in mind, featuring ergonomic designs that reduce physical strain. This not only enhances safety but also improves overall efficiency by enabling operators to work more effectively over extended periods



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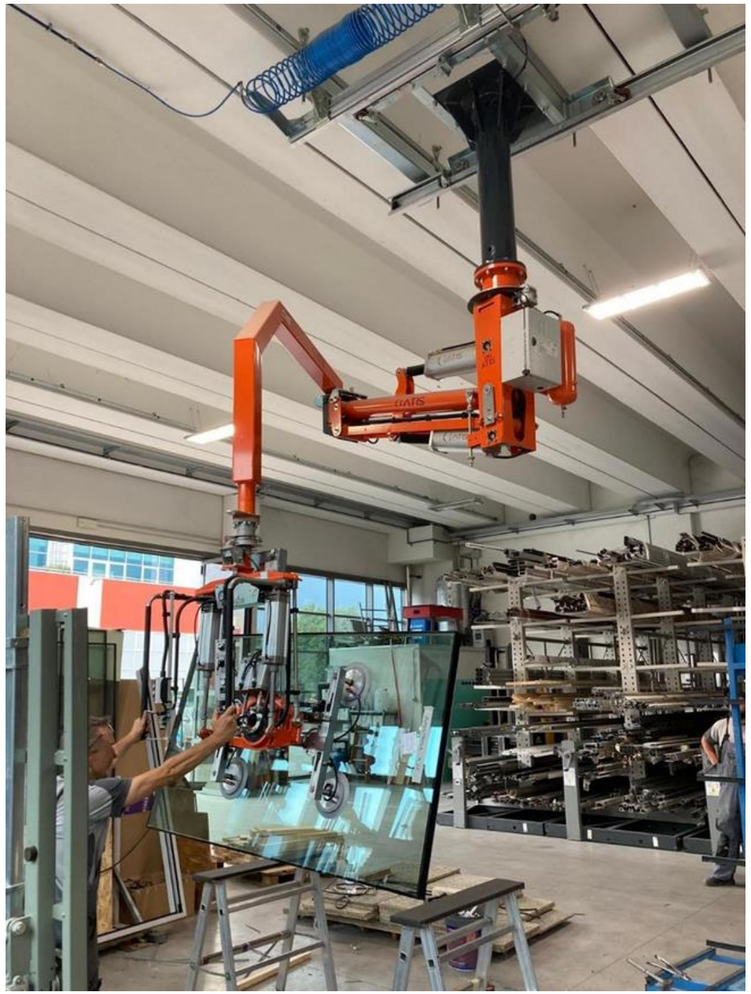

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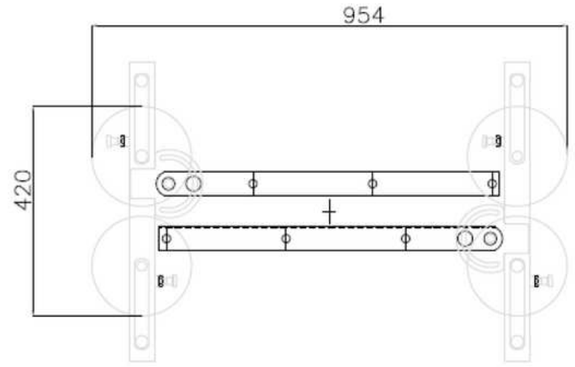
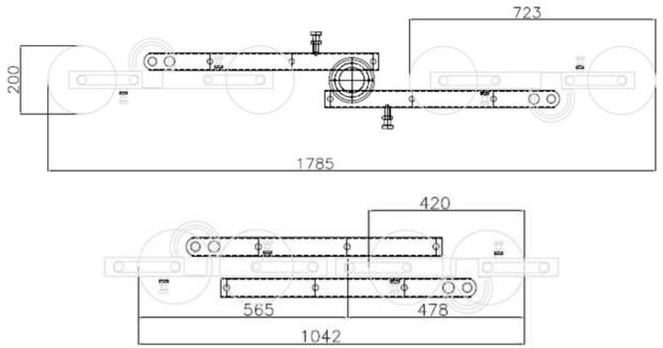
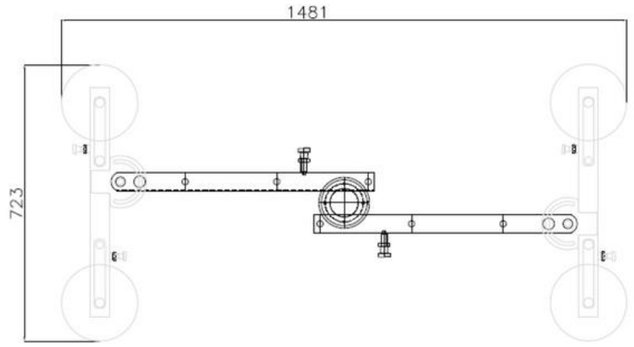
Multi cup configuration

By offering customizable solutions that can handle different sizes, shapes, and types of glass, suction cups ensure that your ATIS lifting equipment can meet the diverse demands of modern glass production

	Suction cups can be arranged in various configurations, such as linear arrays or clustered groups, to match the size and shape of the glass. This adaptability ensures even weight distribution and stable lifting, reducing the risk of breakage.
	For non-flat glass surfaces, such as curved or cylindrical glass, suction cups can be engineered to conform to the shape of the glass, providing a consistent and secure hold.
	The movement of the suction cups in the various configurations is fast, safe and extremely flexible, the passage of movement from one format to another is therefore extremely rapid and efficient.

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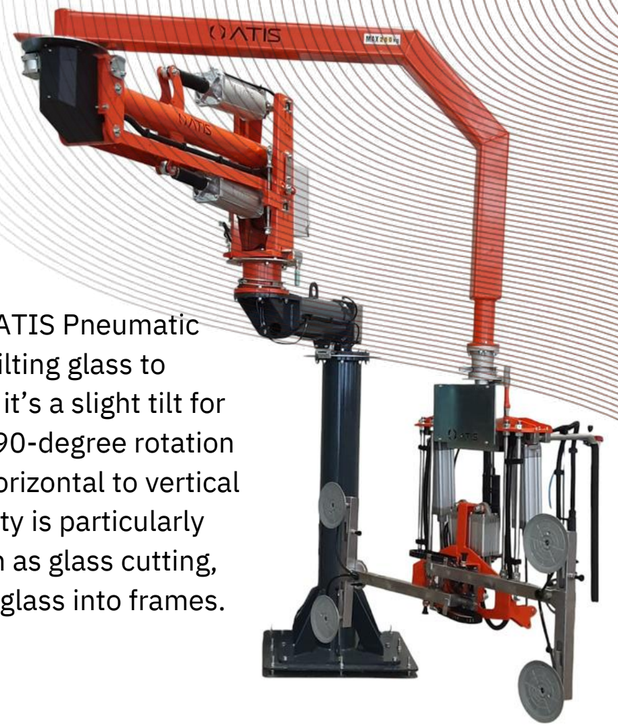
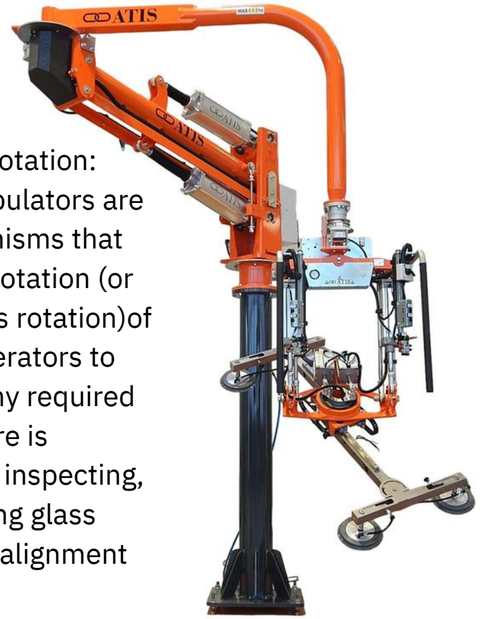
Tilting & Rotating

In the glass industry, certain tasks require more than just lifting and moving materials; they also involve tilting and rotating glass panes to specific angles or orientations.
ATIS Pneumatic industrial manipulators are specially designed to handle these complex operations with precision and ease.



Variable Tilting Angles: ATIS Pneumatic manipulators allow for tilting glass to various angles, whether it’s a slight tilt for better visibility or a full 90-degree rotation to shift the glass from horizontal to vertical orientation. This flexibility is particularly useful in processes such as glass cutting, edge finishing, or fitting glass into frames.



Smooth, Continuous Rotation: ATIS Pneumatic manipulators are equipped with mechanisms that allow for 180-degree rotation (or 360 degree continuous rotation)of the glass, enabling operators to position the glass in any required orientation. This feature is essential for tasks like inspecting, assembling, or installing glass panels, where precise alignment is crucial.

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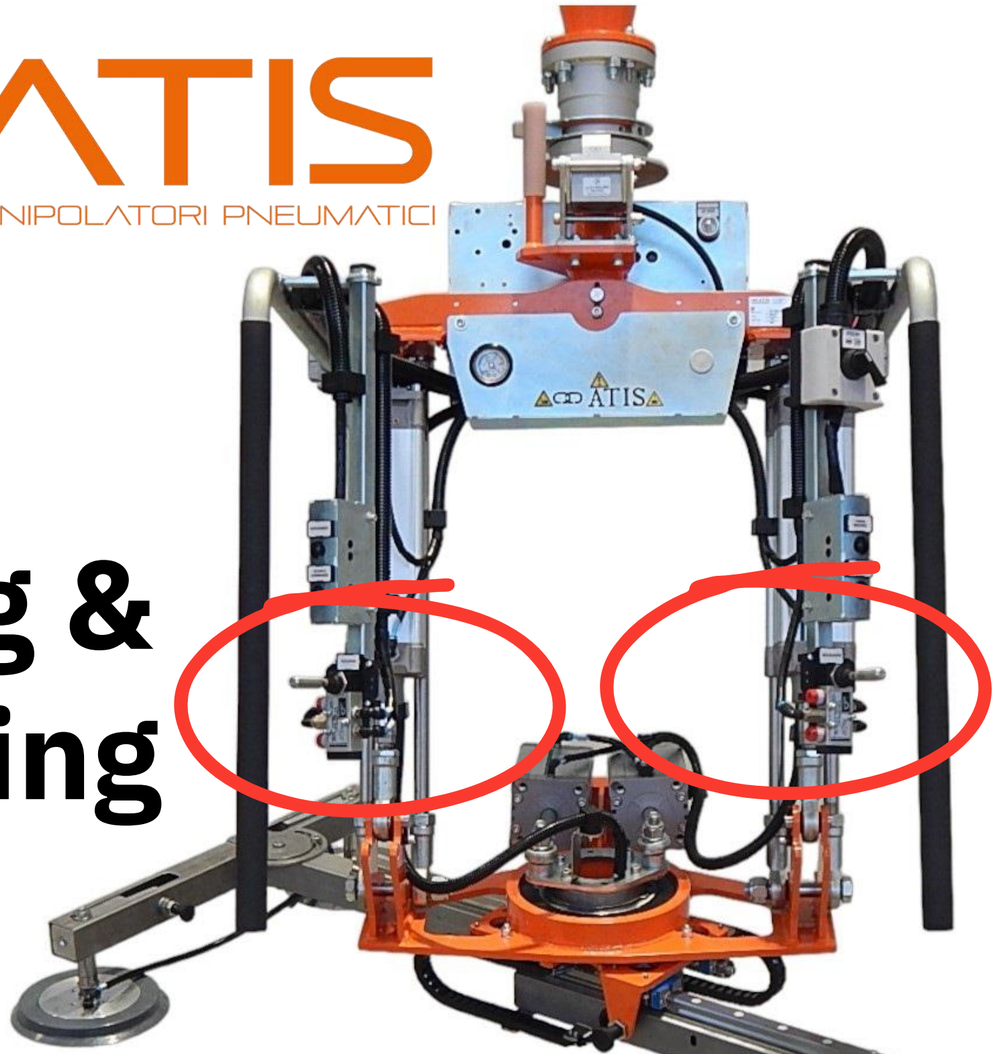
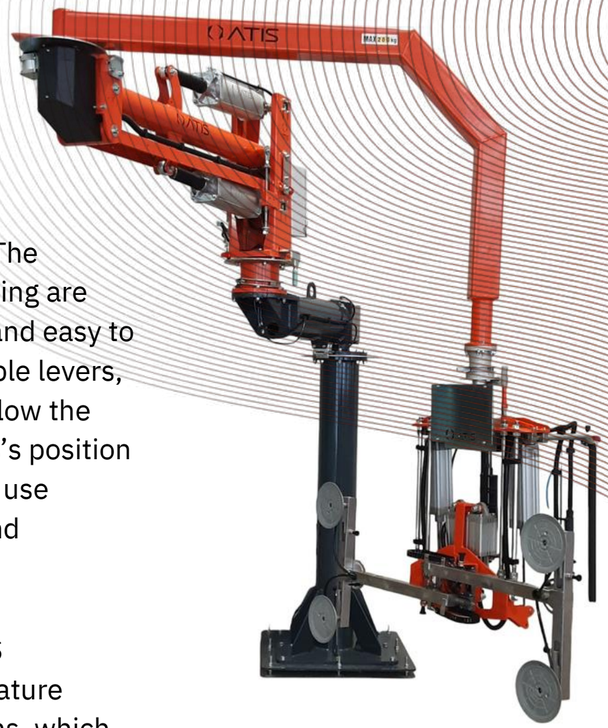
Tilting & Rotating





User-Friendly Operation: The controls for tilting and rotating are designed to be ergonomic and easy to use, typically involving simple levers, buttons, or joysticks that allow the operator to adjust the glass's position with precision. This ease of use reduces operator fatigue and enhances productivity.

Proportional Control: ATIS Pneumatic manipulators feature proportional control systems, which allow operators to make fine adjustments to the tilting and rotation speed based on the task at hand. This level of control ensures that even the most delicate glass handling tasks can be performed with confidence.

Complex Assembly Operations: In scenarios where glass needs to be positioned at specific angles for assembly, such as in window or door manufacturing, the ability to tilt and rotate the glass precisely ensures a perfect fit and alignment, improving overall product quality.

Inspection and Quality Control: During inspection processes, rotating and tilting the glass can help operators view the glass from different angles, making it easier to identify imperfections or defects that might not be visible from a single perspective.

Improved Efficiency: By allowing glass to be rotated and tilted with precision, ATIS pneumatic manipulators reduce the time and effort required for complex handling tasks, increasing overall production efficiency.

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ATIS micrometric regulation

Micrometric regulation in ATIS manipulators is a key feature that provides the precision, control, and smooth movement required for handling delicate and complex glass materials effectively, making it an invaluable tool in the glass industry.

MICROMETRIC REGULATION

ATIS manipulators are renowned for their advanced handling capabilities, particularly in industries where precision is paramount, such as the glass industry.
One of the standout features that contribute to this precision is **micrometric regulation**. This system ensures smooth, controlled movements, enabling operators to handle delicate materials with accuracy and confidence.

Incremental Adjustments: The system allows for minute adjustments in movement

Delicate Positioning: the ability to make micrometric adjustments ensures that the glass is placed precisely where it needs to be, without any abrupt movements that could cause damage.

Precision Handling: Ensures the highest levels of accuracy when moving and positioning glass, critical for maintaining product quality and reducing waste.

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ATIS flexibility

ATIS manipulators' flexibility of installation is a key advantage, allowing them to be adapted to diverse industrial environments and tasks, ensuring that they meet specific operational needs while optimizing space and workflow.

Their installation is possible:

- with fixed column on the floor
- column with self-stable base
- column with movable base with pallet holder or forklift
- column on self-stable base, mobile on floor rail
- column mounted on integrated manual or electric pallet truck
- with fixed or swivel offset column
- fixed wall unit
- sliding wall unit on runways
- sliding wall unit on overhead crane

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ATIS manipulator versus Crane

ATIS Manipulator:

Precision and control: ATIS manipulators are designed for precision and control. This makes them ideal for tasks that require exact positioning and delicate handling.

Smooth, Controlled Movements: The manipulator provides smooth and steady movement in all directions (lifting, tilting, rotating), which is essential for handling fragile or high-precision glass materials.

High Versatility: ATIS manipulators are highly versatile, with adjustable gripping mechanisms, customizable suction cups, and the ability to handle various glass sizes, shapes, and weights. This adaptability makes them suitable for a wide range of applications within the glass industry.

Rotational and Tilting Capabilities: ATIS manipulators excel in offering full rotational and tilting functionalities, allowing for the glass to be manipulated at any angle or orientation required by the task.

Crane with Suction Cups:

Basic Control: Cranes typically offer less precise control compared to ATIS manipulators. Movements such as lifting, lowering, or swinging are controlled by larger-scale mechanical systems, which can be less smooth and harder to fine-tune for delicate operations.

Less Precision in Positioning: Cranes are generally better suited for moving large glass panels over longer distances rather than precise positioning, making them more appropriate for transporting glass than for tasks requiring high accuracy.

Less Adaptable: Cranes are generally less adaptable than manipulators, with fewer options for changing gripping mechanisms or customizing suction cups. They are typically used for standard lifting tasks and may require additional equipment or attachments for more specialized applications.

Limited Rotational and Tilting Features: While some cranes may offer basic tilting or rotating functions, these are often more cumbersome and less precise compared to those available on ATIS manipulators.

Compact and Flexible: ATIS manipulators are more compact and can be installed in various configurations (floor-mounted, ceiling-mounted, etc.), precise and fluid in movements,making them suitable for a wide range of industrial environments.

Fixed, Harder to move: Cranes are usually larger and require a fixed installation, such as being mounted to the ceiling or floor. This limits their mobility and adaptability, not precise and not fluid in movement Cranes generally need more space for installation and operation.

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