

In the industrial sector, protecting operators and equipment from suspended loads is a top priority that requires reliable and certified solutions. For many plants, this means having systems that secure presses, cylinders and lifts, even in the event of unexpected hydraulic or pneumatic failure. These systems strengthen the safety of operators and machinery, helping to avoid unexpected downtime and ensuring compliance with industrial safety standards. In this article, we will explore the 3 key applications where these systems make a difference in industrial safety.

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SECURE LOCKING ¿WHAT SUPPORTS YOUR LOAD?

1.- Hydraulic presses

These are essential for forming and stamping pieces, but they pose a significant risk when there is a loss of pressure in the hydraulic system. This failure can cause the piston to drop, damaging tools or parts and endangering the operator's safety.



To mitigate these risks, SITEMA axial brakes and locking devices offer a reliable mechanical solution that:



- -Automatically immobilizes the piston upon any loss of pressure, preventing unexpected drops.
- -Acts immediately without relying on electrical systems or sensors, eliminating common failure points found in conventional hydraulic systems.
- -Keeps the load secure during stops or maintenance, protecting both personnel and equipment.

2.- Press brakes and stamping equipment

These machines are critical in manufacturing components with high precision and finish. They operate with fast and continuous cycles that require strict motion control to avoid deviations that could affect quality or damage dies.

SITEMA mechanical safety brakes, axial locks and fall protection devices can:

-Secure the position of the ram, preventing unexpected shifts during work cycles or maintenance pauses.

- -Automatically and mechanically stop unwanted movements in the event of hydraulic or pneumatic failures, without relying on electronic components that might fail.
- -Facilitate compliance with international safety regulations such as ISO, CE, and OSHA.

3.- Lifting platforms and Vertical columns

In applications such as work platforms, lifting columns or vertical transport systems, the safety of personnel and heavy loads is critical. A failure in the hydraulic cylinder could cause a sudden drop of the platform, risking both personnel and equipment integrity.

Bidirectional brakes are designed to:

- -Keep the load securely locked in place in case of pressure loss or cylinder failure.
- -Act as certified anti-fall devices, complying with international safety standards.
- -Be used on loading platforms, mold lifters, and double-acting hydraulic cylinders, ensuring the safe retention of the load throughout the entire operation.



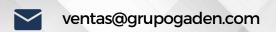
In any industrial plant, accident prevention and machinery protection cannot be left to chance. Incorporating reliable mechanical solutions such as SITEMA brakes, locks and fall protection devices is a clear way to enhance operator safety, protect critical assets and maintain production continuity.

Understanding these applications enables engineers to make informed decisions to optimize processes and ensure compliance with the highest quality standards. If you want to explore real case studies and integration examples, we can assist you in identifying how these solutions can strengthen safety in your daily operations.











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