工商业N+1储能柜运输、安装培训（叉车及吊车）培训
Industrial and Commercial N+1 Energy Storage Cabinet Transportation and Installation Training (Forklift and Crane) Training

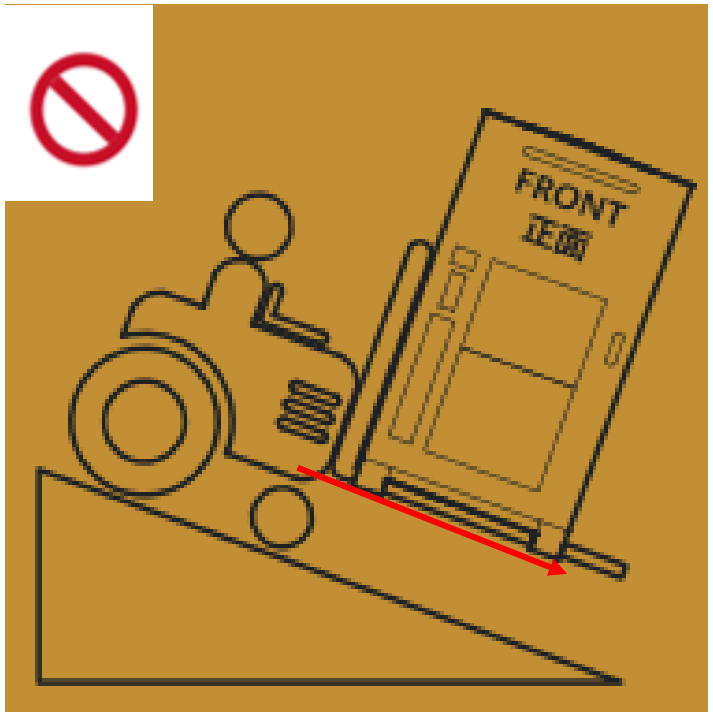


叉车运输

【 1 】叉臂和储能柜朝下坡方向，导致储能柜因重力从货叉上滑落。
The forks and energy storage cabinet were angled downward toward the slope, causing the energy storage cabinet to slide off the forks due to gravity.

【预防措施Precautions 】
驾驶叉车下坡时，应倒车行驶，货叉朝向上方，并用货物绑带固定。
When driving a forklift downhill, it should be done in reverse with the load facing upward, secured using cargo straps.







叉车左右轮不在同一高度

【2】叉车运输时斜着进入仓库5cm防水坡时，一个轮子先跨上5cm防水坡，导致左右轮子不在同一高度，机柜失衡倾倒跌落。The forks and energy storage cabinet were angled downward toward the slope, causing the energy storage cabinet to slide off the forks due to gravity.

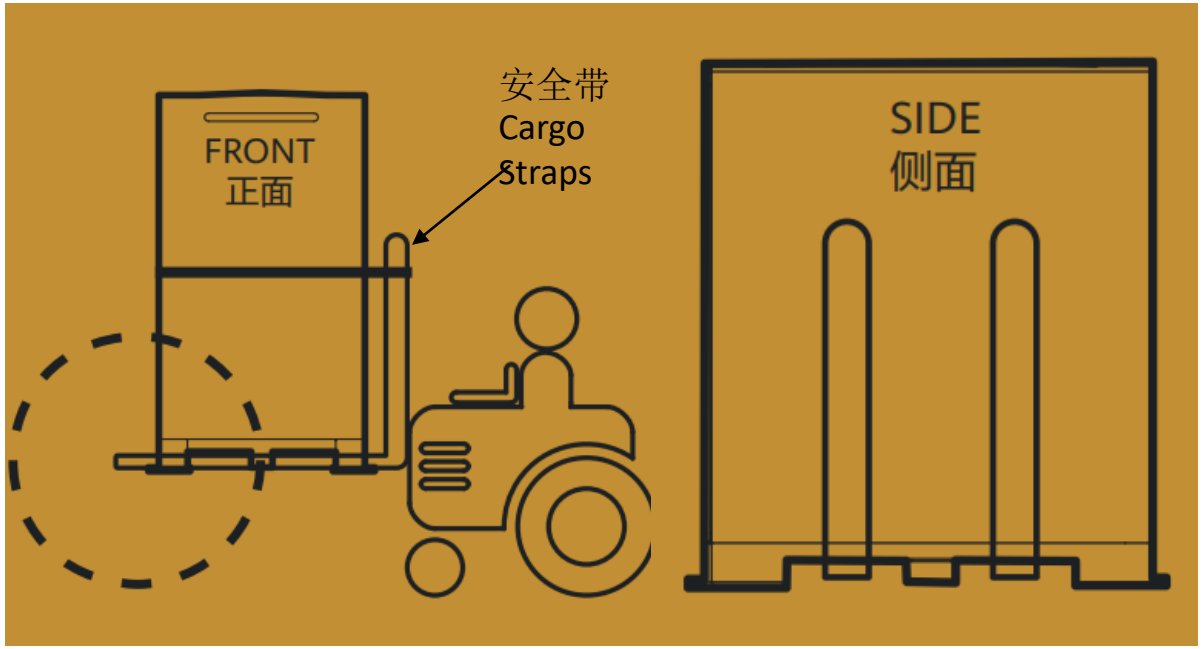
【预防措施Precautions 】

使用叉车搬运机柜时：1. 叉车臂应超出机柜本体。2. 叉车臂应居中放置。3. 行驶速度不得超过5公里/小时。4. 遇到斜坡或障碍物时，应使用货物绑带固定机柜，绑带固定点应位于机柜重心上方。

When using a forklift to move cabinets:1. The forklift arms should extend beyond the cabinet body.2. The forklift arms should be centered.3. The driving speed should not exceed 5 km/h. 4. When encountering slopes or obstacles, use cargo straps to secure the cabinet, with the strap attachment points located above the cabinet's center of gravity.







叉车运输货损案例及预防措施Cases of Cargo Damage During Forklift Transportation and Preventive Measures

【3】在搬运过程中，由于叉车叉臂没有完全伸出到机柜主体之外，叉车急刹车，导致机柜因惯性向前倾斜并翻倒。

During the moving process, because the forks did not extend beyond the main body of the cabinet, the forklift suddenly braked, causing the cabinet to tilt forward and tip over due to inertia.

【预防措施Precautions 】

使用叉车搬运机柜时：1. 叉车臂应超出机柜本体。2. 叉车臂应居中放置。3. 行驶速度不得超过5公里/小时。4. 遇到斜坡或障碍物时，应使用货物绑带固定机柜，绑带固定点应位于机柜重心上方。

When using a forklift to move cabinets:1. The forklift arms should extend beyond the cabinet body.2. The forklift arms should be centered.3. The driving speed should not exceed 5 km/h. 4. When encountering slopes or obstacles, use cargo straps to secure the cabinet, with the strap attachment points located above the cabinet's center of gravity.









叉车运输货损案例及预防措施Cases of Cargo Damage During Forklift Transportation and Preventive Measures

【4】在搬运过程中，叉车从短边叉入，由于叉车在不平地面运输，过坎速度较快，导致机柜受快速冲击、倾倒跌落。

During the moving process, the forklift inserts the forks from the short side of the cabinet，and the forklift moves at a high speed on uneven ground, so the cabinet is impacted and then falls down when the forklift passes over a bump.

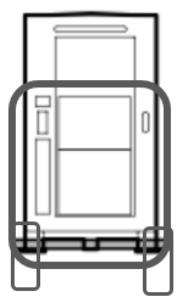


【预防措施Precautions 】

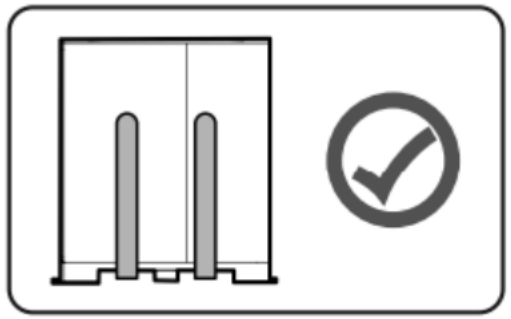
使用叉车搬运机柜时：1. 叉车臂应从机柜长边叉入，非装卸货场景禁止从短边叉入，且需居中放置。2. 行驶速度不得超过5公里/小时。3. 遇到斜坡或不平路面时，应使用货物绑带固定机柜，绑带固定点应位于机柜重心上方。4. 若存在装卸货场景，可从短边叉入，且叉臂必须超出柜体。需保证卸货区域地面平整，且注意避免机柜与货柜、周边建筑撞击；

When using a forklift to move the cabinet:

1. The forklift arms should be inserted from the long side of the cabinet. Do not insert the forklift arms from the short side when the cabinet is not being loaded or unloaded from a truck, and the cabinet must be placed in the center.
2. The forklift should not move at a speed higher than 5 km/h.
3. When encountering a slope or uneven road, use the cargo strap to secure the cabinet, and the strap should be fastened above the center of gravity of the cabinet.
4. If the cabinet is being loaded or unloaded from a truck, the forklift arms can be inserted from the short side，and also the forklift arms should extend beyond the cabinet . Ensure the ground in the unloading area is flat to prevent the cabinet from colliding with the truck container or surrounding structures.



非装卸货场景
If not loaded or unloaded from a truck



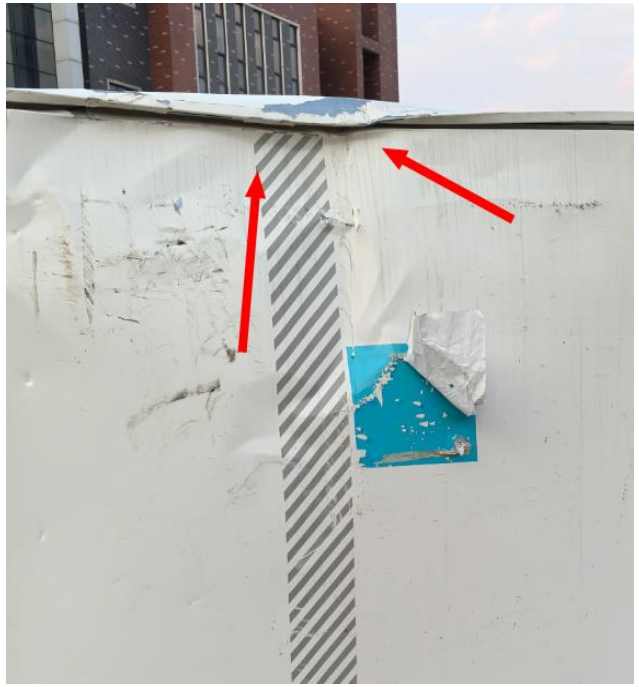
吊装货损案例及预防措施Crane Installation Cargo Damage Cases and Preventive Measures

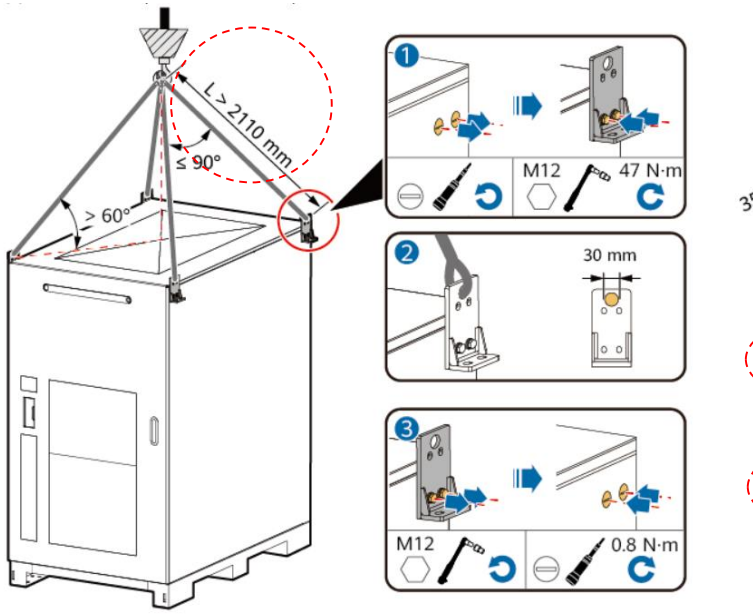
底部吊装过程中，由于腰部缺乏捆绑，移动过程机柜失去平衡倾倒。

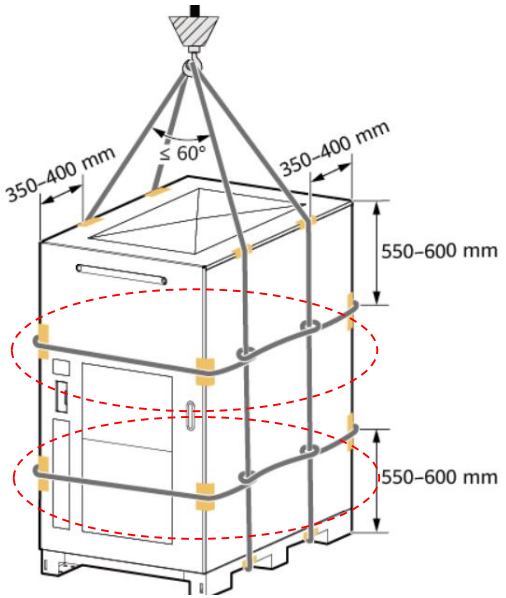
During the process of hoisting the cabinet from the bottom, the lack of proper securing at the waist caused the cabinet to lose balance and tip over during movement.

【预防措施Precautions 】1.吊车起吊能力≥3t；2. 若使用转接件固定顶部吊装，力矩和绳子长度需严格按照包材丝印提示执行。3.若使用底部吊装，腰部必须捆绑，绳子与机柜接触位置需防护。4.吊装过程中需注意附近障碍物，避免磕碰。1. The crane's lifting capacity must be ≥3t. 2. If using an adapter for top-mounted installation, the torque and rope length must be strictly followed according to the instructions printed on the packaging material.3. If bottom lifting is used, the cabinet must be secured with straps at the waist, and the contact points between the ropes and the cabinet must be protected.4. During the lifting process, pay attention to nearby obstacles to avoid collisions.









Thank you.