



THE POWER OF PREPARATION

WHITEPAPER

OFFSHORE USE OF POWER ASCENDER

THE CHALLENGE

In the rope access industry, the deployment of power ascenders has become a common practice, notably observed in tasks such as building facade cleaning where efficiency and safety are paramount. However, despite its prevalence in terrestrial applications, the utilization of power ascenders remains relatively unexplored within offshore environments.

This whitepaper aims to illuminate the potential of power ascenders in offshore projects, shedding light on their benefits, challenges, and optimal practices.

As a focal point, we examine the Skylotec power ascender as a prime example, drawing upon the expertise of Conbit to provide valuable insights and practical experiences. Through this exploration, we aim to unveil the untapped opportunities and address the pertinent considerations surrounding the integration of power ascenders into offshore operations.



POWER ASCENDER INTRODUCTION

The ACX battery-powered hoist represents a motorized solution engineered to facilitate the transportation of individuals or payloads to challenging-to-reach locations where periodic or routine tasks are conducted.

Offering enhanced efficiency and expediency, the ACX Power Ascender streamlines operations on intricate structures, rendering costly access systems or lifting platforms obsolete. Its versatility extends to diverse rescue scenarios, where it can be deployed with minimal exertion and optimal effectiveness. The ACX system emerges as a highly adaptable and cost-efficient tool for maintenance and cleaning endeavors. Notably, in urgent situations, the ACX empowers users with remote control capabilities, ensuring swift and responsive action when time is of the essence.

SOME SPECIFICATIONS

Battery charging time: 90 Minutes (From empty to full)	Control: Handle on the device & remote control	
Remote control range: 150m	Weight: 13kg	Weight: 33 x 28 x 27 cm
IP rating: IP55 (Protected from limited dust ingress. Protected from low-pressure water jets from any direction.)		Standards: CE, Machinery Directive 2006/42/EC



USE CASE: OFFSHORE LIFTING

The utilization of power ascenders in offshore lifting operations presents a transformative solution, particularly in scenarios demanding extensive climbing within towering structures. By integrating power ascenders, offshore duration can be significantly reduced while concurrently enhancing safety measures. One of the primary advantages lies in mitigating fatigue among personnel during ascent, thereby reducing the risk of accidents and optimizing efficiency.

Moreover, the versatility of power ascenders extends beyond personnel transport, facilitating the lifting of rigging items or sling configurations weighing up to approximately 200 kilograms to heights of around 200 meters. This capability not only streamlines operations but also offers a complementary approach to conventional crane systems. While larger, slower cranes focus on main items, power ascenders efficiently handle smaller loads, ensuring seamless coordination and maximizing productivity across the offshore site. The integration of power ascenders thus underscores a paradigm shift in offshore lifting methodologies, emphasizing safety, efficiency, and operational versatility.



USE CASE: FABRIC MAINTENANCE

In fabric maintenance within offshore facilities, the power ascender emerges as a pivotal tool facilitating crucial repair and upkeep tasks. Particularly in painting operations, the power ascender streamlines the lifting and lowering of consumables essential for coating and surface restoration. Its precision and efficiency enhance the workflow, ensuring seamless application and maintenance of protective layers against harsh offshore conditions.

Moreover, in instances where storms or adverse weather damage wall panels, the power ascender serves as a reliable asset for lifting panels during repair and reinstallation efforts. This capability not only expedites the restoration process but also ensures structural integrity and safety within the offshore environment. Furthermore, the presence of power ascenders significantly aids rope access technicians in connecting wall panels with enhanced ease and agility. By providing stable and controlled access, power ascenders empower technicians to execute intricate tasks accurately, thereby bolstering the overall effectiveness of fabric maintenance operations offshore.



USE CASE: OVERBOARD SCAFFOLDING

In overboard scaffolding works, where manual handling and climbing are demanding tasks, the integration of power ascenders introduces a paradigm shift towards efficiency and safety. By minimizing manual handling, power ascenders alleviate physical strain and reduce the risk of fatigue-related accidents among scaffolding technicians. Crucially, they facilitate the controlled lowering of scaffolding materials to positions within easy reach, optimizing workflow and enhancing productivity.

Additionally, power ascenders afford scaffolding technicians comfortable ascent to the main deck, mitigating potential risks associated with traditional climbing methods.

Furthermore, the versatility of power ascenders enables strategic adjustments in scaffolding sequences, allowing for the initiation of scaffold installations from distant points, thereby optimizing access and workflow efficiency. In essence, the incorporation of power ascenders in overboard scaffolding operations not only enhances safety standards but also streamlines workflow processes, underscoring their indispensable role in offshore construction and maintenance endeavors.

POINTS OF ATTENTION

The operation of a power ascender necessitates proficient rope access skills. Despite its apparent simplicity, unforeseen circumstances can introduce risks. Technicians must possess rope access expertise to mitigate these risks effectively.

Thorough analysis of the connection points of the ropes to which the power ascender is attached is imperative. This analysis may entail structural assessments to ensure the system's integrity.

Integration of power ascender usage into job safety analyses and last-minute risk assessments is crucial. Special attention must be paid to the distinctive risks associated with power ascenders, and users must be thoroughly briefed on these hazards.

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HOW CAN CONBIT SUPPORT

Conbit specializes in lifting operations, both offshore and onshore. Utilizing temporary lifting systems, we generate lifting capacity in areas lacking regular crane access. Our installations often occur at great heights, beneath other structures, or just above sea level.

The power ascender serves to minimize challenging climbing and facilitate the handling of small components.

At Conbit, we are committed to sharing our knowledge and lessons learned, including insights into the use of power ascenders. Join us on LinkedIn and YouTube for inspiration on the possibilities within lifting and rope access.

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PURCHASING A POWER ASCENDER

Conbit recommends the Skylotec power ascender which can be purchased at your local Skylotec dealer. If you experience challenges sourcing your Skylotec power ascender, reach out to Conbit for support.

