



BMU Replacement and Refurbishment Guide

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Leading providers of facade access solutions

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Together, Manntech and CoxGomyl are the world's leading providers of superior facade access solutions.

Present around the world with over 120 years of combined experience, CoxGomyl and Manntech are industry pioneers and innovators, providing optimal building maintenance systems available for every building structure regardless of its simplicity or complexity. The combination of the brands provide the most reliable and efficient building access solutions which are built on proven technologies, providing exceptional performance whilst meeting the highest standards of safety and quality.



CoxGomyl is a leading global provider of premium facade access solutions. Present around the world with over 60 years of experience, CoxGomyl has the widest range of configurable building maintenance units built on innovative, proven technologies which provide exceptional performance.

Visit CoxGomyl at www.coxgomyl.com

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Manntech is recognised globally for advanced German high quality engineered building maintenance units pioneering many of the facade access systems seen in the industry today. With over 60 years of experience, Manntech have the longest history of innovation in designing end to end building access solutions for the world's most complex architectural structures.

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ALIMAK GROUP

Manntech and CoxGomyl are a part of Alimak Group. Alimak Group is a world-leading provider of vertical access solutions for the industry and construction sectors. With a presence in more than 100 countries, Alimak Group develops, manufactures, sells and provides service to vertical access solutions with focus on adding customer value through greater safety, higher productivity and improved cost efficiency. Founded in Sweden 1948, Alimak Group has its headquarters in Stockholm, 12 manufacturing facilities in 8 countries and 2,400 employees around the world.

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Why Replace Building Maintenance Units

Serving buildings for decades at a time, building maintenance units provide a long-term facade access solution for even the most complex architectural forms, from the most simple to the most complex. Manntech and CoxGomyl's building maintenance units (BMUs) are chosen all over the world for their reliability and efficiency. Over the years a replacement may be required when an original building maintenance unit hasn't been properly maintained and is beyond economical repair or when the BMU has reached the end of its service life. CoxGomyl and Manntech offer replacement building maintenance systems designed to provide reliable facade access.

Working with building owners and building managers, CoxGomyl and Manntech provide innovative replacement facade access solutions to keep established buildings around the world pristine. When a building maintenance unit has reached the end of its design life or is beyond economical repair due to insufficient maintenance, the most logical solution is to seek a replacement with the capability to meet the modern needs of the building. CoxGomyl and Manntech utilise the latest technological advances to deliver discreet, modern replacement BMUs. Features such as remote monitoring allow for more efficient troubleshooting and minimal downtime when compared to older equipment.

Replacement benefits:

- Up to date and widely available components and spare parts when compared to aged or discontinued equipment
- Enhance the long-term investment for the property based on a 20 to 25-year lifecycle for a new BMU
- Upgraded safety features
- Improved efficiency through greater uptime
- Easily serviceable to minimise downtime
- Meets the latest compliancy requirements and safety regulations
- Ensure the facade access requirements are up to date for the building
- Enhance the design of the original unit when replacing a CoxGomyl or Manntech machine



The BMU Replacement Process

Once awarded a project, CoxGomyl and Manntech work closely with all stakeholders to provide a seamless, end-to-end solution from the design and manufacturing process to dismantling the old building maintenance unit and delivering the replacement.

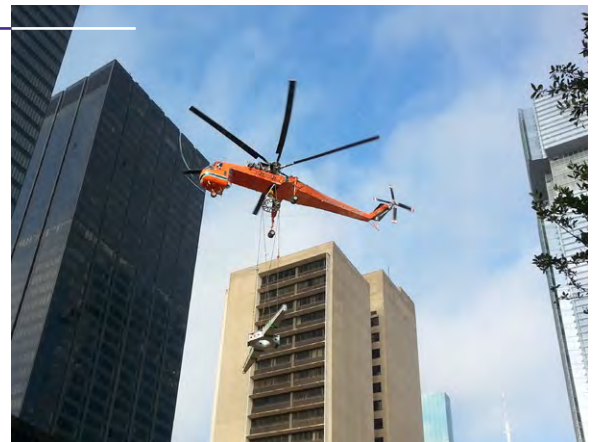
Each client is appointed a technical representative and project manager to provide guidance throughout the project to ensure that an optimal replacement solution is found and delivered within a reasonable timeframe.

Removal of the old building maintenance unit

The removal of the previous building maintenance unit is factored into every replacement project. CoxGomyl and Manntech project managers will assess the clients priorities relating to cost, speed, downtime and minimized disruption of the site and propose the most suitable removal strategy for each individual building.

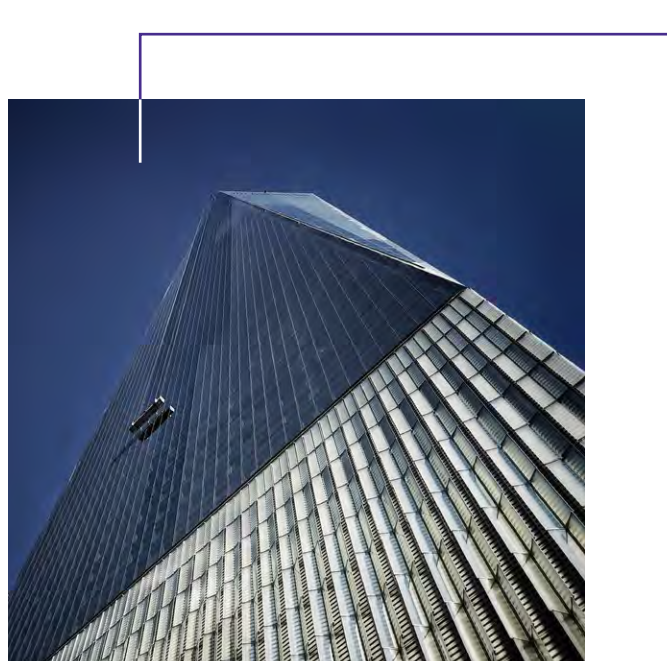
There are a number of options for the removal of old building maintenance units:

- Units can be dismantled using scaffold and dismantling tools, and transported to the ground through the building.
- Units can be cut up using a torch or plasma cutters, where permitted, with the supervision of a fire attendant and carried through the building.
- A mobile crane can be used to lift and lower the BMU to street level either in one piece or in components.
- A heavy lift helicopter or Skycrane can be used to remove the old BMU.



Delivery of the replacement building maintenance unit

CoxGomyl and Manntech replacement building maintenance units are carefully integrated into the existing structure of a building. From the outset of a project, engineers plan carefully and consider how the delivery process can be conducted smoothly to minimise the risk of error. Replacement machines can be supplied with bespoke components to suit the size and weight limitations of each building's available vertical transportation possibilities.



A number of methods can be employed to successfully deliver a replacement building maintenance unit:

- CoxGomyl and Manntech project managers will assess the clients priorities relating to cost, speed, downtime, and minimized disruption of the site and propose the most suitable removal strategy for each individual building.
- Smaller BMUs can be delivered through the building in a modular fashion. This eliminates the need for street closures, uses more simple equipment and and minimizes the risk of damage to the facade.
- Large BMUs can be delivered via derrick crane for full control of the hoisting process and less assembly time.
- A street crane can be used to deliver a BMU quickly. Turn-key pricing makes this a cost-controlled method of delivery.
- Helicopters provide a rapid delivery solution for replacement building maintenance units.

Recent BMU replacement for Guangfa Securities



CoxGomyl delivers a new and improved replacement BMU for Guangfa Securities Headquarters.

CoxGomyl recently provided a replacement building maintenance unit for Guangfa Securities Headquarters, one of the most outstanding skyscrapers in Guangzhou, China. The distinctive design of the building required an innovative building maintenance system to provide access across its entire 308-metre facade. The original building maintenance unit, installed by a competitor of CoxGomyl, had failed to perform to the required standard since its completion in 2018, presenting a range of safety issues as a result, while the design also interfered with the carefully considered aesthetic of the structure. CoxGomyl was invited to deliver a replacement facade access system to overcome these challenges and provide safe access to the building's facade for decades to come.

A building maintenance unit was developed that could be easily integrated into the existing structure of the building while it remained operational. A full-service solution was provided, installing a roofing crane to hoist the BMU into position and removing the previous BMU. Featuring a three-stage telescopic jib the BMU has an outreach of 30.7 metres. Utilising a two-stage telescopic mast, the BMU has the required flexibility and manoeuvrability to navigate the facade of the skyscraper without compromising its aesthetic integrity.

Installations

As the chosen service provider for CoxGomyl and Manntech, all building maintenance unit installations are carried out by Alimak Service.

Before



After



Manntech deliver a custom BMU to Three Allen Centre via helicopter

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Manntech overcomes technical challenges to deliver a custom building maintenance unit to Three Allen Centre via helicopter.

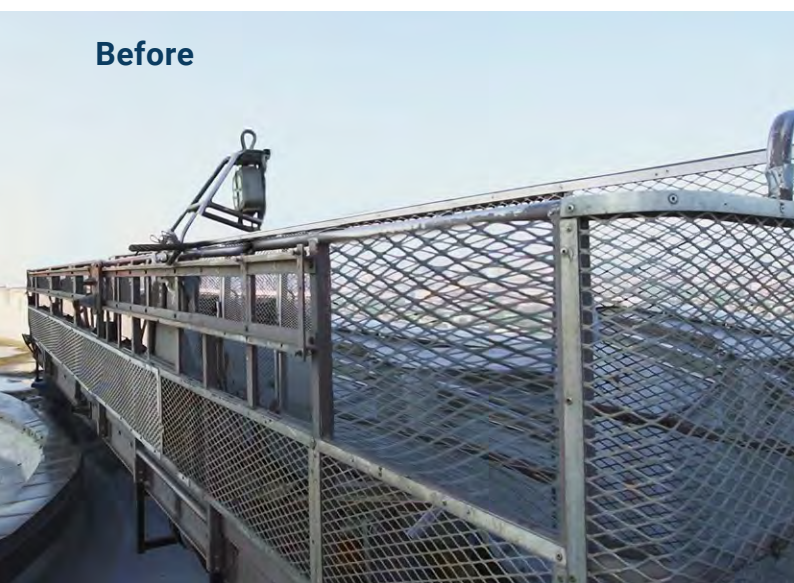
As part of the redevelopment of Three Allen Center in Houston, Texas, a new building maintenance unit was required to replace an aging system which had been out of use for a long time. Renowned for developing innovative custom facade access solutions, Manntech was the first choice for the task. The stakeholders required the replacement BMU to feature the same functional abilities of the previous model to preserve the appearance of this iconic building for decades to come.

The team at Manntech devised an innovative solution and successfully designed, manufactured and delivered the building maintenance unit to its new home on the roof of Three Allen Center. There were a number of technical challenges to overcome in order to lift the building maintenance unit onto the roof of the 208-metre tower without significantly impacting its full-time residents.

Following careful consideration, the engineers at Manntech concluded that the safest and most efficient way to overcome the logistical challenges associated with lifting the new BMU to the roof of the building and minimize disruption to the building tenants, was to deliver it by helicopter. Thus, the twin arm BMU was strategically designed and weighted to be lifted from street level to its final location on the roof via helicopter. Manntech has once again overcome a variety of technical challenges to deliver reliable, high-quality facade access to every elevation of this landmark tower.



Before



After



Refurbishment Solutions

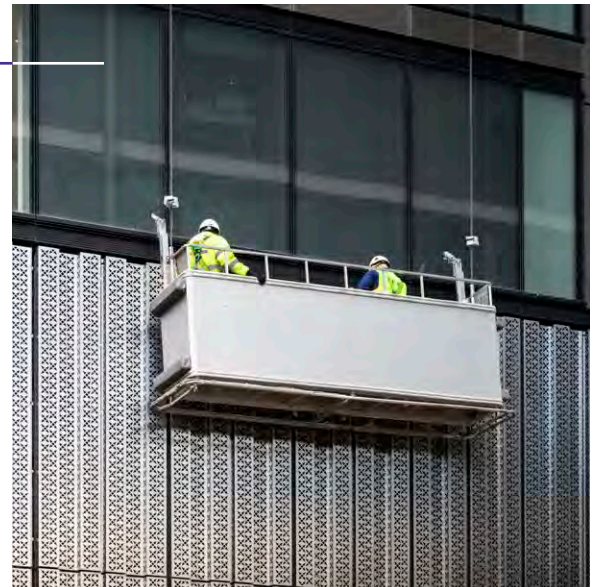
Refurbishment solutions extend the operational life of facade access systems by restoring performance and updating control systems to comply with modern safety requirements.

Refurbishments can enhance the safe operation of facade access systems, minimise downtime, optimise productivity and extend the operational life of the equipment. Through a partial or complete overhaul of the structural, mechanical, hydraulic and safety systems of a building maintenance system, customers benefit from upgraded technical and safety features and enhanced performance.

Investing in a proactive refurbishment plan with Alimak Service provides CoxGomyl and Manntech customers with a cost-effective alternative to a full replacement. All refurbishments are developed using original OEM components and installed by highly experienced technicians from Alimak Service.

Refurbishment Solutions include:

- Full inspection and evaluation report of the current equipment
- Detailed proposals to assist CoxGomyl and Manntech customers in making an informed decision as to the cost-effectiveness of the refurbishment or upgrade
- Work carried out by highly skilled technicians, fully warranted and to the latest industry and safety standards
- Genuine spare parts for quality and longevity



Modernisation Programmes

Through evaluating your needs and the condition of your current equipment, our technical teams can assist by preparing a range of alternatives from modernisation to complete replacement.

Additional features can be provided if needed:

- Increase cradle capacity
- Improved materials handling capacity
- Glass handling and replacement options
- Options to enable future building upgrades
- Options to enable signage changeover

Our project management team will plan ahead with you to execute the works without disruption to the building. With experience with most types of lifting solutions, our team will ensure that any major components to be replaced as part of the refurbishment can be transported to the roof.



For more information visit www.manntech.com and www.coxgomyl.com
Or for product and service solution enquiries contact info@manntech.com or info@coxgomyl.com