

Transforming Tasik Bukit Merah Through Strategic Widening And Deepening Using The AT200ER Amphibious Excavator And SB2000 Excavator Mounted Sectional Barge.



Tasik Bukit Merah serves multiple purposes, including irrigation for agriculture, flood mitigation, and as a biodiversity hotspot. However, decades of sediment buildup have led to reduced water storage, navigational difficulties, and deteriorating water quality. Traditional dredging methods proved either too invasive or inefficient in the shallow and soft terrain of the lake. Thus, an innovative approach was essential—one that balanced performance with minimal environmental disruption.

The AT200ER Amphibious Excavator was selected for its unique ability to operate effectively in wetland and shallow water environments. Designed with an extendable boom and advanced hydraulic system, the AT200ER can perform deep excavation while maintaining stability on soft, marshy terrain. Its low ground pressure and high flotation pontoon undercarriage make it ideal for dredging and reshaping lake contours without causing shoreline erosion or habitat destruction.

This excavator allowed operators to reach previously inaccessible areas of the lake, efficiently removing sediment and expanding the water body's depth and width to restore its hydrological capacity. By enhancing water flow and storage, the lake's overall health and function were significantly improved.

Working in tandem with the AT200ER is the SB2000 Excavator Mounted Sectional Barge, which facilitates access to deeper areas and supports heavy machinery while floating on the water surface. Its modular design allows for flexible assembly and transportation,

The SB2000 provides a stable platform for excavation work and material transport, reducing the need for extensive land-based infrastructure. It also enables sediment to be transferred efficiently to designated containment areas, reducing the risk of recontamination and ensuring environmental compliance.

This integrated widening and deepening operation has had multiple positive outcomes. Hydrological balance has been restored, allowing for improved water storage and flow regulation, especially during monsoon seasons. Fish migration patterns have normalized due to increased oxygen levels and cleaner water, while aquatic vegetation has begun to recover.

Furthermore, the enhanced lake capacity contributes to better irrigation supply for surrounding agricultural lands, supporting local farmers and reducing waterrelated conflicts. The use of environmentally conscious technology ensures that the ecological integrity of the lake is maintained throughout the rehabilitation process.

The transformation of Tasik Bukit Merah exemplifies how modern engineering and ecological preservation can go hand-in-hand. Through the deployment of the AT200ER Amphibious Excavator and SB2000 Excavator Mounted Sectional Barge, the lake is being reshaped into a more functional, sustainable, and resilient water body. This project not only secures the lake's future but also sets a benchmark for similar wetland restoration efforts across the region. As environmental challenges intensify, such strategic, technology-driven solutions will become increasingly essential in preserving our natural resources.



making it ideal for operations in remote or environmentally sensitive areas.

Comprehensive Ecological Restoration Of Jakarta Lakes Through Deployment Of The WH2000 Aquatic Weed Harvester



J akarta's lakes, once vital urban water bodies, are now heavily burdened by floating rubbish and pollution. The rapid urbanization of Indonesia's capital city has led to increasing amounts of plastic waste, household debris, and organic litter entering waterways through storm drains, rivers, and direct dumping. This accumulation of floating waste severely affects water quality, threatens aquatic ecosystems, and reduces the aesthetic and recreational value of these lakes. To address this, the deployment of the **WH2000 Aquatic Weed Harvester** presents an innovative and effective solution for large-scale floating rubbish collection as part of a comprehensive ecological restoration strategy.

Floating waste is more than just a visual nuisance—it disrupts ecosystems by blocking sunlight, reducing oxygen exchange at the water's surface, and posing physical hazards to wildlife. Plastic waste in particular breaks down into microplastics, which can enter the food chain and have long-term environmental and health impacts. Jakarta's existing manual cleanup efforts, while commendable, struggle to keep pace with the volume and persistence of the problem. A more robust, mechanized approach is urgently needed.

The **WH2000** Aquatic Weed Harvester is a specialized machine designed to collect and remove floating debris from water bodies quickly and efficiently. It uses a front conveyor system to scoop up waste from the water surface and deposit it into onboard storage. Its shallow-draft hull and maneuverable design allow it to operate in confined

urban lakes and canals where larger vessels cannot reach. The WH2000 can gather significant amounts of rubbish in a single pass, making it ideal for routine maintenance and emergency cleanups alike.

By regularly deploying the WH2000 across Jakarta's lakes, authorities can significantly reduce the volume of floating garbage and prevent it from sinking or dispersing into harder-to-reach areas. This improves water quality and helps reestablish the lakes as functional urban ecosystems. Clean water surfaces allow for better oxygenation and natural light penetration, benefiting aquatic life. Moreover, cleaner lakes contribute to flood control, as blockages caused by floating trash can hinder water flow and drainage during the rainy season.

Beyond ecological benefits, the WH2000 also brings social and economic advantages. Cleaner lakes enhance the urban environment, making it safer and more attractive for residents and visitors. Removing floating rubbish reduces the risk of waterborne diseases and discourages illegal dumping by signaling that the lakes are actively maintained. In the long run, restored lakes can support community activities such as boating, fishing, and eco-tourism.

The WH2000 Aquatic Weed Harvester offers a powerful solution to the persistent problem of floating rubbish in Jakarta's lakes. Its deployment can play a central role in restoring these crucial urban ecosystems while also improving public health, aesthetics, and quality of life. With consistent operation and strong policy support, Jakarta can reclaim its lakes as clean, vibrant, and sustainable spaces for future generations.



Reclaiming Lake Tondano: A Grand-Scale Aquatic Invasion Cleanup with the WH2000 Weed Harvester.



Lake Tondano, located in the highlands of North Sulawesi, Indonesia, has long been a lifeline for surrounding communities. It serves as a vital source of freshwater, irrigation, fisheries, and tourism. However, in recent decades, the lake has been under siege by an aggressive aquatic enemy—water hyacinth. This invasive species has spread rapidly across the lake's surface, threatening biodiversity, water flow, and economic activities. In response, a groundbreaking cleanup operation was launched, spearheaded by the powerful **WH2000 Weed Harvester**, a machine specifically designed for large-scale aquatic vegetation removal.

Water hyacinth, known for its fast growth and resilience, has taken a toll on Lake Tondano's ecosystem. The thick mats formed by these plants reduce sunlight penetration, deplete oxygen levels, and hinder aquatic life. Moreover, the weed obstructs fishing routes, clogs irrigation channels, and undermines tourism by marring the lake's natural beauty. Manual removal efforts have proven insufficient in the face of such rapid regrowth, prompting the need for a mechanized solution.

Enter the **WH2000 Weed Harvester**—a highefficiency aquatic machine engineered for tough cleanup challenges. With its wide cutting deck, adjustable conveyors, and large onboard storage capacity, the WH2000 is capable of harvesting several tons of aquatic vegetation per hour. Operated by trained crews, the harvester cuts, collects, and transports the invasive plants to shore where they can be processed, composted, or otherwise disposed of. Unlike smaller or less specialized equipment, the WH2000 excels in both speed and sustainability. It minimizes disturbances to native species and reduces the need for chemical treatments, which can be harmful to aquatic environments. This makes it a preferred choice for environmental agencies and conservation groups committed to restoring balance without introducing new ecological risks.

Reclaiming Lake Tondano with the WH2000 Weed Harvester is more than a technological success—it is a model for sustainable environmental restoration. By blending mechanical innovation with community engagement, the project showcases how modern tools can be used to solve pressing ecological challenges. However, continued maintenance, monitoring, and community involvement will be essential to prevent reinfestation.

Lake Tondano's cleanup is a story of resilience and innovation. It underscores the importance of addressing environmental issues with scalable, science-based solutions. Thanks to the WH2000 Weed Harvester and the collective will of the local community, Lake Tondano has taken a major step toward ecological recovery. This endeavor not only restores a cherished natural resource but also sets a powerful example of how humanity can reclaim and protect its vital freshwater ecosystems.



Slithering into Success: An Exhilarating Welcome to Chinese New Year 2025

The Chinese New Year is a time of profound cultural celebration, where traditions, symbols, and rituals converge to usher in a fresh start. For the year 2025, the festivities take on an added sense of excitement and promise, as the Year of the Snake is celebrated. The Snake, specifically the Wood Snake, marking the start of the Year of the Snake, begins on January 29th, 2025.

The Snake is the sixth animal in the 12-year cycle of the Chinese zodiac. The Wood element in 2025 adds attributes like adaptability, creativity, and growth





As Ultratrex embarks on another year of groundbreaking achievements, the Chinese New Year of 2025 symbolizes more than just the beginning of a lunar cycle. It marks the continuation of a legacy that combines tradition with forward-thinking. The excitement surrounding this transition is palpable, as Ultratrex remains committed to pushing the boundaries of excellence in the field of amphibious construction equipment, delivering products that meet the evolving needs of industries worldwide.

Dominate with Safety: The Ultimate Ultratrex Training Experience



Ultratrex has made a bold and unwavering commitment to the safety and well-being of its employees by meticulously organizing a series of comprehensive safety training programs. These initiatives are designed not only to foster a profound understanding of workplace safety protocols but also to enhance the collective awareness and preparedness of the workforce in the face of potential hazards. Through these groundbreaking safety training programs, Ultratrex has created an environment where employees are equipped with the essential knowledge to navigate even the most challenging safety scenarios with confidence and precision.

The safety training modules cover an extensive array of topics, each aimed at addressing specific workplace safety concerns, ensuring that every potential risk is adequately managed and mitigated. Among the paramount offerings are the Safety & Health training sessions, which lay the foundational principles of maintaining a safe, healthy, and productive work environment. These training sessions delve deeply into the critical importance of employee well-being, addressing both physical and mental health in the workplace, thereby ensuring a holistic approach to safety.

Additionally, Ultratrex has introduced the Emergency Response Plan (ERP) training, a cornerstone of organizational preparedness. This series equips employees with the knowledge and skills necessary to react swiftly and decisively in the event of a workplace emergency, ensuring that every individual understands their role in preserving safety and minimizing harm during critical situations. Another focal point of Ultratrex's safety initiatives is the Confined Space training, a crucial program for employees working in environments where restricted access and hazardous conditions present unique dangers. This training provides in-depth guidance on navigating confined spaces, equipping employees with life-saving knowledge regarding proper entry procedures, risk assessments, and emergency protocols.

Ultratrex places strong emphasis on safety, particularly through its Confined Space training—a critical program for employees working in areas with limited access and hazardous conditions. This training offers vital guidance on entry procedures, risk assessments, and emergency protocols.

To support this, Ultratrex also provides HIRARC & SOP training, which focuses on systematically identifying and mitigating hazards through thorough risk assessments. It promotes best practices and a culture of proactive safety, ensuring operations meet the highest standards.

Additionally, the company offers specialized training in Chemical Handling and Exposure, equipping employees with essential knowledge for safely managing hazardous substances. This includes proper handling, storage, disposal, and response to chemical incidents—minimizing risks and ensuring protection.

The Hearing Protection and Audiometric Testing program further highlights Ultratrex's commitment to long-term employee health, particularly for those exposed to high noise levels. The training stresses the importance of hearing protection and regular testing to detect issues early.

Together, these comprehensive training programs reflect Ultratrex's deep commitment to employee safety. By providing well-structured, practical training, the company ensures that employees are not only aware of workplace risks but fully prepared to manage them.

Ultratrex Unleashes Innovation at the Legendary BAUMA Exhibition – 34th Edition, 2025

In 2025, the BAUMA Exhibition in Munich will showcase the latest advancements in the construction and heavy machinery industry, and Ultratrex is set to steal the spotlight. As a leader in amphibious excavation technology, Ultratrex will display its cutting-edge machinery designed to work in challenging environments, such as wetlands, swamps, and flood zones. This marks an exciting moment for both the company and the industry as they push the boundaries of innovation.

BAUMA is the largest and most influential trade fair for the construction industry, where global leaders in machinery and technology gather to present new products and ideas. For Ultratrex, this exhibition is a chance to show how amphibious excavators are changing the game in construction. These machines are designed to perform in environments where traditional equipment struggles, helping to make projects more efficient and environmentally friendly.

Ultratrex is known for designing versatile and ecofriendly machinery. Their amphibious excavators can operate in areas like flooded regions, marshes, and soft ground, offering high performance while minimizing environmental impact. By attending BAUMA, Ultratrex emphasizes its role in transforming the construction industry. Their machines not only increase productivity but also help to protect the environment, meeting global sustainability standards. In a world focused on climate change and eco-conscious construction, Ultratrex's equipment offers solutions for challenging projects in floodplains, coastal zones, and other delicate areas.

Ultratrex's presence at BAUMA 2025 will highlight their commitment to shaping the future of construction machinery. The company's focus on technology, sustainability, and real-world applicability ensures that their amphibious excavators are ready for the demands of tomorrow's construction projects.

BAUMA 2025 will be a major milestone for Ultratrex, showcasing their innovative machines that will help shape the future of construction. Their amphibious excavators will provide solutions for projects in tough environments while promoting sustainability, making them a key player in the construction industry's future.

