Tuttle Creek Water Injection Dredge Build

The Tuttle Creek Water Injection Dredging Demonstration Dredge is being assembled at the USACE Reservoir Tuttle Creek Lake by Michels Construction and Custom Dredge Works. The demo is proceeding on schedule, start of dredging is planned for the week of September 15th, ERDC CHL and EL will mobilize R&D teams starting the week of September 8th.

Building a dredge in a reservoir presents unique construction challenges for the practical application of dredging and the development of reservoir dredging methods. Reservoirs lack heavy construction, maintenance, and fuel facilities and fluctuating water levels can complicate shoreside construction operations. The prime-contractor Michels Construction and subcontractor Custom Dredge Works are using prefabrication and modular block construction techniques to assemble the dredge. (Figure 2)

- A. The vessel was fully constructed and tested to the extent possible at the Custom Dredge Works yard in Topeka Kansas.
- B. The vessel was disassembled into manageable sections (blocks) and line hauled 75 miles to the laydown area, Tuttle Creek Cove Park.
- C. Commercial off-the-shelf modular sectional barges, and the component blocks are presently being assembled using a mobile crane.

This construction method overcomes the challenges of landlocked and low-infrastructure environments for marine construction and combines techniques from traditional shipbuilding with the unique logistics of assembling a large vessel on confined body of water.



Figure 2. (Top Left) Crane lifting one of two 20,000 gallon/minute pumps. (Top Right) Sectional barge assembly. (Bottom Left). 40- feet by 24-inch steel pipe rigged for lifting. (Bottom Right) Push-boat and crane maneuvering sectional barges to be fitted together.

Link: https://www.dredgingtoday.com/2025/08/29/components-arrive-for-tuttle-creek-water-injection-dredging/

https://www.facebook.com/USACETuttle/

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