

Robson Forensic

Engineers, Architects, Scientists & Fire Investigators

HEAVY RIGGING EXPERT

Expert Engineered and Managed a Complex Heavy Rigging Operation

Brent engineered and managed a complex heavy rigging operation in which a 120 foot long, 600,000 pound reactor vessel had to be moved from a barge, two miles into and through an operating oil refinery, picked up and rotated into a vertical position and set, within 1/8 of an inch accuracy, onto 12 anchor bolts on a concrete foundation pad-without the use of a crane to handle the vessel in the refinery.

This operation was performed utilizing a variety of rigging tools including a deck barge for transporting the vessel from the overseas ship to a specially created docking location at the refinery shoreline; a 13-line Self Propelled Modular Transporter (SPMT) for moving the vessel off of the barge and through the refinery (on 104 tires); a 300-ton hydraulic gantry for repositioning the vessel on the SPMT at the erection site; a custom engineered self-tailing device for tailing the vessel on the SPMT during its rotation to a vertical position; a custom engineered Modular Lift Tower (MLT) with a 500-ton hoist and hydraulic slide system for lifting, rotating, moving into position, and lowering the vessel into final setting location. Two support cranes and two bulldozers were also utilized in preparing the site, erecting and dismantling the MLT. In addition to the barge docking site, a temporary railroad crossing was also constructed and dismantled to accommodate the SPMT.

This is just one example of the numerous customized rigging solutions that Brent helped to develop during his time with Elgood Mayo Co. and Barnhart Crane and Rigging. Contact [Brent R. Leisenring, P.E.](#) for information on how we can aid in your investigation.

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