



Case Study LNG #23

LNG Fueled River Barges



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Highlights:

Location — Yangtze River, China

Scope of Project:

- Engineered, built and delivered complete LNG fueling solution for Weichai 155 kW gas fueled marine engines
- Local design and manufacture
- Prestigious Chinese customers
- Compliance with Chinese marine classification
- Chart Vacuum Technology®
- Minimized footprint
- First vessels operational since 2015

Application:

400 million people depend on China's Yangtze River. Before exiting to the sea in Shanghai, the Yangtze passes through some of China's major industrial cities in its lower reaches and is the world's busiest inland shipping corridor. The Chinese government is committed to its environmental recovery, and transitioning to green energy to power marine vessels is just one of the many initiatives being pursued.

Chart was approached by two acclaimed Chinese companies operating on the waterway to provide the complete fueling solution, including storage and delivery systems for new natural gas fueled vessels they building. All the craft are powered by Weichai 155 kW marine engines but Chart had to cater for different tank capacities and piping arrangements associated with the tank connection spaces (TCS and also known as cold boxes) that are called by marine rules to house the valves, vaporizers, plumbing and instrumentation.

System Configuration:

- 5.6 m³ horizontal cryogenic storage tank with dual drip tray
- 5.6 m³ horizontal cryogenic storage tank with twin TCS
- 11 m³ horizontal cryogenic storage tank with twin TCS
- Tanks can be supplied with LNG through marine bunkering or road tanker

Significant Accomplishments:

- 4 systems for a fleet of 30 TEU household garbage ships were delivered in 2017
- Fully engineered, built and tested in our Changzhou facility
- Equipment is fully in accordance with China Classification Society (CCS) standards

