## World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

## Designing the First Oil Tanker Shipyard Facility in Kuwait

Authors: Fatma Al Abdullah, Shahad Al Ameer, Ritaj Jaragh, Fatimah Khajah, Rawan Qambar, Amr Nounou

**Abstract :** Kuwait currently manufactures its tankers in foreign countries. Oil tankers play a role in the supply chain of the oil industry. Therefore, with Kuwait's sufficient financial resources, the country should secure itself strategically in order to protect its oil industry to sustain economic development. The purpose of this report is designing an oil tankers' shipyard facility. Basing the shipyard facility in Kuwait will have great economic rewards. The shipbuilding industry directly enhances the industrial chain in terms of new job and business opportunities as well as educational fields. Heavy Engineering Industries & Shipbuilding Co. K.S.C. (HEISCO) was chosen as a host due to benefits that will result from HEISCO's existing infrastructure and expertise to reduce cost. The Facility Design methodology chosen has been used because it covers all aspects needed for the report. The oil tanker market is witnessing a shift from crude tankers to product tankers. Therefore the Panamax tanker (product tanker) was selected to be manufactured in the facility. The different departments needed in shipyards were identified based on studying different global shipyards. Technologies needed to build ships helped in the process design. It was noticed that ships are engineer to order. The new layout development of the proposed shipyard is currently in progress. A feasibility study will be conducted to ensure the success of the facility after developing the shipyard's layout.

**Keywords**: oil tankers, shipbuilding, shipyard, facility design, Kuwait

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location: Chicago, United States Conference Dates: December 12-13, 2020