

Modern Technologies and Equipment for Modular-Aggregate Installation of Shipborne Equipment

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Abstract : The most advanced method of onboard equipment installation on the world shipbuilding practice is modular method, or modularization. The main idea of this is assembly of equipment, pipelines and hull structures in so called assembly units yet at the shopfloor. Those assembly units are thereafter loaded and installed inside the ship's hull. This allows to reduce labour intensiveness and significantly improve assembly quality, due to the fact that a good part of installation work is performed in the shops, instead of restricted onboard premises. Also, this method allows performing equipment installation at very early stages of hull erection. This practice is widely spread in naval submarines building. However, in merchant shipbuilding, equipment is installed mostly individually. To implement modular principles of equipment installation in designing and construction of civil ships and marine rigs, some new technologies are being developed in the following areas. The paper contains main principles and already achieved results in the above mentioned areas.

Keywords : assembly and installation technology, onboard equipment installation, large-scale assembly units, modular method

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