

A **semi-submersible heavy-lift ship**, or also known as a "flo/flo" (for float-on/float-off), has a long and low well deck between a forward pilot house and an after machinery space. In superficial appearance, it is somewhat similar to a dry bulk carrier or some forms of oil tanker. Its ballast tanks can be flooded to lower the well deck below the water's surface, allowing oil platforms, other vessels, or other floating cargo to be moved into position for loading. The tanks are then pumped out, and the well deck rises to shoulder the load. To balance the cargo, the various tanks can be pumped unevenly.

The flo/flo industry's largest customer base is the oil industry. They have transported many oil drilling rigs (the flo/flo ships can carry the rigs from their construction site to a drilling site at roughly three to four times the speed of a self-deploying rig). Rapid deployment of the rig to the drilling site can translate into major savings to the oil industry. They also transport other outsized cargo and yachts.

The U.S. Navy has used such ships to bring two damaged warships back to the United States for repair. The first was the guided missile frigate USS *Samuel B. Roberts* (FFG 58), which was nearly sunk by a naval mine in the central Persian Gulf on 14 April 1988. The frigate was towed to Dubai, then floated home to Newport, Rhode Island, aboard the Mighty Servant 2.^[2]

Twelve years later, the MV *Blue Marlin* transported the U.S. guided missile destroyer USS *Cole* (DDG 67) from Aden, Yemen to Pascagoula, Mississippi, after the warship was damaged in a bombing attack on October 12, 2000.

The U.S. Navy has also chartered other heavy lift ships to carry smaller craft, usually mine-countermeasure craft, or other patrol craft. Since there are no US-flagged heavy lift/flo/flo ships, the U.S. Navy normally relies on its Military Sealift Command to charter them from the world commercial market.

In 2004, the Blue Marlin carried the world's largest semi-submersible oil platform, the BP Thunder Horse, from a shipyard in Korea to a shipyard in Corpus Christi, Texas.^[3]

Many of the larger ships of this class are owned by the company Dockwise, including the Mighty Servant 1, the Blue Marlin, and the Black Marlin. In 2004, Dockwise increased the deck width of Blue Marlin, to make it the largest heavy transport carrier in the world. Two of the company's vessels have been lost in recent years: the Mighty Servant 2 which capsized after hitting an uncharted underwater obstacle off Indonesia in November 1999, and the Mighty Servant 3 which foundered after unloading the drilling unit Aleutian Key offshore Angola in December 2006.