4 Types of Ship Launching Methods

Launching of ships is one of the most important methods of the entire ship construction process.

Last few years have seen a number of developments in the field of ship launching systems in order to improve the safety and stability of the ship in the water.

Different types of Ship launching methods

Traditionally, ship launching in the water is done using four main types of methods. These methods are:

1. Gravitational type launching
2. Floating-out type launching
3. Mechanical Type launching
4. Airbag launching

1. Gravitational type launching

The gravitational type launching system is further divided into three main types, which are:

- Longitudinal Oiled Slideway Launching
- Longitudinal Steel – Roller Slideway Launching
- Side Oiled Slideway Launching

**Longitudinal Oiled Slideway Launching**

The longitudinal oiled slideway launching is one of the oldest forms of launching systems. Using this system, the ship slides on a
sideway and under its own weight enters the water. Oil or wax is used to assist in the sliding process.

The main advantage of this method is that it uses simple equipment and can be used for vessels with different tonnage and types. However, the coating of oil which is used to slide the ship smoothly can pollute the water. There is also danger of huge pressure on the front part of the ship during the launch.

**Longitudinal Steel – Roller Slideway Launching**

In this type of ship launching method steel rollers are used instead of oil to reduce friction during sliding. This method uses high-intensity steel rollers, security devices, and steel board for the launching. The steel plate on the wooden slide helps in the sliding process and the slide rails help them to protect from steel balls.

Net bags are used at the end of the slide to collect the steel balls so that they can be used again. This method is most effective and easy to start. However, the initial installation charges are high.

**Side Oiled Slideway Launching**
The side oiled slideway launching system is also one of the most widely used ship launching systems. This type of system is mainly of two types.

In the first type, the slideway extends into the water and the ship slides into the water using the slideway. In the second method the slideway doesn’t go until the water and the ship along with the frame slides into the water. The ship then becomes steady based on its own buoyancy and stability factors. Such launching requires the ship to have great stability and strength.

2. Floating-Out Type Launching

The floating out type launching is carrying out for ships which are built in dry-docks and are launched by filling the dock with water. (Technically this is not a ship launching procedure)

The floating-out type launching system is a simple, effective, and safe procedure. Though the initial investment is high, this type of method is most widely used by shipbuilders.

3. Mechanical Type Launching

The mechanical type ship launching system can be divided into following types:

- Longitudinal mechanized slideway launching
- Two points longitudinal mechanized chute launching
- Wedge-shaped mechanized vehicles launching
- Slope change transverse area mechanized vertical chute launching
- High-low track slide mechanization launching

All the above mentioned system requires a mechanical feature to launch a ship. The construction and maintenance expenditure is high, whereas the mobility and controlling factors of the systems are not up-to-the-mark. All these methods are mainly used for smaller size vessels and cannot be used for large, high tonnage ships.

4. **Air bags Launching**

Launching ships using air bags is an innovative and safe technique to launch ships in water. These airbags are usually cylindrical in shape with hemispherical heads at both ends. They are made of reinforced rubber layers and have high load capacity. This method can easily be used in all types and sizes of vessels.
Do you think we have missed any important ship launching method? Let us know in the comments below.

Source: [http://marineinsight.com](http://marineinsight.com)