



Bawat

Ballast Water Management

BAWAT BALLAST WATER MANAGEMENT FOR JACK-UP RIGS

- **NO PERMANENT BWMS INSTALLATION**
- **ONE MOBILE BWMS TO SERVICE MULTIPLE RIGS**
- **NO BALLAST WATER TREATMENT WHILE THE RIG IS IN OPERATION**

THE MOST COST-EFFICIENT BWMS FOR RIG OWNERS

Most Offshore Jack-up rigs are not designed to work with traditional Ballast Water Management Systems.

The tank set-up is designed for drilling operations and not trim/stability as commercial vessels. This gives rig owners a challenge when it comes to selecting a BWMS, as installation becomes cumbersome and expensive.

Furthermore, rigs change location at low frequency, resulting in a limited need for ballast water treatment. Rig owners can therefore end up investing in expensive systems and installations.

According to the BWM.2-Circ 46 Offshore rigs can get exceptions for treating the ballast water and sediments if the water and sediments originates from the same location and no mixing of unmanaged ballast water and sediments from other areas has occurred.

This means that local water used as ballast or pre-load can be de-ballasted again without treatment.

By using a Bawat BWMS a special purging procedure to treat the tanks can be carried out between rig moves. Before the rig is moved, the mobile Bawat BWMS is placed on the deck. The pre-load tanks are purged via the Bawat BWMS and the ballast tanks for rig move are filled with compliant water. When the ballast water treatment operation is completed, the BWMS unit can be off-loaded. At arrival in the new location, the rig can operate freely with local water and de-ballast the ballast tanks without use of a BWMS system. (See operation on page 2)

Only fittings to connect the Bawat BWMS to the ballast piping system onboard is needed. Because of the flexibility of the BWMS unit and the operation is simple, it can service multiple rigs.

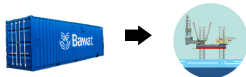


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U.S. Coast Guard
APPROVED

BAWAT BWMS OPERATION:

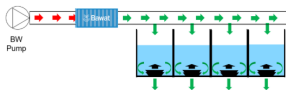
1. PREPARATION TO MOVE RIG



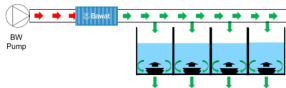
Rig preparing for move to new location, Bawat BWMS container is taken onboard.

All tanks used for preload are purged to bring them in D2 compliance. The purging procedure is described below:

a. Pump water in all tanks used for preload to 1 meter's height and afterwards dump the water via the dump valves.



b. Repeat paragraph a.



All tanks are now D2 compliant.

2. RIG MOVE



The ballast tanks needed for rig move need to be filled with treated water.

After treatment the Bawat BWMS can be off loaded or stored aside on the rig.



3. ARRIVAL AT NEW LOCATION



Rig arrives at new location and getting ready for preload. The preload procedure can be done with use of local water and without treating the water as all tanks are IMO/USCG compliant. Only when preparing for new rig move the tanks needs to be purged to bring them back to compliant status.

GENERAL FEATURES:

- ONE PASS TREATMENT SYSTEM
- EASY INSTALLATION ON RIG
- THE BAWAT COMPONENT ARE STANDARD COMPONENTS MADE FOR MARINE USE AND WORKS EASILY WITHOUT USAGE FOR LONG PERIODS
- NO FILTER MEANING NO CLOGGING
- EACH BWMS CONTAINER CAN SERVE MULTIPLE RIGS
- NO CONSUMABLES BESIDES FUEL
- NO HOLDING TIME