

Miura BWMS operation method (Brief version) - - - Ballasting

*Refer to operation manual for the detail.

1. Ballasting

- (1) Press [Ballast] button on screen.
- (2) Secure Sea to Sea line.
- (3) After reducing ballast pump outlet valve opening to one-fourth, start ballast pump operation.
**When treating water is passed rapidly through system, "Filter differential pressure abnormal" could be issued.*
- (4) Press [Confirmation] button and start ballasting.
- (5) When bypass valve (V1) is closed, open ballast pump outlet valve gradually, finally open fully.
**If "Filter differential pressure abnormal" is issued during warming-up operation, stop operation.*
- (6) When shifting to "Ballast Water Treating", switch to Sea to Tank line.

2. Stop

- (1) Press [Stop] button on screen.
- (2) Stop ballast pump after switching to Sea to Sea line and completing cooling operation.
- (3) Make sure to carry out filter wash after operation.

3. Maintenance of no-water storage

In case it is expected that Miura BWMS is not operated for a long time, maintain no-water storage state in accordance with following method.

- (1) Carry out filter wash once every 2 weeks.
- (2) Carry out air purge once every week.
-Air purge method-
- (1) Switch to manual mode.
- (2) Open air inlet valve (V8) and filter wash discharge valve (V6), carry out air purge.

Model	Air purge time
HK-300	2 minutes
HK-450	4 minutes
HK-600	5 minutes
HK-900	6 minutes

***When differential pressure abnormality occurs.**

When differential pressure abnormal occurs, please start ballasting after washing filter element with MIURA designated detergent.

In case differential pressure abnormal still occurs, please contact manufacturer.

Miura BWMS operation method (Brief version) - - - Deballasting

*Refer to operation manual for the detail.

1. Deballasting

(1) Press [Deballast] button on screen.

(2) Secure Sea to Sea line or Tank to Tank line.

*Depending on water quality at port of call, it may be impossible to carry out warming-up operation with Sea to Sea line. In this case, carry out warming-up operation with Tank to Tank line.

(3) Adjust valve opening so that flow rate becomes same as during ballasting, operate ballast pump.

*In case flow rate is restricted due to low UV dose during ballasting, flow rate during deballasting also needs to be restricted.

(4) Press [Confirmation] button and start deballasting.

(5) When shifting to "Deballast Water Treating", switch to Tank to Sea line.

2. Stop

(1) Press [Stop] button on screen.

(2) Stop ballast pump after switching to Sea to Sea line and completing cooling operation.

(3) Make sure to carry out air purge of filter unit after operation.

*In case it is confirmed that there is no water inside with sight glass, air purge is not needed.

3. Maintenance of no-water storage

In case it is expected that Miura BWMS is not operated for a long time, maintain no-water storage state in accordance with following method.

(1) Carry out filter wash once every 2 weeks.

(2) Carry out air purge once every week.

-Air purge method-

(1) Switch to manual mode.

(2) Open air inlet valve (V8) and filter wash discharge valve (V6), carry out air purge.

Model	Air purge time
HK-300	2 minutes
HK-450	4 minutes
HK-600	5 minutes
HK-900	6 minutes