The Best Partner of
Energy, Water and Environment

MIURA

Ballast water management system

HK

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Energy, Water and Environment

MIURA

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ISO 9001
Quality assurance system for boiler and water treatment systems and on-line maintenance service

ISO 14001
Our head office and Hojo factory are sites with a registered environmental management system.

CAUTION	In order to use the product safely, be cautious of safety and always read the "Operation Manual" before use.

◎ Cautions regarding exports: If the products in this catalog are included in the products subject to export restrictions as defined by the rules of the "Foreign Exchange and Foreign Trade Act," then export permission from the Japanese government is necessary when exporting the products outside of Japan.
If the products are to be exported, please make an inquiry to our sales staff.

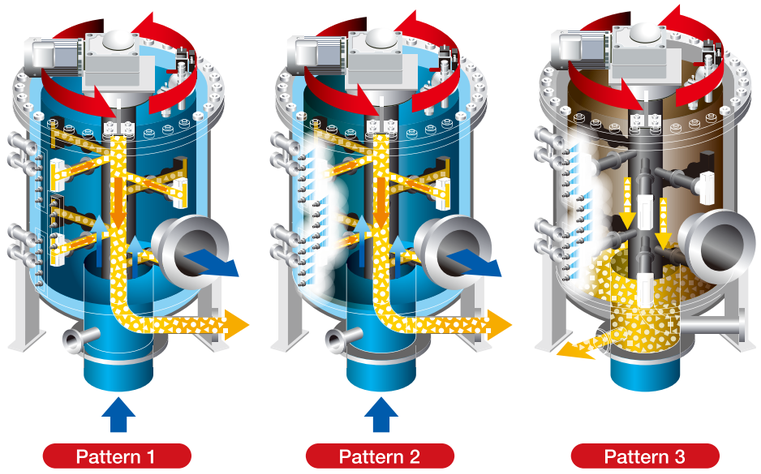
Products may be changed without notice for improvement. The details shown in this catalog are the specifications for Japan. Please contact your nearest distributor or sales office with any inquiries regarding this catalog.

Updated in July 2022 011HA

An original cleaning system to maintain the capture performance of the filter

MIURA has developed a filter with an innovative structure that makes filter cleaning possible at the same time as the capture of the organisms in the ballast water. With MIURA's unique multi-stage cleaning function, the maintainability and performance are supported and the capturing function of the filter is maintained. The filter is always maintained in a clean state, so it does not require the time and effort of the crew of the vessel and the primary duties in cargo handling can be performed smoothly.

Filter unit

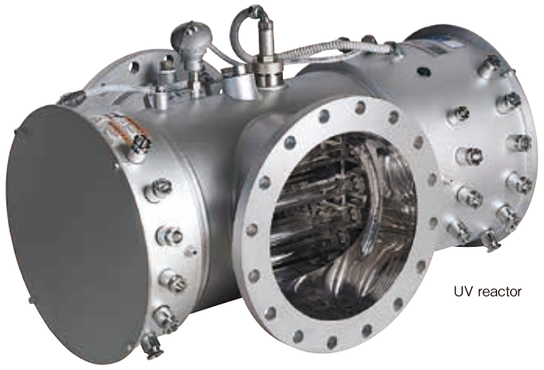


The three MIURA original cleaning patterns preserving the filter performance

In order to reduce the clogging of the filter, a function is included that can clean the filter element in multiple stages. With these three cleaning patterns, high pressure jet cleaning is performed from the outside of the filter element to keep the filter clean at all times and preserve the filter performance.

Reliable sterilization of organisms with a uniquely developed UV irradiation method

MIURA started the installation of the independently developed BWMS from 2014. As we have accumulated proven results in the installation of the system, we have also received favorable evaluations of the sterilization performance for S-sized and smaller organisms and for fungi. We are implementing repeated improvements to reduce power consumption and extend the service life and are aiming for further quality improvements. A cleaning function has been included inside the UV reactor to reduce the maintenance work that the crew of the vessel must perform.



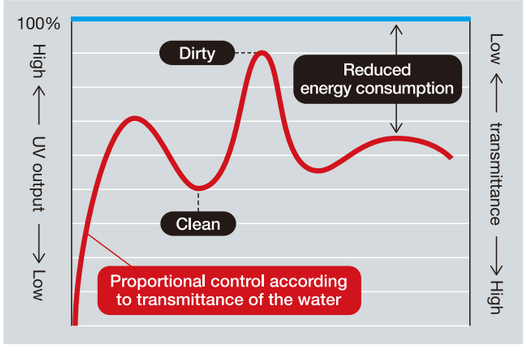
UV reactor

UV power supply

UV sensor

Proportional control operation to realize reduced electricity consumption and longer service life

The short service life of UV lamp was previously the disadvantage of UV irradiation, but we have improved this with a method of operation that uses proportional control. A UV sensor monitors the UV illumination intensity and the amount of UV irradiation is controlled. This saves electricity and extends the service life.

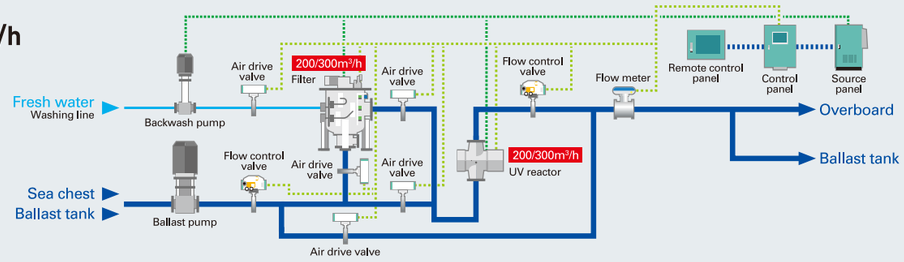


Example filter and UV reactor configurations

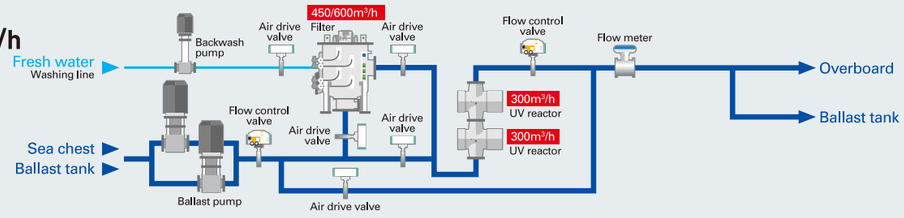
Select the capacity of the filter and UV reactor according to the ballasting and deballasting capacity.

* The following figures are typical examples of BWMS Code, HK-C, and HK-R.

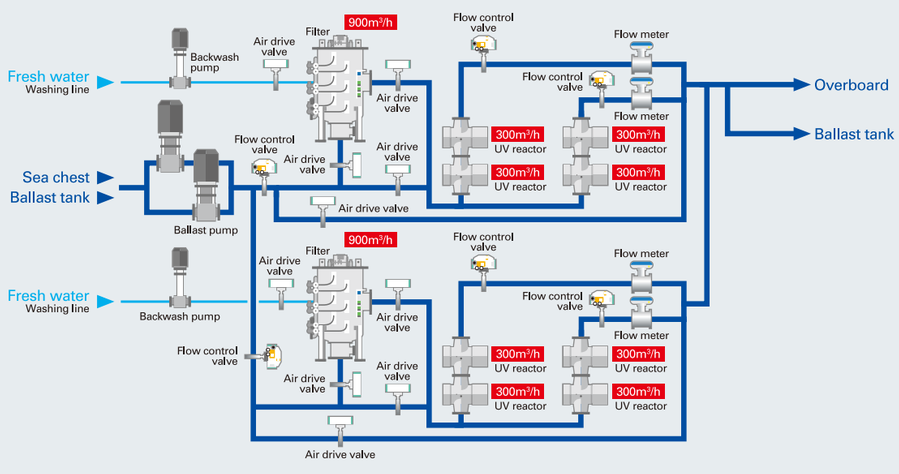
Ballast capacity
200/300m³/h



Ballast capacity
450/600m³/h



Ballast capacity
1800m³/h



Filter	UV reactor		Capacity [IMO]		Capacity [USCG: Type C]		Capacity [USCG: Type R]	
			Ballast	Deballast	Ballast	Deballast	Ballast	Deballast
200F	06U	—	200	200	—	—	200	200
	10U	—	200	300	200	200	—	—
300F	08U	—	300	300	160	160	300	300
	12U	—	300	300	300	300	—	—
450F	06U × 2	06U + 06U	400	400	—	—	—	—
	08U × 2	08U + 08U	450	600	320	320	450	600
	10U × 2	10U + 10U	450	600	400	400	—	—
	12U × 2	12U + 12U	450	600	450	600	—	—
600F	08U × 2	08U + 08U	600	600	320	320	600	600
	12U × 2	12U + 12U	600	600	600	600	—	—
900F	08U × 2 + 08U	—	900	900	480	480	900	900
	12U × 2 + 12U	—	900	900	900	900	—	—
	08U×2 + 08U×2	—	900	1200	640	640	900	1200
	12U×2 + 12U×2	—	900	1200	900	1200	—	—

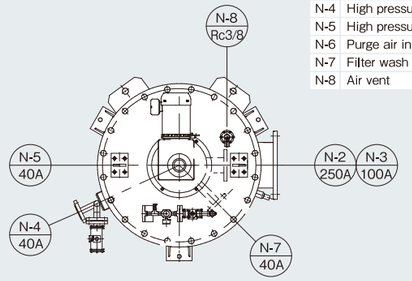
* The above equipment configurations are typical examples. Contact a MIURA sales office for information on other configurations.

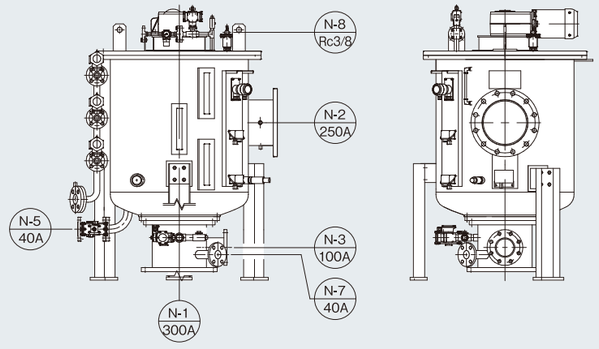
Basic specifications and external views

Filter unit

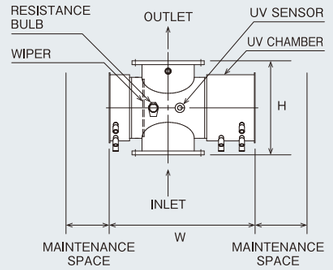
Nozzle table

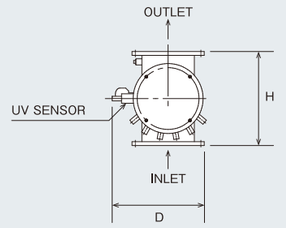
No.	Description	Size	Q'ty
N-1	Ballast water inlet	JIS 10K-300A	1
N-2	Ballast water outlet	JIS 10K-250A	1
N-3	Back wash water outlet	JIS 10K-100A	1
N-4	High pressure wash water inlet	JIS 20K-40A	1
N-5	High pressure wash water outlet	JIS 10K-40A	1
N-6	Purge air inlet	JIS 10K-15A	1
N-7	Filter wash water outlet	JIS 10K-40A	1
N-8	Air vent	Rc3/8	1



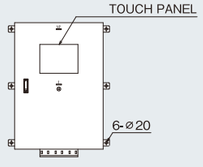


UV reactor

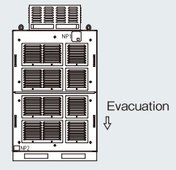




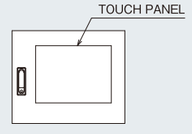
Control panel



Source panel



Remote control panel (option)



Equipment name	Standard flow rate [m³/h]	Dimensions (H × W × D) [m] *	Diameter (in/out) [A]	Weight [Kg]
Filter 200F	200	1445 × 1200 × 1095	300 / 250	800
Filter 300F	300	1610 × 1195 × 1095	300 / 250	900
Filter 450F	450	2000 × 1200 × 1075	400 / 350	1300
Filter 600F	600	2050 × 1485 × 1435	400 / 350	1700
Filter 900F	900	2615 × 1510 × 1435	450 / 400	2000
UV reactor	200/300	640 × 990 × 625	350 / 350	205
Control panel		1060 × 800 × 300		90
		1660 × 800 × 300		150
Source panel		1630 × 910 × 740		460
		1920 × 910 × 740		560
Remote monitoring panel		370 × 450 × 170		15
Power supply voltage	Source panel AC440V 60Hz 3ø, Control panel AC110V~220V 60Hz 1ø			
Design pressure	0.7 MPa			

* Space for maintenance is not included.