



Marine Safety Center

BWMS Type Approval Status



Approved

Application Received	Manufacturer (Country)	Model	Independent Laboratory	System Type	Capacity	Certificate Issued* (Amended)
20-Sep-2016	Optimarin (Norway)	OBS/OBS Ex	DNV	Filtration + Ultraviolet	65 – 3,000 m ³ /h	02-Dec-2016 (13-Jan-2025)
21-Sep-2016	Alfa Laval (Sweden)	PureBallast 3.0/3.1	DNV	Filtration + Ultraviolet	85 – 3,000 m ³ /h	23-Dec-2016 (3-Nov-2023)
23-Sep-2016	TeamTec BWMS AS (Norway)	Oceansaver MK II	DNV	Filtration + Electrodialysis	200 – 7,200 m ³ /h	23-Dec-2016 (9-Nov-2022)
24-Jan-2017	Sunrui (China)	BalClor, BalClor Smart	KR	Filtration + Electrolysis	50 – 8,500 m ³ /h	06-Jun-2017 (21-Nov-2024)
31-Mar-2017	Ecochlor, Inc. (USA)	Ecochlor, EcoOne, EcoOne Hybrid	DNV	Filtration + Chemical Injection	500 – 16,200 m ³ /h	10-Aug-2017 (25-May-2023)
2-May-2017	ERMA FIRST (Greece)	Erma First FIT	LR	Filtration + Electrolysis	100 – 3,740 m ³ /h	18-Oct-2017 (28-Sep-2023)
31-Oct-2017	Techcross, Inc. (Republic of Korea)	ECS & ECS-A	KR	Electrolysis	150 – 12,000 m ³ /h	05-Jun-2018 (31-Jan-2024)
28-Sep-2017	S&SYS Co., Ltd (Republic of Korea)	Purimar	KR	Filtration + Electrolysis	250 – 10,000 m ³ /h	15-Jun-2018 (Pending)
12-Mar-2018	BIO-UV Group (France)	BIO-SEA	DNV	Filtration + Ultraviolet	55 – 1,400 m ³ /h	20-Jun-2018 (18-Mar-2025)
9-Apr-2018	Wärtsilä Water Systems, Ltd. (UK)	Aquarius EC	DNV	Filtration + Electrolysis	250 – 4,000 m ³ /h	30-Aug-2018 (11-Aug-2023)
31-May-2018	HD Korea Shipbuilding & Offshore Engineering (Republic of Korea)	HiBallast	DNV	Filtration + Electrolysis	75 – 10,000 m ³ /h	26-Oct-2018 (25-Oct-2023)
9-May-2018	Headway Technology Co., Ltd. (People's Republic of China)	OceanGuard	DNV	Filtration + Electrolysis	65 – 5,200 m ³ /h	06-Nov-2018 (3-Nov-2023)
29-Mar-2018	JFE Engineering Corporation (Japan)	BallastAce	CU	Filtration + Chemical Injection	500 – 4,000 m ³ /h	13-Nov-2018 (03-Oct-2024)

*Some manufacturers have requested multiple amendments to their Type Approval Certificates. The first date is the date when the original certificate was issued, and the date in parentheses is the date of the current amendment. Copies of Type Approval Certificates can be found at <http://www.dco.uscg.mil/msc/Ballast-Water/TACs/>, or by visiting the USCG Approved Equipment List at: <http://cgmix.uscg.mil/Equipment/Default.aspx>.

Revised 11/13/2025



Marine Safety Center

BWMS Type Approval Status



Approved

Application Received	Manufacturer (Country)	Model	Independent Laboratory	System Type	Capacity	Certificate Issued* (Amended)
30-Mar-2018	Panasia Co., Ltd. (Republic of Korea)	GloEn-Patrol & GloEn-Patrol 2.0	DNV	Filtration + Ultraviolet	50 – 6,000 m ³ /h	14-Dec-2018 (04-Jun-2025)
3-Mar-2018	De Nora (USA)	BALPURE	LR	Filtration + Electrolysis	400 – 8,570 m ³ /h	19-Dec-2018 (07-Dec-2023)
20-Jul-2018	Scienco/FAST (USA)	inTank, inTank FITT, inTank SuperFITT BWTS	DNV	Electrolysis + Chemical Injection	Up to 200,000 m ³	01-Feb-2019 (04-Apr-2025)
18-Oct-2018	DESMI Ocean Guard A/S (Denmark)	CompactClean	DNV	Filtration + Ultraviolet	35 – 1,740 m ³ /h	16-Apr-2019 (Pending)
19-Oct-2018	Wärtsilä Water Systems, Ltd. (UK)	Aquarius UV	DNV	Filtration + Ultraviolet	50 – 1,000 m ³ /h	02-May-2019 (08-Apr-2024)
21-Sep-2016/ 18-Mar-2019	Alfa Laval (Sweden)	PureBallast 3.2	DNV	Filtration + Ultraviolet	85 – 3,000 m ³ /h	15-May-2019 (Pending)
19-Oct-2018	Cathelco Ltd (UK)	Evolution	LR	Filtration + Ultraviolet	55 – 1,500 m ³ /h	25-Jun-2019 (24-Jun-2024)
13-Jun-2019	COSCO Shipping Heavy Industry Technology Co., Ltd. (China)	Blue Ocean Shield (BOS)	DNV	Filtration + Ultraviolet	100 – 3,200 m ³ /h	09-Sep-2019 (25-Nov-2024)
1-Apr-2019	Hyundai Heavy Industries Co., Ltd. (Republic of Korea)	EcoBallast	KR	Filtration + Ultraviolet	250 – 2,160 m ³ /h	7-Oct-2019
16-Apr-2019	Miura Co., Ltd. (Japan)	HK-(E)C	DNV	Filtration + Ultraviolet	160 – 900 m ³ /h	28-Oct-2019 (16-Oct-2024)
28-Jun-2019	HANLA IMS Co., Ltd. (Republic of Korea)	EcoGuardian	KR	Filtration + Electrolysis	130 – 4,000 m ³ /h	05-Nov-2019 (7-Mar-2025)
23-Jan-2019	Miura Co., Ltd. (Japan)	HK-S(E)	NSF	Filtration + Ultraviolet	200 – 900 m ³ /h	8-Jan-2020
19-Jul-2019	BAWAT A/S (Denmark)	BAWAT BWMS Mk2	LR	Heat	50 – 5,000 m ³ /h	04-Mar-2020 (05-June-2024)

*Some manufacturers have requested multiple amendments to their Type Approval Certificates. The first date is the date when the original certificate was issued, and the date in parentheses is the date of the current amendment. Copies of Type Approval Certificates can be found at <http://www.dco.uscg.mil/msc/Ballast-Water/TACs/>, or by visiting the USCG Approved Equipment List at: <http://cgmix.uscg.mil/Equipment/Default.aspx>.

Revised 11/13/2025



Marine Safety Center

BWMS Type Approval Status



Approved

Application Received	Manufacturer (Country)	Model	Independent Laboratory	System Type	Capacity	Certificate Issued* (Amended)
30 Mar 2018/ 30 Sep 2019	Panasia Co., Ltd. (Republic of Korea)	GloEn-Patrol 2.0	DNV	Filtration + Ultraviolet	50 – 6,000 m ³ /h	19-Mar-2020 (07-Dec-2023)
30-Aug-2018	NK Co., Ltd. (Republic of Korea)	NK-O3 BlueBallast II	LR	Ozone	200 – 8,000 m ³ /h	23-Mar-2020 (23-Mar-2025)
27-Sep-2018	NK Co., Ltd. (Republic of Korea)	NK-O3 Blue-Ballast II Plus	LR	Ozone	200 – 8,000 m ³ /h	23-Mar-2020 (23-Mar-2025)
27-Dec-2019	Hyde Marine Inc. (USA)	Guardian-US	DNV	Filtration + Ultraviolet	60 – 3,000 m ³ /h	29-Apr-2020 (15-Feb-23)
31-Dec-2019	Miura Co., Ltd. (Japan)	HK-(E)R	KR	Filtration + Ultraviolet	200 – 900 m ³ /h	07-May-2020 (Pending)
13-Jan-2020	Techcross, Inc. (Republic of Korea)	ECS-Hychlor	DNV	Filtration + Electrolysis	300 – 8,000 m ³ /h	11-May-2020 (27-Feb-2025)
27-Nov-2018	Seatrium Eco Technology Pte. Ltd. (Singapore)	LUV U1	LR	Filtration + Ultraviolet	250 - 1,500 m ³ /h	27-May-2020 (10-Apr-2025)
4-Feb-2020	SHIKOKU Chemical Corp. (Japan)	Microfade II	CU	Filtration + Chemical Injection	250 – 2,000 m ³ /h	24-Jun-2020 (12-Apr-2024)
12-Jun-2020	oneTank, LLC (USA)	oneTank	DNV	Chemical Injection	Up to 4,000 m ³ /tank	14-Sep-2020 (Pending)
17-Jun-2020	Elite Marine Corp. (China)	Seascope	DNV	Filtration + Ultraviolet	80 – 5,000 m ³ /h	16-Oct-2020
30-Jan-2020	Panasonic Environmental Systems & Engineering Co., Ltd. (Japan)	ATPS-BLUESys	DNV	Electrolysis	150 – 3,600 m ³ /h	21-Oct-2020
31-Jul-2020	Knutsen Ballast Water AS (Norway)	KBAL BWMS	LR	Pressure Vacuum + Ultraviolet	400 - 3,000 m ³ /h	5-Nov-2020 (21-Feb-2025)
28-Sep-2020	Alfa Laval (Sweden)	PureBallast 2.0	DNV	Filtration + Ultraviolet	250 – 2,500 m ³ /h	30-Dec-2020

*Some manufacturers have requested multiple amendments to their Type Approval Certificates. The first date is the date when the original certificate was issued, and the date in parentheses is the date of the current amendment. Copies of Type Approval Certificates can be found at <http://www.dco.uscg.mil/msc/Ballast-Water/TACs/>, or by visiting the USCG Approved Equipment List at: <http://cgmix.uscg.mil/Equipment/Default.aspx>.

Revised 11/13/2025



Marine Safety Center

BWMS Type Approval Status



Approved

Application Received	Manufacturer (Country)	Model	Independent Laboratory	System Type	Capacity	Certificate Issued* (Amended)
9-Oct-2020	TeamTec BWMS AS (Norway)	Senza BWMS	DNV	Chemical Injection	375 – 3,750 m ³ /h	11-Feb-2021 (11-June-2025)
28-Sep-2020	SKF Marine GmbH (Germany)	SKF BlueSonic BWMS	DNV	Filtration + Ultraviolet + Ultrasound	100 – 1,500 m ³ /h	14-Apr-2021 (07-Apr-2022)
30-Dec-2020	Wuxi Brightsky Electronic Co. (China)	BSKY	KR	Separation + Ultraviolet	80 – 6,000 m ³ /h	27-Apr-2021 (28-Feb-2022)
7-Jun-2019	Evoqua Water Technologies Ltd. (United Kingdom)	SeaCURE	PIA	Filtration + Electrolysis	500 – 6,000 m ³ /h	08-Jun-2021 (15-Jun-2023)
31-May-2021	Jiangsu Nanji Machinery Co. Ltd. (China)	NiBallast	DNV	Filtration + Deoxygenation	100 – 4,000 m ³ /h	10-Sep-2021 (12-Nov-2025)
23-Apr-2021	HD Korea Shipbuilding & Offshore Engineering (Republic of Korea)	HiBallast NF, HiBallast HyB	KIOST	Electrolysis	75 – 10,000 m ³ /h	27-Oct-2021 (Pending)
27-Jul-2021	RWO GmbH (Germany)	CleanBallast-OBS	DNV	Filtration + Electrolysis	500 – 3,000 m ³ /h	16-Dec-2021
3-Jun-2021	Norwegian Greentech AS (Norway)	NGT BWMS	DNV	Filtration + Ultraviolet	27 – 609 m ³ /h	24-Feb-2022 (8-Jan-2024)
10-May-2021	Atlantium Technologies Ltd. (Israel)	Purestream	LR	Filtration + Ultraviolet	100 – 1,500 m ³ /h	21-Apr-2022
31-May-2022	Langh Tech Oy AB (Finland)	LanghBW	DNV	Filtration + Ultraviolet	300 – 600 m ³ /h	16-Sep-2022 (14-Jan-2025)
3-Jun-2022	AQUASTAR Co., Ltd (Republic of Korea)	AquaStar	KR	Electrolysis	200- 5,000 m ³ /h	07-Nov-2022 (12-Dec-2024)
16-Mar-2023	Shanghai Electric Cyeco Environmental Technology Co., Ltd (China)	Cyeco	DNV	Filtration + Ultraviolet	100- 1,600 m ³ /h	21-Jun-2023 (03-Apr-2025)

*Some manufacturers have requested multiple amendments to their Type Approval Certificates. The first date is the date when the original certificate was issued, and the date in parentheses is the date of the current amendment. Copies of Type Approval Certificates can be found at <http://www.dco.uscg.mil/msc/Ballast-Water/TACs/>, or by visiting the USCG Approved Equipment List at: <http://cgmix.uscg.mil/Equipment/Default.aspx>.

Revised 11/13/2025



Marine Safety Center

BWMS Type Approval Status



Approved

Application Received	Manufacturer (Country)	Model	Independent Laboratory	System Type	Capacity	Certificate Issued* (Amended)
18-Nov-2022	SAMKUN CENTRURY Co., Ltd. (Korea)	ARA Plus+	KR	Filtration + Ultraviolet	150 – 1,300 m ³ /h	10-Oct-23
17-May-2023	HANLA IMS Co., Ltd. (Republic of Korea)	EcoGuardian NF	KR	Electrolysis	130 – 6,000 m ³ /h	26-Oct-23 (7-Mar-2025)
16-Feb-2023	Techcross, Inc. (Republic of Korea)	ECS-HYCLHOR 2.0	LR	Electrolysis	250 - 8,000 m ³ /h	14-Dec-2023 (Pending)
21-Aug-2025	Shanghai LEE's FUDA Electromechanical Technology Co., Ltd.	LeesGreen	KR	Filtration + Ultraviolet	150 - 1,500 m ³ /h	Pending

*Some manufacturers have requested multiple amendments to their Type Approval Certificates. The first date is the date when the original certificate was issued, and the date in parentheses is the date of the current amendment. Copies of Type Approval Certificates can be found at <http://www.dco.uscg.mil/msc/Ballast-Water/TACs/>, or by visiting the USCG Approved Equipment List at: <http://cgmix.uscg.mil/Equipment/Default.aspx>.

Revised 11/13/2025



Marine Safety Center

BWMS Type Approval Status



Under Review

Application Received	Manufacturer (Country)	Model	Independent Laboratory	System Type	Capacity	Certificate Issued* (Amended)
16-May-2024	DESMI Ocean Guard A/S (Denmark)	CompactClean	DNV	Filtration + Ultraviolet	35 – 1,740 m ³ /h	16-Apr-2019 (Pending)
15-Jan-2025	HD Korea Shipbuilding & Offshore Engineering (Republic of Korea)	HiBallast NF, HiBallast HyB	KIOST	Electrolysis	75 – 10,000 m ³ /h	27-Oct-2021 (Pending)
4-Mar-2025	Techcross, Inc. (Republic of Korea)	ECS-HYCLHOR 2.0	LR	Electrolysis	250 - 8,000 m ³ /h	14-Dec-2023 (Pending)
10-Jun-2025	Miura Co., Ltd. (Japan)	HK-(E)R	KR	Filtration + Ultraviolet	200 – 900 m ³ /h	07-May-2020 (Pending)
21-Aug-2025	Shanghai LEE's FUDA Electromechanical Technology Co., Ltd.	LeesGreen	KR	Filtration + Ultraviolet	150 - 1,500 m ³ /h	Pending
9-Sep-2025	S&SYS Co., Ltd (Republic of Korea)	Purimar	KR	Filtration + Electrolysis	250 – 10,000 m ³ /h	15-Jun-2018 (Pending)
23-Sep-2025	Alfa Laval (Sweden)	PureBallast 3.2, PureBallast 3.5 Ultra	DNV	Filtration + Ultraviolet	85 – 3,000 m ³ /h	15-May-2019 (Pending)
3-Oct-2025	oneTank, LLC (USA)	oneTank	DNV	Chemical Injection	Up to 4,000 m ³ /tank	14-Sep-2020 (Pending)
2-Oct-2025	Headway Technology Co., Ltd. (People's Republic of China)	OceanGuard Sim	DNV	Electrolysis	65 – 5,200 m ³ /h	Pending

*Some manufacturers have requested multiple amendments to their Type Approval Certificates. The first date is the date when the original certificate was issued, and the date in parentheses is the date of the current amendment. Copies of Type Approval Certificates can be found at <http://www.dco.uscg.mil/msc/Ballast-Water/TACs/>, or by visiting the USCG Approved Equipment List at: <http://cgmix.uscg.mil/Equipment/Default.aspx>.

Revised 11/13/2025