

Marcon International, Inc.

Vessels and Barges for Sale or Charter Worldwide

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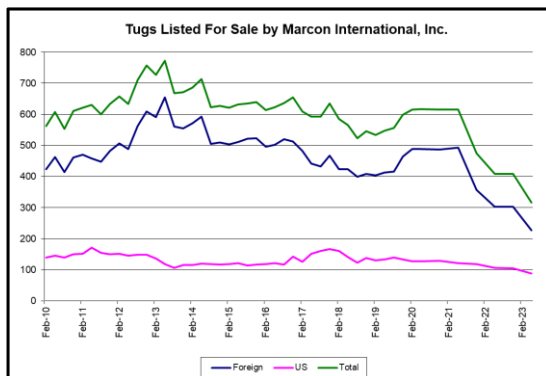
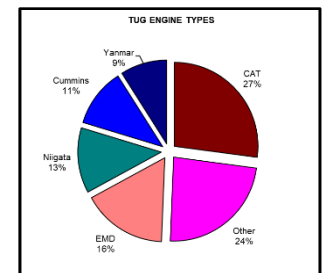
Tug Market Report



Of the 13,322 vessels and 3,757 barges that Marcon tracked as of May 2023, 5,184 are tugs with 316 officially on the market for sale worldwide, down 249 or 44.07% from one year ago, May 2022, and down 93 or 22.74% from May 2018. 95.51% of U.S. and 36.12% of foreign tugboats for sale are direct from Owners. 52 or 16.46% of the tugs worldwide, primarily foreign flagged, were built within the last 10 years, are newbuilding re-sales or currently under construction – compared to 19.80% one year ago and 35.04% five years ago. 53 (16.77%) are over 50 years of age, with five of those over 75 years old. Eight have no age listed. The oldest tug Marcon currently has listed is a 1940 built 122' LOA, 1,950BHP single screw tug located on the U.S. Great Lakes. This “old lady” is balanced by two twin screw tug newbuild resales for delivery in the U.S. in 2023 and 2024.

Market Overview

The majority of tugs Marcon tracks for sale as of this report are in the US with 89 tugs officially on the market (vs. 106 one year ago), followed by 59 in Southeast Asia (71), 34 in the Far East (52), 34 in Europe (53), 20 each in Latin America (29) and in the Mediterranean (33), 13 in the South Pacific (17), 9 each in the Caribbean (11) and in the Mid East (15), 7 where location unstated (10), 6 in Canada (7) and 2 each in Africa (5) and Southwest Asia (0). Where machinery is known, CAT diesels power 84 or 27% of the tugs listed for sale. This is followed by 51 vessels with EMDs, 39 Niigata, 35 Cummins, 28 Yanmar and 8 with Mitsubishi. 65 tugs are powered by other machinery from Akasaka to Wartsila with one Fairbanks Morse tug on the market.



Five years ago, 35.04% of tugs for sale worldwide, primarily foreign flag, were built within the previous 10 years compared to 16.46% today. Then 11.86% of the tugs on the market were 50+ years old compared to 16.77% today. At that time, Marcon had five tugs older than 75 years same as today. The average age of all tugs that Marcon has for sale worldwide today is 30 years, with 1993 average build date, compared to 26 years, 1992 average built, in May 2018. The U.S. had the largest selection of tugs listed in 2018 with 141 available (25.0%), followed by 116 in Southeast Asia (20.5%), 65 in the Mid East (11.5%), 53 in Far East (9.4%), 49 in Europe (8.7%), Mediterranean 44 (7.8%), 34 in Latin America (6.0%), 18 in the Caribbean (3.2%), 15 Africa (2.7%), 11 in the South Pacific (1.9%), 10 Canada (1.8%), 7 where location is unknown (1.2%) and 2 in Southwest Asia (0.4%).

Looking at tugs for sale worldwide, conventional twin screw tugs lead with 196 (62.0%) available, followed by 80 azimuthing (25.3%), 27 single-screw (8.5%), seven Voith Schneider tractors (2.2%) and six triple screw (1.9%). This is fairly comparable to five years ago when 12.4% of the 565 tugs for sale were single screw, 60.7% twin screw, 23.2% azimuthing, 3.0% VS tractor and 0.7% triple screw tugs. Bearing in mind that we are focusing on those available for sale, it seems that for the past five years, azimuthing and conventional twin screw tugs have maintained steady positions in the market. Single screw tugs are mostly relegated to nearly zero commercial work, except in certain specific cases. Available for sale units have dropped considerably with many of those being scrapped due to age and condition. It is noted that in May 2023, Sea-Web reported 2,242 tugs worldwide scuttled, broken up or to be broken up world-wide. This is up 5.06% from May 2022's 2,134. Scrapped vessels increased 34.38% between May 2021 and May 2022, after averaging just over 2% from 2018 to 2019 and then 2019 to 2020. With the decrease in rate of scrapping, it seems that many companies have finished a concentrated effort to scrap its excess tonnage during the worst of the economic fallout of the pandemic. In certain areas of the market, we have seen an increase in demand for tugs and barges, with there being a shortage of units with desired specifications.

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Details believed correct, not guaranteed. Offered subject to availability.

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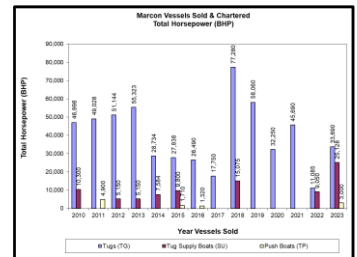
Tug Boat Market Report – May 2023

Marcon's database shows 93 fewer tugs officially for sale than five years ago in May 2018 with largest shifts in the lower horsepower categories. There are 23 fewer tugs are today listed in the 2-3,000HP range with average age increasing from 30 to 31 years. The 3-4,000HP range lost 22 tugs while their average age increased from 25 to 30 years. Below 1,000HP and the 1-2,000HP range each lost 13 tugs while average age increased six to eight years, respectively. The 4-5,000HP range decreased by 10 tugs with average age rising from 17 to 24 years. There were minor changes in the higher horsepower ranges as far as number available for sale and average age. In summary, we saw a 22.74% drop in listings with a four year increase in overall average age.

Marcon has closed 17 sales to date in 2023 with several additional sales pending. These sales included seven twin screw tugs ranging between 1,340BHP and 7,200BHP. Activity in the US tug market remains brisk with numerous tugs changing hands during the past quarter of 2023. Marcon has been involved in the domestic US market selling a US Flag 136' LOA 1978 McDermott SY built 5,750BHP tug from US West Coast Owners in the past month, as well as a US Flag 1,300BHP tug in Alaska and a Tier 3, 2,200BHP US Flag tug from the US Gulf to new Owners for employment in US Northeast wind farm support work. We have several offerings remaining in the US Market, including a 4,400BHP Twin Screw Ocean Tug which has just completed her 5 year dry-docking for ABS and USCG, and is ready to go with full refurbishment also completed. We also have a few smaller construction / dredge support tugs which can be developed, but we are finding it difficult to move tonnage into the expected high demand of the California dredge and marine construction markets at this time. This is mainly due to CARB (California Air Resource Board) requirements. The current CARB requirements appear to insist any and all newly imported vessels into the California market will now require Tier 4 main engines to enter that potentially lucrative market. Tier 2 is being phased out at the end of 2023, but instead of allowing Tier 3 tonnage to be brought in, CARB has declared that all new imports into the market shall be Tier 4 (which was not technically required until phasing out of the Tier 3 at the end of 2027). This has stymied many acquisition possibilities for owners and operators looking to continue their service in the Golden State, and may portend a day of reckoning when there are not enough acceptably tiered tugs to service the demand in that region.

Recent Marcon Tug Sales & Charters

Marcon has sold seven tugs totaling 33,690BHP amongst 17 sales to date in 2023, after selling or fixing tows for five tugs totaling 11,085BHP in 2022. Since our first sale in 1983, Marcon sold or chartered 390 tugs totaling 1,281,462BHP out of 1,563 sales and charters total.



Marcon can report it closed on the sale of the twin screw, ocean going tug "San Felipe" from SAAM Towage to its new South American owners. Built in 1996 at President Marine Pte, Singapore; the 2,800BHP unit measures 95' x 28' x 13' and is powered by twin Yanmar T240-ET main engines. The vessel is surveyed under Lloyds Register Class. The tug is being repositioned to the new owner's location and will eventually be renamed. Marcon was the sole broker in the transaction.

In June, Marcon sold an additional twin screw tug on a private and confidential basis. In May, Marcon closed on two private and confidential sales of twin screw tugs.

Marcon closed on the sale of the three 7,200HP U.S. flagged Invader Class tugs "Ensign" (pictured), "Warrior" and "Ranger" from owner Crowley Puerto Rico to an overseas client in an en-bloc deal. All three tugs were built in the mid-1970s at McDermott Shipyards in Louisiana. The tugs measure 132' x 36.5' x 19.2'. Each has triple rudders for close-quarter maneuverability and steering power for large tows as evidenced by their 75 short ton bollard pull. This sale represents the 127th, 128th and 129th vessels and barges that Marcon has assisted Crowley Maritime with selling, purchasing or chartering since Marcon sold Crowley's 1955-built supply vessel "Gulf Mariner" in 1986.



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Tug Boat Market Report – May 2023

Featured Tugs Available for Sale in Descending BHP Order



File: [TG51090](#) Tug - Triple Screw: 90.0' x 40.0' x 16.0'. Built in 2002. U.S. flag. GRT: 98. USCG COI Sub M Exp. Jun 2025. FO: 80,000g. FW: 8,000g. Crane: 1 - 2T Hiab. Winch: Almon Johnson Single Drum; 1 - electric 1,650' x 2.25". Wire: 2,100' x 2.25". Stern Roller. Main Engines: 3 x Cummins KTA50 total **5,000BHP**. 87" x 83" Pagett Swann 4-blade props on 8" shafts. Bowthruster 10BHP. **Bollard Pull: 66T**. Speed about 12.3kn max. Gensets: 1 - 104kW; 1 - 56kW; 1 - 75kW / GM6-71. 8 in 6 cabins. 800gpd watermaker. Modified, type 37 88" backing kort nozzles. 1/2" plating. Heavy keel coolers & fendering incorporated as part of structure. Six rudders. No loadline necessary, due to low GRT. Anchor handling. **U.S. Gulf Coast.**

File: [TG48137](#) Tug - Twin Screw: 136.6' x 40.0' x 20.2'. Built in 1982 by Main Iron Works Inc.; LA. U.S. flag. GRT: 161. ABS + A1, Towing Service + AMS, Unrestricted Service exp. Feb 2022. Laid-up. FO: 173,250g. FW: 25,000g. BW: 83,060g. Crane: Nautilus 5T hyd. Winch: Markey TDS-36 double drum. Line Pull: 125T. Wire: 2,200' x 2.25". Main Engines: 2 x Alco 12-251E total **4,860BHP**. 126" x 122" 4-blade props on stainless shafts. Kort nozzles. Gensets: 2 - 150kW / GM8V71. Quarters: 13 bunks. AirCon. Galley. Raised foc'stle bow & upper pilothouse with 56' eye level. Secondary Almon Johnson tow winch with capacity for 1,800' 2.25" wire. Rescue boat. ITC Tonnage: 815G / 244N. **U.S. Gulf Coast.**



File: [TG45013](#) Tug - Triple Screw: 110.0' x 41.0' x 16.0'. Built in 1987 by Jacksonville, FL. U.S. flag. GRT: 139. ABS Loadline - Expired. No COI. FO: 110,000g. FW: 14,000g. Crane: 2T Hydraulic. Winch: Double drum. Line Pull: 100T. Wire: 2 - 2,000' x 2.25". Main Engines: 3 x EMD 12-645E2 total **4,500BHP**. 3 - FP 96" x 95" props on 9" shafts. Kort nozzles. Six steering "vane" rudders. **Bollard Pull: 72T**. Gensets: 2 - 70kW / GM; 1 - 90kW / GM. Quarters: 11 berths (5-7crew). **Upper pilot house with 55' eye level.** 1,000lpd watermaker. Range 30 days towing/60 days utility works. ITC - 450G / 135N. **U.S. Gulf Coast.**

File: [TG44164](#) Tug - Twin Screw: 163.8' x 41.3' x 18.9'. Built in 2010 by Malaysian shipyard. Malaysia flag. GRT: 959. BV I +Hull, +Mach Tug, FiFi-1, Waterspray, AHT, Unrestricted. SS due May 2025. Dwt: 700mt. 220m2 clear deck. FO: 500m3. FW: 242m3. DW: 65m3. BW: 65m3. Winch: 150mt brake AHT double drum waterfall. Line Pull: 80mt. Wire: 1,000m x 52mm. Stern Roller. Main Engines: 2 x Cummins QSK60-M total **4,400BHP**. 2 - 4-blade FP props. Kort nozzles. 10kn service speed. Bowthruster 350HP. **Bollard Pull: 54.8mt**. Speed about 12kn max on 13mt/pd. Pumps: FO: 70m3/hr. FW: 70m3/hr. Fire: 1,200m3/hr. Gensets: 2 -265kW / Cummins QSM11-D(M), 1 - 150kW / Cummins 50Hz AC. **FiFi 1.** 1,200/300m3/h water/foam remote joystick monitors. 42 berths in 12 cabins. Handy-sized anchor handling tug. 120T SWL stern roller. 200T SWL Karm Fork & tow pins 2 - 10T tuggers and 2 - 5T capstans. Foam: 16m3. CO2 system: 6 - 45kg tanks. Dispersant: 19m3. Sewage treatment: 2.1m3/d. 6 person rigid rescue boat. Four Crowcon H2S sensors. **Southeast Asia.**



File: [TG43150](#) Tug - Twin Screw: 150.0' x 35.0' x 12.1'. Built in 1963 by Southern Shipbuilding; LA. Rebuilt: 2004. St Vincent/Grenadine flag. GRT: 290. ABS + A1 Towing Service (E) + AMS. Survey overdue. FO: 100,000g. Winch: Single drum Markey / GM3-71 powered. Wire: 2,000' x 2". Main Engines: 2 x CAT 3606 total **5,166BHP**. 2 - FP props. Repowered in 2004. Gensets: 2 - 60kW. Raised foc'stle bow. **Raised pilot house with @ 44' height of eye.** Previously worked with 18,125dwt drybulk ITB hopper barge. 66' highest fixed point. New Fernstrum coolers in 2004. Totally rebuilt in 2004. **Caribbean.**

File: [TG43129](#) Tug - Azimuthing: 114.3' x 32.8' x 14.8'. Built in 1996 by Kyeong-In Eng. & Shipbldg.; So. Korea. Chile flag. GRT: 375. LR 100 A1 Chile Coastal Service Exp. May 2026. Dwt: 153mt. Light Disp.: 434mt. Winch: Towing Aft. Main Engines: 2 x Pielstick 8PA5L total 4,320BHP. Aquamaster U.S. 2001/3150 props. Bollard Pull: 53.1mt. Speed about 13kn. Pumps: FiFi: 360m3/h. Gensets: 2 - 190kW / CAT 3406C-TA. Firefighting: 2 - 3,000Lpm. Monitors. Quarters: 9 persons. Water curtain (125l/min). Oil Dispersant system (400l/min). Foam - 3MT, Dispersant - 4m3. **South America West Coast. Q4 2023.**



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File: [TG43011](#) Tug - Azimuthing: 114.3' loa x 32.8' beam x 14.8' depth x 10.83' loaded draft. Built in 1996 by Kyeong-In Eng. & Shipbldg.; So. Korea. Rebuilt: 2010. Mexico flag. GRT: 375. LR 100 A1 Mexican Coastal Service. SS Sept 2026. Dwt: 153mt. Light Disp.: 434mt. FO: 62.55m³. FW: 22.75m³. BW: 30.77m³. Winch: Hook. Main Engines: 2 x CAT C280-06 total **4,320BHP**. Aquamaster U.S. 2001/3150 props. Repowered in 2010 from MAN 8PA5L. **Bollard Pull: 54.5mt**. Speed about 13kn. Pumps: FiFi: 360m³/hr. Gensets: 2 - 85kW. Firefighting: 2 - 3,000Lpm monitors. Quarters: 9 persons. AirCon. Galley. Water curtain (125l/min). Oil Dispersant system (400l/min). Foam - 3MT, Dispersant - 4m³. **Mexico West Coast.**

File: [TG40131](#) Tug - Twin Screw: 105.0' loa x 30.0' beam x 13.8' depth x 10.50' light draft x 12.00' loaded draft. Built in 1976 by Halter Marine; Pierre Part, LA. Rebuilt: 1998. U.S. flag. GRT: 183. ABS Loadline. USCG COI Sub M - exp. Jul 2027. FO: 65,946g. FW: 6,830g. BW: 8,690g. Winch: Intercon dbl drum DD-200 / GM6-71. Wire: 2,000' x 2" each drum. Main Engines: 2 x CAT 3516 total **4,500BHP**. Last Overhauled: 2013. 2 - 96" x 65" FP props on 9" shafts. 08/2019 M/Es have about 14,000 hrs. since overhaul. Speed about 12kn free. Gensets: 2-99kW/John Deere 4045 (new 2014). Quarters: 3-2, 2-1 person cabins. AirCon. Galley. Raised foc'stle bow. Totally rebuilt in 1998. New interior, etc. Tug is in fresh water. Towing Winch removed from tug and totally rebuilt and reinstalled in 2019. All ballast and fresh water tanks blasted and painted. Recent dry-docking in January 2022 with fresh USCG COI and ABS Loadline issued in June 2022. **Sold to current Owner via Marcon.** Not officially for sale, but we may develop. **U.S. Northwest.**



File: [TG40130](#) Tug - Twin Screw: 114.6' loa x 29.5' beam x 13.1' depth x 9.84' loaded draft. Built in 1998 by Kyeong-IN Engineering & Shipbldg Ltd; S Korea. Ecuador flag. GRT: 293. Class: LR 100A1 - Exp. Sept 2023. FO: 108.5m³. FW: 38m³. BW: 29m³. Crane: 1-1T hydraulic. Winch: Aft tow winch; 58T tow hook + 3.0T @ 15m/min capstan & rope reel. Main Engines: 2 x CAT 3606 DITA total **4,000BHP**. 2 - 2,100mm x 1,050mm FP props on Stainless steel shafts. **Bollard Pull: 45mt**. Speed about 12kn free on 193g/kW/h. Gensets: 2 - 130kVA / Daewoo 167PS 225vAC 60Hz. Quarters: 10 crew. ITC Tonnage 329G / 98N. **South America West Coast.**

File: [TG40086](#) Tug - Triple Screw: 86.0' loa x 41.0' beam x 16.0' depth. Built in 1998 by Green Cove Springs, FL. U.S. flag. GRT: 98. USCG COI Sub M - Exp. Aug 2026. FO: 85,000g. Crane: 1 - 1T Hiab. Winch: Almon Johnson 244 + 10T tigger; 1 - elect. (AHT or tandem). Wire: 2,000' x 2.25"; 1,800 x 2.25". Stern Roller. Main Engines: 3 x Mitsubishi S12RY1MPTA total **5,000BHP**. Last Overhauled: 2009. 87" x 83" Bird Johnson SS props on 8" shafts. Range - 30 days. New M/E: 2009. Bowthruster 100BHP. **Bollard Pull: 50T**. Gensets: 1 - 150kW; 1 - 80kW; 1 - 60kW. 8 in 6 cabins. AirCon. Galley. Type 37 (88") kort nozzles. 1/2" plating. Reportedly built to ABS requirements. Heavy keel coolers & fendering incorporated as part of structure. 6' x 10' stern roller; six rudders, 85,000g liq. Capacity can be divided into F.O. & water. No load line necessary, due to low GRT. Anchor handling. **Caribbean.**



File: [TG39002](#) Tug - Twin Screw: 139.0' loa x 34.0' beam x 17.2' depth x 10.60' light draft x 14.10' loaded draft. Built in 1976 by Burton Shipyard; Port Arthur, TX. Rebuilt: 2000. U.S. flag. GRT: 198. ABS +A1, Towing Service +AMS. Drydocking and special survey overdue Sept. 2015. Dwt: 647T. FO: 129,000g. FW: 12,300g. BW: 122,400g. Winch: Double drum Intercon 74077. Line Pull: 100T. Wire: 2 x 2,200' 2". Main Engines: 2 x EMD 16-645E6 total **4,200BHP**. 2 - 115"x88" 4-blade Stainless props. 12,400nm range @ 10kn. **Bollard Pull: 52.5ST**. Speed about 10-12.5kn on 104-179gph. Gensets: 2 - 99kW / GM8V71 450v 60Hz. Quarters: 8 berths. AirCon. Galley. Hydraulic tow pins. 65 ton electric barge winches. **Sold to**

current Owner by Marcon. Tanks coated at last drydocking. Low main engine and reduction gear running hours and machinery is all in very good overall condition. Laid up in fresh water. **U.S. West Coast.**

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Tug Boat Market Report – May 2023

File: [TG36067](#) Tug - Twin Screw: 101.7' loa x 31.2' beam x 13.8' depth x 11.48' loaded draft. Built in 2010 by Malaysian shipyard. Malaysia flag. GRT: 299. BV I +Hull, +Mach, Tug, Unrestricted Service. Class Renewal & Docking Surveys due Feb 2020. Dwt: 268mt. 58m³ clear deck. FO: 308.6m³. FW: 46.5m³. Winch: 50T brake Marine Equipment single drum & 5T tugger. Wire: 500m 50mm. Main Engines: 2 x Cummins KTA50-M2 total **3,600BHP**. 2 - 4-blade FP props. Kort nozzles. P/S Tailshaft Surveys due Jul 2020. **Bollard Pull: 41mt**. Speed about 9-11kn. Pumps: FO: 10m³/hr. Gensets: 1 - 150kW / Cummins 6CTA8.3-D(M), 1 - 80kW / Cummins 50Hz. Quarters: 12 in 4 cabins. Galley. 31m towing tug. Sewage treatment system. BNWAS. 2 - 15 person life rafts. Keel laid in 2008, launched in 2009 & commissioned 2010. **Available with 328' x 84' barge [DB32885](#). Southeast Asia.**



File: [TG35103](#) Tug - Twin Screw: 105.0' loa x 32.0' beam x 16.9' depth x 15.25' loaded draft. Built in 1972 by Carrington Slipways Pty Ltd; Australia. Foreign flag. GRT: 268. LR disclassified. Laid-up. Winch: Tow hook. Main Engines: 2 x Blackstone ESL16MK2 total **3,500BHP**. 2 - 4-blade FP props. Kort nozzles. **Bollard Pull: 44T**. Gensets: 2 - 40kW 415vAC 50Hz. Laid-up. **South America East Coast.**

File: [TG32198](#) Tug - Twin Screw: 105.3' loa x 29.5' beam x 13.8' depth x 11.86' loaded draft. Built in 2008 by Tang Tiew Hee; Malaysia. Singapore flag. GRT: 299. NKK NS* (Tug) MNS*, LSA, RCF. Special due Jun 2023. Docking due May 2022. Dwt: 212mt. FO: 236mt. FW: 22mt. BW: 31mt. Winch: 40T brake single drum & 40T SWL tow hook. Stern Roller. Main Engines: 2 x Cummins KTA50-M2 total **3,200BHP**. 2,400 x 1,524mm 4-blade FP props. Kort nozzles. P/S Tailshaft Surveys due May 2024. **Bollard Pull: 40mt**. Speed about 12kn on 295L/h. Gensets: 2 - 100kW / Cummins 6BT5.9-D; 1 - 25kW / Yanmar 4TNE 106G1A. Quarters: 15 crew. AirCon. 2 - 15 person liferafts. Second Special Survey completed & all machinery overhauled. All paints & anodes renewed for 5-year program in June 2019 with fresh 5-year certificates issued by ClassNK, with all machinery overhauled. Hold RINA Class (IACS Class). Full details including owner's brochure, recent photographs and small scale drawings on request. **Available en bloc with 330', 10,000mt dwt barge [DB33073](#).** Set currently operating in the carriage of coal from Indonesia to Malaysia, Thailand, Cambodia and Vietnam. Both tug and barge are reportedly in very good and well-maintained condition. **Southeast Asia.**



File: [TG31012](#) Tug - Twin Screw: 121.4' loa x 37.4' beam x 16.2' depth x 13.30' loaded draft. Built in 2007 by SE Asia shipyard. Malaysia flag. GRT: 467. NKK NS*(TUG/FFV1/AHV) MNS* MPP, LSA, RCF, AFS Exp. April 2022; Next DD due Oct 2020. Laid-up. FO: 312m³. Main Engines: 2 x CAT 3512B-TA total **3,150BHP**. 2 - FP props. **Bollard Pull: 47mt**. Gensets: 1 - 150kW / Cummins 6CTA8.3. AirCon. Galley. Two anchor handling sister tugs available for sale. **Southeast Asia.**

File: [TG30196](#) Tug - Twin Screw: 120.0' loa x 31.0' beam x 14.8' depth. Built in 1970 by McDermott, Amelia, LA. U.S. flag. GRT: 177. ABS Loadline due May 2023. USCG COI Sub M - Exp. July 2027. FO: 96,000g. FW: 3,000g. Winch: Double Drum Markey TDS 32. Line Pull: 179mt. Wire: 2 - 2,200' x 2". Main Engines: 2 x EMD 12-645E2 total **3,000BHP**. 2 - FP props. **Bollard Pull: 37.4mt**. Gensets: 2 - 110kW John Deere 6068. AirCon. Galley. Hydraulic Tow Pin / Roller system. Owner is a keen Seller and inviting offers after inspection. Contact Marcon for further details and price guidance. **U.S. West Coast.**



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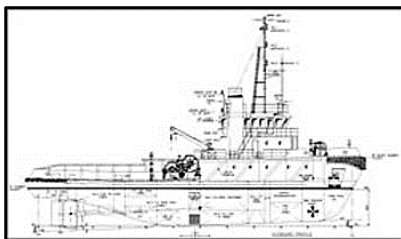
File: [TG30039](#) Tug - Twin Screw: 98.0' loa x 30.0' beam x 13.3' depth. Built in 1983 by Patti Industries; Pensacola, FL. U.S. flag. GRT: 145. ABS Loadline expired Jan 2019 - overdue. 20'x30' clear deck. FO: 60,000g. FW: 5,700g. Winch: Smatco Double Drum W/F DAW-100. Line Pull: 100,000lbs. Wire: 2,000' x 1.75"; 1,400' x 1.25". Main Engines: 2 x CAT 3512B total **3,000BHP**. 2 - FP props. Kort nozzles. Repowered 2007. Gensets: 2 - 50kW / GM4-71. Quarters: 3-1, 2-2 person berths. AirCon. Galley. Contact Marcon for further details / price guidance. Owner is keen to sell and inviting offers. **U.S. West Coast.**

File: [TG29090](#) Tug - Twin Screw: 90.0' loa x 33.0' beam x 14.9' depth. Built in 1981 by Main Iron Works. U.S. flag. GRT: 163. ABS Loadline, USCG COI Sub M - exp. July 2023. FO: 50,617g. FW: 880g. BW: 5,410g. Winch: 1 - Capstan aft. Main Engines: 2 x EMD 12-645E6 total **3,000BHP**. 2 - FP 102" dia. 4-blade props. Kort nozzles. Gensets: 2 - 75kW / John Deere 4045TF285. Quarters: 8 bunks. AirCon. Galley. Last completed a dry-dock in 2020 and ABS Loadline issued. Fresh water ballast only. Used as a back-up boat with light duty over the past three years. Contact Marcon for price guidance. **U.S. Southeast.**



File: [TG28193](#) Tug - Twin Screw: 95.1' loa x 28.2' beam x 13.5' depth x 11.80' loaded draft. Built in 1995 by President Marine Pte.; Singapore. Panama flag. GRT: 223. LR 100A1 LMC - Exp. Apr 2025. Dwt: 164mt. Light Disp.: 265mt. FO: 96.4m3. FW: 38m3. Winch: Tow Hook. Main Engines: 2 x Yanmar T240-ET total **2,800BHP**. 2 - Bronze FP props. **Bollard Pull: 39T**. Gensets: 2 - 60kW / Leroy GM6-71 380vAC 50Hz. Quarters: 7 crew. **South America West Coast. Q4 2023.**

File: [TG28115](#) Tug - Twin Screw: 105.0' loa x 30.0' beam x 14.6' depth x 12.50' loaded draft. Built in 1975 by Bollinger Machine Shop; Lockport LA. St Vincent/Grenadine flag. GRT: 183. Ex ABS Loadline. Dwt: 186mt. FO: 66,070g. FW: 10,000g. Winch: Intercon DD-175D Double drum. Dutch Bar. Line Pull: 145ST max. Wire: 2,000' x 2.25". Stern Roller. Main engines power total **2,820BHP**. 100" dia. 4-blade FP props. **Bollard Pull: 18MT**. Speed about 8.5-10kn on 80-95gph. Gensets: 75kW & 150kW GM 6V-71. 8 crew in 5 cabins. AirCon. Galley. Upper pilot house. Solid rubber rail fendering. **Available with deck barge [DB23073](#). Caribbean.**



File: [TG27122](#) Tug - Twin Screw: 121.4' loa x 37.4' beam x 16.2' depth x 13.10' loaded draft. Built in 2008 by Shin Yang Shipyard; Malaysia. Malaysia flag. GRT: 475. NKK, NS*(Tug)/MNS*, MPP, LSA, RCF, AFS. Special Survey due May 2023. Dwt: 350mt. 10m x 10m clear deck. FO: 280m3. FW: 80m3. Winch: 50T Tow winch +5T tugger. Main Engines: 2 x Cummins KTA38M2 total **2,700BHP**. 2.2m 4-blade bronze FP props on 203mm shafts. Kort nozzles. Joystick at fore & aft controls. P/S Tailshaft Surveys due Jul 2023. Bowthruster 350BHP. **Bollard Pull: 35mt**. Speed about 12kn trial on 12kL/pd. Pumps: FO: 30m3/h @ 50m head. Bilge & Ballast 30m3/h @ 30m. Gensets: 2 - 150kW / Cummins 6CTA8.3DM 415vAC 50Hz. Firefighting: 56m3/h @ 50m head fire pump +2" portable diesel driven pump. Quarters: 14 in 6 cabins. AirCon. Conan Wu 37m design tug. M300H bow and 300 x 300 DD hollow aft fendering plus rubber tires. Last drydocked for class July 2018. **Available with 360' x 84' barge [DB36085](#). Southeast Asia.**

File: [TG25010](#) Tug - Twin Screw: 100.0' loa x 27.0' beam x 12.0' depth x 10.00' light draft x 12.00' loaded draft. Built in 1966 by Houma Welders Inc; Houma, LA USA. Trinidad/Tobago flag. GRT: 196. Winch: Single Drum. Wire: 2,000' x 2". Main Engines: 2 x CAT D399 total **2,500BHP**. Kort nozzles. Gensets: 2 - GM 6V-71. **Caribbean. Dec 2023.**



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Tug Boat Market Report – May 2023



File: [TG24181](#) Tug - Single Screw: 105.0' loa x 32.1' beam x 12.4' depth. Built in 1983 by Jakobson Shipyard Inc, Oyster Bay, NY. U.S. flag. GRT: 198. USCG COI Sub M - Exp. Jul 2026. FO: 24,473g. Winch: Capstan aft. Main Engine: 1 x Alco 12-251E total **2,430BHP**. 1 - FP props. Kort nozzles. Speed about 9.5kn. Gensets: 2 - 75kW / GM6-71. Pusher tug with four level deck house. Flanking rudders. Last drydocked 2022 with ABS and USCG COI all current. Winch available, but not installed. **U.S. Northeast.**

File: [TG24075](#) Tug - Twin Screw: 74.3' loa x 26.2' beam x 11.4' depth x 8.50' loaded draft. Built in 2002 by Detroit Chile SA. Peru flag. GRT: 131. ABS A1, Towing Services, AMS. Unrestricted Service. SS due Dec 2026. Dwt: 131mt. FO: 38.6m3. FW: 13.1m3. Main Engines: 2 x MTU 8V4000M60 total **2,400BHP**. **Bollard Pull: 32T**. **South America West Coast.**



File: [TG17949](#) Tug - Twin Screw: 49.0' loa x 21.0' beam x 11.3' depth. Built in 1998 by Sylte Shipyard Ltd.; Maple Ridge, BC. Canada flag. GRT: 61. LR. Laid-up. Winch: Single drum aft. Main Engines: 2 x total **1,799BHP**. **Bollard Pull: 23T**. Speed about 10kn. **Canada West Coast.**

File: [TG16047](#) Tug - Twin Screw: 84.6' loa x 26.0' beam x 12.5' depth x 10.20' loaded draft. Built in 2012 by Hung Seng Shipbuilding; Malaysia. Singapore flag. GRT: 204. NKK. FO: 200T. FW: 80T. Winch: Tow, 25T SWL Tow hook. Main Engines: 2 x CAT 3412D total **1,696BHP**. 2 props. Kort nozzles. **Bollard Pull: 21-22T**. Speed about 11kn. Gensets: 2 - 50kW / Yanmar. Quarters: 10 crew. **Southeast Asia.**



File: [TG16046](#) Tug - Twin Screw: 84.6' loa x 26.0' beam x 12.5' depth x 10.20' loaded draft. Built in 2012 by Moxen Shipyard, Malaysia. Singapore flag. GRT: 198. NKK. FO: 200T. FW: 80T. Winch: Tow, 25T SWL Tow hook. Main Engines: 2 x CAT 3412D total **1,696BHP**. 2 props. Kort nozzles. **Bollard Pull: 21-22T**. Speed about 11kn. Gensets: 2 - 50kW / Yanmar. Quarters: 10 crew. **Southeast Asia.**

File: [TG14103](#) Tug - Twin Screw: 101.7' loa x 27.9' beam x 12.5' depth x 9.84' loaded draft. Built in 2002 by Piasau Slipways Sdn Bhd; Miri, Malaysia. Singapore flag. GRT: 271. NK NS(Tug) MNS, LSA, RCF, Tug. Special Survey due Jun 2022. Docking due Dec 2020. Dwt: 191mt. FO: 200mt. FW: 80mt. Winch: Single drum & 25T tow hook. Main Engines: 2 x CAT 3412C-TA total **1,442BHP**. 2 - FP props. Kort nozzles. P/S Tailshaft Surveys due Nov 2021. **Bollard Pull: 20mt**. Speed about 11kn free. Gensets: 2 - 62.5kVA Stamford / Perkins 4.235 415vAC 50Hz 3Ph. 12 crew in 5 cabins. Galley. Last Annual Survey completed Sep 2019 and docking for class Dec 2017. Further details including small scale drawing, Owner's brochure, class survey status, flag registry & price ideas on request. **Southeast Asia.**



File: [TG09047](#) Tug - Twin Screw: 47.3' loa x 14.5' beam x 8.0' depth. Built in 1960 by John J. Reich-Elizabeth, NJ. Rebuilt: 2008. U.S. flag. GRT: 32. USCG COI Sub. M - Exp. Mar 2025. Last DD March 2023. FO: 1,860g. FW: 130g. Winch: Single drum hydraulic + H Bitt. Wire: 1000' x 1.25' soft line. Main Engines: 2 x MTU DD Series 60 14L total **950BHP**. 2-FP 52" x 34" 3-blade bronze props on 4" stainless shafts. Range 750nm @ 6kn. Tier 2 Re-power in 2005. Speed about 6-10kn on 9-16g/hr. Gensets: 1 - 20kW Delco / Northern Lights 843 Tier 2. Quarters: 4 crew. Galley. Welded steel construction. 1/2" hull and deck plating. Keel coolers. Upper steering station on fly bridge. Engines regularly serviced, good condition and well maintained. Fitted with galley / mess, enclosed head. **U.S. West Coast.**

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File: [TG08065](#) Tug - Twin Screw: 65.0' loa x 23.0' beam x 5.0' depth x 6.00' light draft x 8.00' loaded draft. Built in 1969. U.S. flag. GRT: 85. USCG COI Sub M; exp. Feb 2026. 12' x 18' clear deck. FO: 16,500g. Winch: 1 - 6T. Main Engines: 2 x CAT D353 total **1,200BHP**. 2 - 62" 4-blade props on 5" shafts. Endurance: 20 days or 3,000 miles. Speed about 10kn. Gensets: 1 - 10kW / Miller; 1 - 5kW / Farymann. **U.S. Gulf Coast.**



File: [TG06035](#) Tug - Twin Screw: 35.4' loa x 14.5' beam x 4.8' depth. Built in 1973 by John Manly Ltd.; Vancouver, BC. Canada flag. GRT: 14. Main Engines: 2 x total **600BHP**. **Bollard Pull: 6mt**. Speed about 11kn. Small twin engine, conventional single screw, harbor tug used in dredging operations. **Canada West Coast.**

Worldwide Number of Tugs

While information in *IHS Fairplay Sea-web* only covers “sea-going” vessels over 100GRT, there are many tugs either under that tonnage or in inland service. According to Sea-web, as of 9 May 2023, there were 21,360 “sea-going” tugs over 100GRT worldwide, up from 20,772 (2.83%) and 18,953 (12.70%) in May 2022 and 2018, respectively. Total horsepower is 58,364,533BHP, up 1,913,944BHP (3.39%) over the past year. Even considering flags of convenience, the largest national fleet of tugs over 100GRT continues to be under Indonesian flag with 5,665 tugs totaling 10,272,329BHP. The U.S., as the second largest national fleet of tugs, operates 1,486 “sea-going” tugs over 100GRT, or 6.96% of the world market, totaling 5,589,776BHP (9.58% global BHP). Average age of tugs worldwide is 23.3 years (built 2000) with the U.S. flag “sea-going” fleet at 35.31 years (built 1988). The “Unknown” flag group is 10.81% of the world market, comprised of 2,310 tugs totaling 4,428,337BHP or average 1,917BHP each with an average age of 36.2 years. This large “Unknown” group indicates to us that older, lower horsepower tugs may be falling off the radar. Five years ago, average age of the worldwide fleet was 21.4 years (built 1996). Average horsepower of the worldwide fleet over the past five years has held steady at approximately 2,700BHP.

Top 25 “Sea-Going” Tug Fleets by Units as Of May 2023 According to IHS Fairplay Sea-Web

Flag	Total BHP	%	# Tugs	%	Avg BHP	Avg Age
Worldwide	58,364,533	100.00%	21,360	100.00%	2,732	2000
Indonesia	10,272,329	17.60%	5,665	26.52%	1,813	2011
Unknown	4,428,337	7.59%	2,310	10.81%	1,917	1987
United States Of America	5,589,776	9.58%	1,486	6.96%	3,762	1988
Japan	2,788,771	4.78%	754	3.53%	3,699	2007
Russia	1,582,760	2.71%	632	2.96%	2,504	1994
Korea, South	1,874,303	3.21%	594	2.78%	3,155	1997
Malaysia	1,239,191	2.12%	538	2.52%	2,303	2007
India	1,485,139	2.54%	506	2.37%	2,935	2002
Singapore	1,185,757	2.03%	427	2.00%	2,777	2011
Panama	1,309,946	2.24%	419	1.96%	3,126	1995
Turkey	1,385,838	2.37%	361	1.69%	3,839	2009
Philippines	688,067	1.18%	291	1.36%	2,364	1983
Brazil	1,164,593	2.00%	287	1.34%	4,058	2006
Italy	1,126,433	1.93%	287	1.34%	3,925	1996
Australia	1,175,321	2.01%	270	1.26%	4,353	2005
St Vincent & The Grenadines	1,090,923	1.87%	266	1.25%	4,101	2012
Iran	580,395	0.99%	247	1.16%	2,350	1993
United Kingdom	860,481	1.47%	244	1.14%	3,527	2000
China, People's Republic Of	772,565	1.32%	243	1.14%	3,179	1997
Canada	733,425	1.26%	241	1.13%	3,043	1983
Nigeria	568,896	0.97%	200	0.94%	2,844	1992

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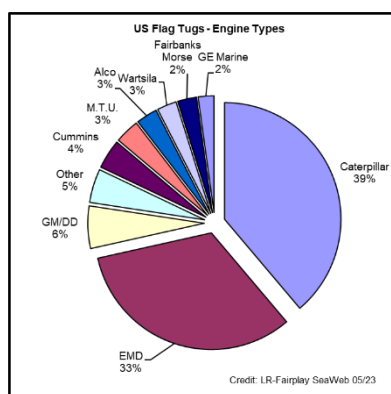
Tug Boat Market Report – May 2023

Breakdown of U.S. “Sea-Going” Fleet

According to IHS Fairplay Sea-web, as of May 9, 2023, the U.S. domestic tug fleet consisted of 1,486 “sea-going” tugs totaling 5,589,776BHP. The U.S. flag fleet increased by seven or 0.47%, total horsepower increased by 45,035BHP or 0.81% and average age increased by six months to 35.3 years, compared to one year ago. The U.S. fleet over 100GRT decreased by 54 or 3.51% but increased by 130,186BHP or 2.38% since May 2018. Average age increased by seven months. The fleet data supports what we have witnessed in the market with older, lower horsepower units being scrapped and replaced with higher horsepower units. We continue to see units scrapped or offered for sale outside the U.S. due to post-merger fleet consolidations and the uneven economic conditions.

U.S. Sea-Going Tug Fleet Over 100GRT By BHP According to Lloyd’s Register as of May 2023

	Unknown BHP	Under 999	1000-1999	2000-2999	3000-3999	4000-4999	5000-5999	6000-6999	7000-7999	8000-8999	9000 Plus	Total
Total #	100	39	208	194	281	272	140	137	41	14	60	1,486
Avg. BHP		798	1,513	2,365	3,413	4,351	5,364	6,455	7,213	8,225	11,331	
Avg. LOA	87	77	85	96	104	105	105	108	144	135	160	
Avg. Beam	28	23	26	29	32	35	36	39	40	42	49	
Avg. Depth	11	9	11	13	15	16	17	18	20	21	24	
Avg. Year Built	1976	1958	1969	1978	1983	1996	2003	2009	1988	2007	2010	1987



Of the 1,486 U.S. tugs in Sea-web, 159 have unknown engines. 515, or 35% where type is known, are powered by CATs, 434 (29%) by EMDs, 78 (5%) by General Motors / Detroit Diesels, Cummins 4%, Alcos and M.T.U.s (Rolls Royce) with 3% each, and Fairbanks Morse, GE Marine and Wartsila have 2% each of the market share. Five years ago, of 1,540 U.S. flag tugs, 496 or 36% were powered by EMDs, 462 (30%) by CATs and 104 (7%) by GM / DD. Comparing May 2023 against May 2018, EMDs lost three percentage points, GM / DD lost two percentage points, CATs gained five percentage points. In the current fleet, 282 (19%) and 813 (55%) are conventional single and twin screw, respectively. 327 azimuthing (22%), 41 triple screw (3%) and 23 Voith tractor tugs (2%) make up the remaining 27%. Compared to May 2018, today there are 80 fewer single screw, 14 fewer twin screw and 36 more azimuthing tugs in the U.S. tug fleet where over 100GT.

Worldwide Articulated Push Tugs Fleet

According to IHS Fairplay Sea-web, as of May 9, 2023, there are 248 articulated push tugs above 100GT worldwide. 67.34% or 167 are U.S.-flagged with average 6,317BHP and average age of 25 years - with many older units being conversions of conventional tugs. The second largest fleet with 16 ATB tugs is attributed to “unknown flag”, followed by seven each flagged in Liberia and South Korea and six each in Canada and Indonesia. The remaining 81 are spread among 19 countries. The average age of non-U.S. flagged articulated push tugs is 33 years with average 4,449BHP. Of total tugs worldwide, ATB tugs make up 1.16%. However, in the U.S., articulated push tugs account for 11.24% of all tugs. Since May 2022, there has not been any change in overall counts of U.S. and foreign-flagged ATB tugs. Average age in the U.S. increased from 24 to 25 years old, with outside the U.S., also increasing one year to 33 years old. The youngest ATB fleets sail under Liberian and Russian flags; Russia with a 2020-built, 3,400BHP ATB and Sierra Leone with seven average 2020-built ATBs. Mexico has the oldest ATB, a 1,775BHP 1968-built unit. Compared to May 2018, the worldwide ATB tug fleet grew by 28 vessels, 13 in the U.S. and 15 elsewhere. Average age then was 20 years for U.S. vessels and 31 years old for non-U.S. Average BHP was slightly higher at 6,654BHP for U.S. and 4,636BHP for non-U.S.

Sea-web Articulated Push Tugs Summary as of 9 May 2023

	Total BHP	%	# Tugs	%	Avg BHP	Avg Age	Age in Years
US	1,054,969	74.54%	167	67.34%	6,317	1999	25
Foreign	360,350	25.46%	81	32.66%	4,449	1990	33

Marcon is currently tracking 130 ATB tugs worldwide with five currently for sale, ranging in age from five to 46 years old. All five ATB tugs for sale are located in the U.S.

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Vessel & Shipyard News

According to the **U.S. Coast Guard Merchant Vessels of the U.S.** database updated May 1, 2023, 30 towing vessels are listed with 2023 build dates. These range from 24' to 136' LOA, 1,320BHP to 7,725BHP (where BHP given) vessels. In 2022, 83 towing vessels were built or completed; following 107 built or completed in 2021, 128 in 2020 and 113 in 2019.

IHS Fairplay Sea-Web as of May 9, 2023 reports 728 towing vessels, all over 99GT, built or to be built in 2023 or later. The 728 towing vessels represent 2,629,705HP (average 3,612HP). 163 are on order for Indonesia, 109 for St Vincent & The Grenadines, 104 for Turkey, 54 for Singapore, 34 for France, Bangladesh 23, 20 each for Egypt and the U.S. The remaining 201 are being built for 46 other countries. Looking at average BHP for each country's newbuilds is interesting as France has the lowest with an average 170BHP compared to the U.S. with average 6,826BHP, which is surpassed only by Brunei and Hong Kong building six tugs total with an average 7,340BHP.



The contract was signed for a new building RAmpage 4100BB-H Hybrid Offshore Tug between **Uzmar** CEO Mr. A. Noyan Altug and **Bukser & Berging** CEO Vette John Sverdrup on the last week of December 2022 at the headquarters office of Bukser & Berging, Lysaker, Norway. The vessel is designed to fulfil the general demands of the offshore industry and to be built for worldwide operation. The vessel is intended to carry out Tug operations inshore, offshore and towing. The vessel's hull is designed to give the maximum maneuverability, high Bollard Pull together with good seaworthiness and low fuel consumption. The new RAmpage 4100BB-H Hybrid Offshore Tug will have 41mt LOA and 14.5m width and will accommodate 10 persons. Maximum Crew comfort is priority in the design of the new RAmpage 4000-H as the vessel will have COMF-NOISE 3, COMF-VIB 3 class notations. RAmpage 4100BB-H will be powered by two medium speed main engines of 2,800kW to run two azimuth thrusters with input of 3,700kW. One bow thruster of 500kW will be used for high maneuverability and DP0 operations. The vessel will be equipped with two 900ekW inline electrical motor/shaft generators for boosting the main engines to achieve maximum bollard pull of 120BP. These electrical motors will be powered by four powerful generator sets of 555ekW.

Contract signed with **Uzmar** to deliver new, state-of-the-art, TRAnverse tugs with superior operating capability and fuel efficiency, following design collaboration between **Robert Allan** and **Svitzer**. Svitzer, a leading global towage provider and part of A.P. Moller-Maersk, in May 2023 announced it has awarded a contract to Uzmar Shipyard to build two new TRAnverse tugs for its Australian business. The TRAnverse tugs are a revolutionary tug design, created in collaboration with Robert Allan Ltd, which set a new standard in tug efficiency, power and manoeuvrability, and deliver an estimated 10-15% reduction in fuel use compared to other tugs on the market. The new tugs will be built to a specification that also enables biofuel operations bringing tank-to-wake carbon emissions to zero. The TRAnverse tug's omnidirectional hull form, in combination with its unique towing staple and propulsion system, provides towage capabilities that are unmatched by other tug designs. Its design enables it to maximise the forces necessary for braking and steerage during towage, as it manoeuvres steadily in the water, and consequently without compromising safety, even at full speed range. It maintains position with lower propeller input power than tug designs where the thrusters are mounted side by side, and overall brings a significant increase in stability and freedom of movement. As a result of these features, the TRAnverse tug meets the full range of complex harbour and terminal towage environments, providing benefits such as the ability to reduce overall time of tug jobs, greater availability in poor weather conditions, reduced emissions and enhanced safety. The two new tugs will be deployed to Svitzer Australia's Port of Newcastle (NSW) operations in 2025 becoming the first TRAnverse tugs to be deployed to Australia, and only the second and third to be deployed globally. The Port of Newcastle is a busy, diverse port operation with a complex harbour, tidal restrictions and channel environment requiring active escort towage, and direct and indirect towage capabilities. Newcastle sees a range of vessels calling from capsized vessels carrying coal, to bulk, container and cruise ships. The complexity of Newcastle's towage operations and range of vessels that call on the port will showcase the full range of the TRAnverse tug's capabilities. Svitzer CEO Kasper Friis Nilaus commented: *"We have been listening closely to our customers and their need for innovative towage solutions. The TRAnverse tug offers significant improvements in operational efficiency, flexibility and sustainability by improving shipping turnaround times and reducing carbon emissions, helping customers to manage the demands of the modern towage market and the complex, busy port environments of today and the future."*



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Uzmar Shipyard delivered the “*Svitzer Elizabeth*” tugboat built for **Svitzer** with a ceremony. RAstar 3200W series built by Uzmar Shipyard, **Robert Allan Ltd.** designed tugboat was delivered with a ceremony attended by Svitzer officials and guests. Uzmar Chairman of the Board A. Noyan Altuğ stated in his speech that Uzmar is not just a shipyard that builds and sells tugboats; “As Uzmar, we export our intellectual and technical know-how, years of experience, enhanced technology and technical capability of Turkish engineering. Uzmar-built tugs, serving in 25 different countries of the world, are the products of our collective experience. We are working to make a

difference in the world with our progressive projects that we invest in for future generations, our environmentally friendly and sustainable vessels with low emissions and carbon footprints. We are sure that the ‘Svitzer Elizabeth’, which we have delivered today, will make us all proud with both its operational and innovative features, thanks to its superior technological equipment and maritime capability. I thank all the Uzmar family, the Svitzer team, and Robert Allan Ltd. who contributed to this important project.” Svitzer COO Philip Patenden thanked all the teams involved in the project in his speech and stated that they would be happy to work with Uzmar on other projects in the future. Svitzer Europe Regional Technical Manager Erik Mainkvist thanked Uzmar in his speech and said; “*The two tugboats Uzmar delivered to Svitzer about three years ago are successfully serving in our Australian ports. During this time, we looked forward to the day when a tugboat built by Uzmar Shipyard would also serve in Europe Region. It is finally possible with ‘Svitzer Elizabeth’. It will be one of the strongest tugboats in the region when it goes into service. We look forward to working with Uzmar on more tugboats to be deployed in Europe. We are continuing the preparations with Uzmar to start the construction of two TRansverse tugboats, whose contracts we signed in the past weeks. Thanks to this cooperation, I hope that we will witness the successful conclusion of many more projects.”* After Svitzer Liverpool Port Manager Jennifer Beswick cut the ribbon for the ship’s departure, “*Svitzer Elizabeth*”, who made a short show, will depart for the Port of Liverpool, where she will serve, in a few days.

In January 2023, **Med Marine** and **Trabzon Port** signed an agreement for the construction and delivery of a 24m 60TBP conventional tugboat. The tugboat will be produced in **Eregli Shipyard** and is planned to be delivered in January 2024. Technical specifications of the SeaTech Solutions design tugboat are as follows. Length: 23.96m; Breadth: 12.25m; Depth: 4.50m; Draft: 4.65m. Crew: 7 person. Bollard Pull: 60mt. Speed: 11 knots.



January 2023 - Hull Number ER119 – MED-A2875 RAstar 2800 W Tug Boat was launched successfully. It measures 28.40m in length, 13.0m in width, 5.40m in depth and it is equipped with CAT 3516E 2,100kW @ 1,600RPM engines and Kongsberg US 255 P30 FP HD slipping clutch.

The contract signing ceremony for the supply and delivery of an Azimuth Stern Drive Tugboat with the **Kenya Shipyard Limited** took place on March 2022. The vessel is MED-A3085 series, designed by Canadian Naval Architects **Robert Allan** exclusively for **Med Marine** and the delivery of the tug was facilitated to Kenya on 5th September 2022. Med Marine’s tugboat was chosen by Kenya Shipyard for its versatile, multi-purpose, compact and modern design which features efficient ship-handling, coastal towing, general-purpose towing and escort capabilities. Vessel will be operated at Port Lamu in Kenya in order to meet the growing marine service requirements of Kenya Shipyard. Vessels name was chosen as *MV “Pate”*. The tugboat’s specifications: Length overall: 29.70m; Beam, moulded: 13.30m; Depth: 5.45m; Draft maximum 6.00m; Gross tonnage: 481mt; The two Imo Tier II emission standard Caterpillar 3561C diesel engine produced a total output of 5,050kW at 1,800RPM to the Kongsberg US255P30 FP azimuthing stern drive (ASD) and 2,800mm diameter propellers via a composite shafting. She performed a free sailing speed of 12 knots and a bollard pull of 84 metric tons. She have an accommodation of 8 persons.



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Tug Boat Market Report – May 2023



Med Marine and Mainport (Celtic Tugs) of Ireland held a naming ceremony for its MED-A2885 RAsar 2800 series tugboat. The vessel was named as “*Celtic Treaty*” by its owner Irish Mainport Holdings. The ceremony took place on 25th April in **Eregli Shipyard**. The state-of-the-art “*Celtic Treaty*”, at 28m in length, with 50+mt bollard pull and two CAT3512C main engine is a versatile, multi-purpose, compact and state-of-the-art ASD design by **Robert Allan Ltd** which features efficient ship-handling, coastal towing, and other general purpose towing capabilities. RAsar designs have full escort capability. “*Celtic Treaty*” set sail for her home port on 26th April and she will be operating in Foynes, Ireland by Celtic Tugs Limited. The tugboat’s specifications: Length Overall 28m; Beam, Moulded 13.0m; Depth 5.10m; Draft Maximum 5.70m; Gross Tonnage <500; Bollard Pull 50mt; Speed 12.5 knots; Main Engine CATERPILLAR 3512C Total Power 2 x 1,500kW @ 1,600RPM Emission Standard IMO Tier II; Azimuthing Stern Drive; Schottel/SRP 360 Propeller 2,100mm diameter; Shafting Composite Shaft; Accommodation 8 people.

Med Marine successfully launched VoltRA series, a registered trade mark of Med Marine, battery-powered state-of-the-art tugs during the NorShipping exhibition, which holds significant global importance within the marine industry, as it catalyzes partnerships, finalizes business agreements, and establishes new contact networks. Med Marine has consistently prioritized environmental consciousness. In line with this commitment, together with **Robert Allan**, Med Marine has developed its own line of battery-powered electric tugs, which range from ranging from 21 meters to 30 meters. Med Marine’s battery-powered tugboats’ battery banks will range from 2,900kWh to 5,000kWh. With a strong focus on achieving zero emissions, Med Marine’s electric tugs play a pivotal role in fostering a healthier environment. Med Marine’s C.E.O, R. Hakan Şen commented: “*We strongly believe that making investments in practices and technologies that prioritize the environment is of utmost importance in safeguarding our planet’s resources and securing a sustainable future. In this regard, we are pleased to launch our VoltRA series battery-powered state-of-the-art tugs to meet the growing demand for environmentally friendly tugs during Nor-Shipping.*”



Sanmar Shipyards has ended a successful year with the delivery of two tugboats that are both powerful and environmentally aware to Italy-based long-term client **Rimorchiatori Augusta**. They were two of four tugs that the Türkiye-headquartered tugboat builder delivered during the last week of 2022. Based on the technologically-advanced, reduced emissions exclusive to Sanmar RAmports 2400 SX MKII design from leading naval architects Robert Allan Ltd, the tugs left Sanmar’s Tuzla Shipyard on Saturday (December 24). Sanmar’s new RAmports 2400SX MKII series of tugs will be the first IMO Tier III emissions compliant tugs

working in Italian ports. Known as “*Bogacay LII*” and “*Bogacay LIV*” while at Sanmar, the tugs have been renamed “*Citta di Augusta*” and “*Citta di Siracusa*” respectively by their new owners. Sanmar delivered an impressive total of 30 tugboats built at its purpose-built shipyards at Altinova and Tuzla in Türkiye to operators Europe, the Middle East, Australia, South and Central America, and domestic customers in Türkiye during 2022. It has previously delivered the tugs “*Turchia*” in 2014, “*Citta di Salerno*” in 2017, “*Arechi*” and “*Italia*” in 2020 to the Rimorchiatori Riuniti group. Both “*Citta di Augusta*” and “*Citta di Siracusa*” measure 24.4m LOA, with a moulded beam of 12m and least moulded depth of 4.5m and have been designed for maximum efficiency in the performance of ship-handling duties for sea going ships, with bollard pulls of 60-plus metric tons and a free running speed of 12 knots. Able to accommodate a crew of up to six people, the tugs are powered by two high speed, electronically-controlled IMO Tier III compliant CAT 3512E main engines, each producing 1,901kW at 1,800RPM to drive standard production US 205 FP 360-degree azimuthing thrusters. “*Citta di Augusta*” and “*Citta di Siracusa*” have Fi-Fi 1 fire-fighting capability with their main fire pump driven through clutched flexible coupling in front of the port side main engine. Tank capacities include 77,900 liters of fuel oil and 11,500 liters of fresh water. Ali Gurun, Chairman of Sanmar Shipyards, said: “*2022 was a good year for us with 30 deliveries to both new and returning customers. In 2023 our focus will continue to be improving the environmental credentials of our tugs through technological advance and state-of-the-art design. This latest version of the popular Bogacay class tugs achieves a new level of low emission, low environmental impact tugboat operation. We are delighted that Rimorchiatori Augusta has again chosen Sanmar to provide the powerful, cost-effective and environmentally-conscious tugs they need to meet their specific operational demands.*” The other two tugs Sanmar delivered during the final week of 2022. They were “*Yenicay XVI*” a compact 32 ton bollard pull tug sold to Türkiye-based Marintug, renamed “*Adakale*” by its new owners, and “*Bozcay VI*”, sold to Türkiye-based operator Yalpaş, where it has been renamed “*Yalova 5*”.

Marcon International, Inc.

Tug Boat Market Report – May 2023

State-of-the-art tug arrives in Esperance to boost port operations with three generations of **Mackenzie Marine and Towage** family on board. A new Sanmar-built tug has arrived in Esperance, Australia, with the “*Lillian Mac*” joining the Mackenzie Marine and Towage fleet to bolster operations in the port. The family-run Mackenzie Marine and Towage holds the contract to operate tug services in Esperance and the new \$10 million vessel joins three other tugs in the company’s fleet – “*Hellfire Bay*”, “*Shoal Cape*” and “*Cape Pasley*”. The “*Lillian Mac*” arrived in Esperance after a four-day voyage from Henderson, with one stopover in Bunbury. The “*Lillian Mac*” was built in Istanbul, Turkey, at **Sanmar Shipyards** to a Robert Allan design – Canadian naval architects - and is the first Mark II version of the new RAmports 2400SX series of tugs. The new class of tug is designed to achieve an improved level of low emission, low environmental impact tugboat operation. The vessel conforms with International Maritime Organisation Tier III emission standards which are an international set of standards designed to improve air quality and protect public health by controlling emissions from ships. At 24 by 12 meters, the “*Lillian Mac*” is driven by twin Caterpillar V16 engines, has firefighting capabilities of 1,200m³/hour and has accommodation for six people. The new generation, environmentally friendly tug is also designed for emergency response towing with state-of-the-art gear to rescue ships and bring them to a safe anchorage. The official naming ceremony for the “*Lillian Mac*” will take place on April 21, 2023, in Esperance.



Sanmar Shipyards has held naming ceremonies over two consecutive days for five tugboats. Two LNG-fuelled escort tugs are the most powerful tugboats that Sanmar has built to date, while the other three of the tugs are the first in the



game changing all-electric ElectRA series. All of them will work at Canada’s prestigious and environmentally-sensitive new LNG terminal in British Columbia. The first ceremony on March 7 saw the naming of the two LNG-fuelled escort tugs at Sanmar’s Altinova Shipyard. Based on the RAstar 4000 DF design from Vancouver-based naval architects **Robert Allan Ltd**, the two Azimuth Stern Drive (ASD) tugs named “*Haisea Kermodé*” and “*Haisea Warrior*” will be Canada’s first LNG tugs. Ranking among the world’s highest performing escort tugs, at 40m in length and with more than 100 metric tons of bollard pull, these impressive tugs will generate indirect escort forces of approximately 200 metric tons. “*Haisea Kermodé*” and “*Haisea Warrior*” were named by Lisa

Grant, Interim Deputy Chief Administrative Officer of the Haisla Nation and Haisla Nation Councillor Kevin Stewart. The second ceremony on March 8 was held at Sanmar’s Tuzla Shipyard and saw the naming of “*Haisea Wamis*”, “*Haisea Wee’git*” and “*Haisea Brave*”, three ground-breaking all-electric ElectRA tugboats which will carry out harbour duties at Kitimat. All three were named by Crystal Smith, Chief Councillor of the Haisla Nation. At 28.4m in length, with 65+mt bollard pull and 6,102kWh of battery capacity each, the ElectRA 2800 electric harbour tugs will perform all their ship-berthing and unberthing missions on battery power alone. With ample clean hydroelectric power available in Kitimat, the harbour tugs will be able to recharge from dedicated shore charging facilities at their berths between jobs, effectively resulting in zero emissions. Ali Gurun, Chairman of Sanmar Shipyards,

said: “*We are proud to be delivering these vessels on time despite having had serious challenges during and after Covid, with limitations on travel, closed days, limitations on going to work, then a shortage of components. Now we have had the earthquake with quite a number of our workers travelling to the quake zone to help and assist family and friends.*” Cem Seven, Vice Chairman of Sanmar Shipyards, said: “*I would like offer our most sincere thanks to LNG Canada, HaiSea, Seaspan and Haisla Nation for their confidence in Sanmar and we wish these 5 beautiful tugs will bring all of you prosperous, safe and clean operations.*”

Jason Klein, CEO of **LNG Canada**, said: “*The collaboration between Seaspan and the Haisla Nation is an exciting and purposeful partnership that will provide dependable and responsible marine services to LNG carriers calling in Kitimat. Their culture of safety, respect and environmental stewardship is an extension of LNG Canada’s commitment to designing, building and operating our project in consideration of community interests while providing benefits to north coast communities.*” VIP guests at the ceremonies included top level executives from the LNG Canada, **HaiSea Marine, Seaspan Marine, Haisla Nation** and Robert Allan Ltd, including along with Chief Crystal Smith, Derek Ollman and Jason Klein, Gord Miller, COO of Seaspan Marine; Jordan Pechie, Director at HaiSea Marine; and Mike Fitzpatrick, President & CEO of Robert Allan Ltd, plus Anna Maria Darmanin, Secretary General of the European Tugowners’ Association, Sanmar employees and representatives of the international maritime media.



Marcon International, Inc.

Tug Boat Market Report – May 2023



Sanmar Shipyards has signed a new contract with long-term client **Buksér og Berging AS** to build a new generation environmentally-friendly tugboat. It will be the ninth tug that the leading Turkish tugboat builder has delivered to the Norway headquartered operator. Based on the exclusive to Sanmar RAmports 2400SX MKII design from Canadian naval architects **Robert Allan Ltd**, the new tug will be the most technologically-advanced and greenest version of the popular RAmports series, and will comply with strict IMO Tier III emissions requirements. Sanmar is already in the process of constructing its eighth tug for BuBe at its purpose-built shipyards in Türkiye – a game-changing emissions-free electric powered ElectRA 2200-SX ‘Tug of the Future’. In 2014 and 2015 Sanmar delivered five new-build tugs to Buksér og

Berging AS, including “*Borgøy*” and “*Bokn*”, the world’s first two purely LNG fuelled tugboats and in 2021 delivered the Tier III compliant TRAktor 3000-Z design tugs “*Bob*” and “*Bamse*” to the environmentally-aware operator. The latest contract is for a tug measuring 24.40m LOA, with a 12.00m moulded beam and a navigational draft of 5.45m, which will be powered by two CAT 3512E main engines each achieving 1,901kW at 1,800RPM to drive Kongsberg US 205S P20 CP thrusters. The tug will be capable of a speed ahead of 12.5 knots and a bollard pull of 60t and include escort notation. Deck equipment will include a Palfinger PK 11001MA deck crane, Karmoy aft and forward winches and a Triplex tow pin. The tug will differ from a standard RAmports 2400SX MKII by being the first with a tow pin and stern roller. Other non-standard features will be a hydraulic operated capstan, boiler, sewage treatment unit and an oily water separator.

National Energy Corporation (NEC), a subsidiary of the state-owned **National Gas Company of Trinidad and Tobago**, has taken delivery of a new **Damen ASD Tug 2811**.

NEC has opted to have installed a Class certified Damen Marine NO_x Reduction System to make it IMO Tier III compliant. While this is not a requirement in the Caribbean Sea yet, it is in full alignment with NEC’s commitment to promoting sustainability in the local and regional energy sectors.

The ASD Tug 2811, named “*National Energy Resilience*” in recognition of the role it will play in delivering low-emission towage, has also been fitted with

Damen Triton, Damen’s in-house remote monitoring software. Triton gathers data from across the vessel and analyses it to deliver valuable insights into efficiency and operability to owners and operators via its web-based platform. For NEC, this will include insights into fuel consumption and CO₂, NO_x and CO₂e emissions. Combining this data with its operational profile will allow NEC to optimize the vessel’s operating profile, potentially reducing fuel consumption by up to 15-20%. NEC is making the purchase in response to the increase in oil & gas exploration and production in the waters of the southern Caribbean, with its duties including rig relocation and other offshore operations. Adding an advanced, low-emission tug to their fleet sends a clear message to its customers that it is prepared to invest in assets that contribute to a sustainable future. “*National Energy Resilience*” is also their most powerful vessel yet with 60mt of bollard pull.



On the 12th of April, the Ireland-based marine services company **Atlantic Towage & Marine Ltd** took delivery of a new **Damen Multi Cat 2309** workboat, named “*Ocean Energy*”. The vessel will spearhead Atlantic’s push into the European market, with a special focus on the fast-growing offshore renewables sector. To optimise the vessel for its role, Atlantic Towage has specified a larger forward deck crane AKC 185 HE4 and an AK34 aft deck crane from HS Marine. A DP1 system from Kongsberg synchronizes twin screws aft and a bow thruster for optimum manoeuvrability. Other deck gear includes anchor-handling, towing and tugger winches. Accommodation is for up to seven crew across five cabins. “*Ocean*

Energy” is IMO Tier II compliant and the engineering space is pre-prepared for the retrofit of a Damen Marine NO_x Reduction System. This uses selective catalytic reduction (SCR) technology to raise a vessel to Tier III compliance and, with the necessary space already available, it can be efficiently fitted when required. While this is the most efficient way to be future-proofed for IMO Tier III, Damen also offers a range of retrofit options to suit most requirements. Additional customisations have been implemented to optimize the vessel for her various roles. The handover ceremony took place at Damen Shipyards Gorinchem, where the MuC 2309 was fitted out following the build of her hull and superstructure at Damen Shipyards Koźle. “*Ocean Energy*” will now begin a contract in Danish waters to assist with cable installations.

Marcon International, Inc.

Tug Boat Market Report – May 2023

Damen Shipyards Group has recently delivered two vessels, a Shoalbuster 3209 named “*Aria*”, and a Stan Pontoon 4113 to **A. R. Singh Contractors Ltd.** Damen signed the contract for the Shoalbuster with its customer in December 2021. Closer to completion of the vessel, the shipbuilder was able to deliver the pontoon within a month after contract effectiveness thanks to its practice of building vessels in series and keeping them in stock for short lead times. The combination of the Shoalbuster and the Stan Pontoon will soon leave the Damen construction yard in Gorinchem, the Netherlands, to work in the marine contracting business in the Southern Caribbean. With the industry around the construction of roads, hotels, shore bases and other buildings booming in Guyana, the vessels will have no time to lose to get to work. With the hull of the Shoalbuster already constructed, Damen was able to accommodate all wishes from the customer in a relatively short time span. The electrical network has been adapted to be better suited in the region that the vessel will operate. The large working deck, alongside the heavy duty crane and winch, will provide the perfect working tools for the rough work required. Also, the vessel can fulfil her duties offshore as a Fire Fighting 1 system including spray has been fitted. This is the second time that Damen has delivered a vessel to A. R. Singh Contractors, which took delivery of a Stan Tug 2208, named “*Adamant*”, in 2008. The Damen Shoalbuster 3209 is 32.27 x 9.35 meters and delivers 45+mt of bollard pull. It is a versatile, multi-functional vessel able to conduct a wide range of duties including (ocean-going) towage, mooring, pushing and firefighting. The vessel's elongated, 80m² deck space ensures its suitability for anchor-handling operations as well.



Damen Marine Services (DMS), the division of Damen Shipyards that offers Damen vessels for charter both fully crewed and bareboat, has taken delivery of the first of a new class of Damen Multi Cat, a Multi Cat 3313 SD named “*DMS Snipe*”. While Damen's Multi Cat range is known for its shallow draught capabilities, this new class can draw less than two meters, an exceptional achievement for a 33-meter vessel. The Multi Cat 3313 SD continues the Multi Cat ethos of being the Swiss Army Knife of orkboats. The “*DMS Snipe*” is equipped with a wide range of equipment including two deck cranes, an anchor winch and towing pins. It also has exception deck space for its length. It is ideal for all types of operation in shallow waters including construction, anchor handling and dredging support. “*DMS Snipe*” has joined DMS's fleet in the Arabian Gulf. With its long coastline and shallow waters, the Gulf is a consistent source of demand for vessels able to operate in such an environment. Clients include oil & gas majors led by Aramco, dredging and marine construction companies that use them for a variety of activities including anchor handling and supplying fresh water and fuel to offshore installations. Albwady Damen shipyard in the UAE provides facilities for DMS to resupply and maintain its vessels. DMS's latest acquisition has been delivered pre-prepared for upgrade to IMO Tier III compliance. While it is not yet a requirement in the Gulf, by having the necessary pipework, foundations and other preliminary equipment in position, Damen's Marine NOx Reduction System can be installed quicker and more economically if and when the decision is taken to proceed. With their shallow draught capability, vessels like the Multi Cat 3313 SD can also avoid damaging marine ecosystems when operating close to reefs or the shore. “*DMS Snipe*” was officially handed over to DMS on 20th March in a ceremony held at Albwady Damen. The Lady Sponsor was Sandra Hitz, the Manager Finance & Administration at Damen Marine Services. Shortly afterwards it set off to begin its first charter, a major dredging operation, which will take place over Q2 and Q3 2023.

11th May, **Multraship Towage & Salvage** named two **Damen** built tugs at a Christening ceremony held at Multraship's home port of Terneuzen, the Netherlands. “*Multratug 5*”, a Damen Stan Tug 1205 and “*Multratug 6*”, a Damen ASD Tug 2810, were immediately entered into service upon delivery to Multraship and are currently in operation in the River Scheldt area. The speed with which the tugs were delivered was thanks to Damen's practice of building in series and for stock. Although based on proven, standard designs, Damen is able to tailor its vessels to the requirements of –its clients. In the case of “*Multratug 6*”, this included a winterization package, FiFi-1 class notation and installation of an aft winch, amongst many other additional features. “*Multratug 6*” also has the distinction of being the last Damen ASD Tug 2810 ever to be built. The vessels were delivered to Multraship during a period of wider fleet expansion, with the company also adding two ERTVs, as well as a Damen Multi Cat and salvage support vessel along with another Damen harbour tug over the past year.



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Tug Boat Market Report – May 2023



In a ceremony held at **Damen Shipyards Hardinxveld**, the second of the new Multi Cat (MuC) 3313 SD class was handed over to workboat operator **Herman Sr. BV** in front of hundreds of guests. Named “*Bella*”, the exceptionally versatile 33-meter vessel has a draught of less than two meters, enabling her to operate in very shallow waters. The MuC 3313 SD is one of the largest types in Damen’s Multi Cat range and so its extensive deck area enables it to be equipped with a wide range of equipment. Bella has two powerful deck cranes and a bollard of over 30mt which, together with an anchor winch and towing pins, makes her ideal for dredging, anchor handling and construction projects. The Bella will initially operate in north-

west European waters, particularly in the shallow waters of the North Sea. Following the christening she has joined a dredging project in Dutch / UK waters.

The DP2 MultiCat 3713, with the future name “*Waddenstroom*”, is currently being built at **Damen Shipyards Hardinxveld** equipped with a Damen Marine NOx Reduction system and will be delivered 26 October 2023. This series stands out with an excellent positioning capability due to the innovative propulsion design; two 360 degree thrusters, one conventional propulsion arrangement in the aft and this combined with two compact jet bow thrusters in the bow. The bollard pull of the vessel is 35mt. With the diesel-electric propulsion system fuel efficiency is ensured, resulting in costefficiency. VWMS has chosen for a Damen Marine NOx Reduction System with its advanced active emissions control system using selective catalytic reduction (SCR), to make it IMO Tier III certified. The vessel will be equipped with two cranes, one on fore deck and one on aft deck, with an SWL of 13.5mt at a reach of 18.5m. The combination of these two cranes with the bow and stern rollers makes the vessel multifunctional for anchor handling combined with the towing and tugger winches, bow and stern rollers and towing pins. The vessel provides support both offshore and close to shore due to the low draft of 2.3m. The MultiCat 3719 design facilitates accommodation for 16 persons. In this series there is cabin space for ten persons above main deck level, and additional cabins for six persons below deck.



Damen Shipyards and **Boluda Towage** have joined forces to bring zero-emissions tugs to Europe. In a ground-breaking move the two organisations, which have nearly 200 years of tugboat experience between them, aim to launch the first newbuild methanol tug in Europe. The first vessel is intended to be a Damen RSD-E Tug 2513 and the partners are now working together to identify the potential harbour that will be best matched to its operational profile. Damen is currently developing the methanol powered tug as part of its mission to be the world’s most sustainable shipbuilder. This completely new design is based on Damen’s experience and knowledge thanks to its extensive R&D capability in alternative sustainable propulsion systems. Boluda as a leading global towage company and Damen as a leading

innovative shipbuilder, share a strong commitment towards environmental sustainability, safety and operational excellence. Boluda Towage has been investing for years in order to achieve cleaner and greener operations in the port. An important milestone in its ambition to work towards lower emissions has been a multiple order of IMO Tier III tugs in 2020. These pioneering vessels set a new standard for all its subsequent newbuilds. Boluda Towage and Damen Shipyards look forward to working with other maritime stakeholders to accelerate the transition to cleaner vessels, particularly those operating in or close to urban areas. In the harbour and towage sector, electric and methanol-fueled propulsion systems currently offer the best and most available route to achieve this. Vicente Boluda Ceballos, Vice Chairman of Boluda Towage, said: “*We are very proud of this collaboration/partnership with Damen Shipyards, which represents an important technological and innovative advancement for our industry. We know that we are in an increasingly complex environment that requires us to always be at the leading edge of solutions to increase safety in our operations, limit our environmental carbon footprint and meet the needs of our customers. With that purpose in mind, we are eager to continue our journey towards the future as a leader in the towage and maritime industry.*” Arnout Damen, CEO of Damen Shipyards Group, commented: “*We are delighted to be working with Boluda Towage on what will be a new chapter in European towage. Not only is this project in keeping with our own values, we also aim to give added momentum to the transition to sustainable harbor towage as the benefits that both electric and methanol-driven vessels deliver will be there for all to see. To aid this process we are already building RSD-E Tugs 2513 for stock and a number will be available for delivery in 2024/25*”.

Marcon International, Inc.

Tug Boat Market Report – May 2023

Damen Shipyards Group has unveiled the latest vessel in its Compact Tugs product platform. The ASD Tug 2111 joins the ASD Tug 2312 in the innovative range, combining proven technology with innovation to advance safety, sustainability, reliability, and efficiency. Siebe Cieraad, Damen Product Portfolio manager explains the thinking behind this next generation series of tugs. *“As sea-going ships continue to increase in size, new challenges are arising in ports. Tugs are required to operate – safely – with less space, at the same time needing increased power to perform. This 21-meter harbour tug with 50 ton bollard pull is therefore a very exciting addition to our portfolio.”* The ASD Tug 2111, in common with other vessels in Damen's portfolio, features numerous safety features. For example, it boasts a high freeboard, which keeps water on deck to an absolute minimum. It also features ample tumblehome, enabling it to get safely up close to an assisted vessel. A further feature is the tug's full vision bridge. This provides a 360-degree view from the deck house over the surrounding waters as well as the deck both fore and aft. Making the ASD Tug 2111 even safer, are its spacious, clutter-free decks. A crucial factor in this is the location of the winch in the deck house. With this, fore and aft towing operations are conducted with a single winch. As well as making the decks clutter-free, this has the added advantage of sheltering the winch from the elements, thereby reducing maintenance. The design features the shipbuilder's proven closed loop keel cooling system. Reducing the amount of on board sea water systems to an absolute minimum, lowers the amount of erosion-related maintenance. Damen has incorporated a new electric power generation system to its Compact Tugs range. The system is able to create electricity by drawing on the ample available power of the main engines, reducing fuel consumption and emissions as a result. A further boost to efficiency comes from the tug's 2.4 meter diameter propeller, the large size of which offers increased thrust. The ASD Tug 2111 also features the patented Damen Twin Fin to ensure outstanding course keeping and predictable sailing behaviour during both free sailing and bow to bow operations.



Recent **Jiangsu Zhenjiang** shipyards activity include on 6th January, 2023, a 3,840kW ASD tug built for **Fujian** and named “*Fu Gang Tuo 22*” (first left upper picture) was launched successfully. Also, the fourth 3,824kW ASD tug, “*Xu Wei Gang Xiao 5*”, (second left upper picture), designed and built for **Lianyungang Xuwei Port Investment Group Co. Ltd** launched successfully. On 16th January, four units for **Lianyungang Xuwei Port Investment**

Group Co. Ltd and named “*Xu Wei Gang Xiao 3*”, “*Xu Wei Gang Xiao 4*”, “*Xu Wei Gang Xiao 7*” and “*Xu Wei Gang Xiao 8*” were delivered (pictured right top). “*Xu Wei Gang Xiao 3*” and “*Xu Wei Gang Xiao 4*” measure 37m x 10.6m x 4.8m, BP ahead of 67.5mt, BP astern of 60.8mt, power of 3,824kW, endurance of 1,200nm and speed of 13.16kn. “*Xu Wei Gang Xiao 7*” and “*Xu*



Wei Gang Xiao 8” measure 41.2m x 11.4m x 5.3m, BP ahead of 81.4mt, BP astern of 73.1mt, power of 4,780kW, endurance of 1,200nm and speed of 13.62kn. On 29th January, a 3,824kW ASD tug built for **Jiangsu Port Navigation Engineering (Taicang) Co., Ltd**, named “*Tai Gang Tuo 5001*”, was delivered (pictured bottom left). The vessel measures 39.85m x 10.4m x 4.8m, ahead pull of 66.4mt, astern pull of 58mt, endurance of 700nm and speed of 13.35kn.

On 7th April, 2023, a 3,680kW hybrid ASD tug “*Yonggang Tuo 80*”, designed and built by **Jiangsu Zhenjiang Shipyards** for **Ningbo Oil Handling & Tug (Barge) Co., Ltd**. was launched successfully. The ship uses parallel Oil-Electric hybrid propulsion, that is, the superimposed drive of traditional diesel engine and battery-powered motor propulsion. In the hybrid mode, energy saving and emission reduction can be realized through the system's working condition optimization and intelligent energy scheduling, which can not only meet the requirement of optimal power output of the main engine, but also achieve the optimal energy consumption by superimposed lithium battery propulsion. When the tugboat enters the emission control area, it can switch to the pure battery mode for propulsion to realize zero emission in the control area. In the diesel propulsion mode, the excess power of the main engine can be fed back to the grid and charged by lithium batteries. The ship will become the first domestic “*diesel-electric + battery*” parallel hybrid tugboat.



Marcon International, Inc.

Tug Boat Market Report – May 2023



On 20th April, a 4,020kW ASD tug built by **Jiangsu Zhenjiang Shipyards** for **Changzhou Jinfan** and named “*Jin Fan Tuo 5003*” (pictured top left) was delivered successfully. The vessel has length of 38.85m, breadth of 10m, depth of 4.8m, bollard pull ahead of 55mt, endurance of 700nm and speed of 14.7kn. The capacity of firefighting has reached regulation requirement of Class I inland vessel. On 10th May,



a 3,840kW ASD tug built for **Fujian** and named “*Fu Gang Tuo 22*” (pictured right) was delivered successfully. The vessel has length of 39.9m, breadth of 10.6m, depth of 4.98m, bollard pull ahead of 64.8mt, bollard pull astern of 59mt, endurance of 1,000nm and speed of 13.25kn. The capacity of fire-fighting has reached regulation requirement of Class I.



On 27th May, two 3,824kW ASD tugs with FIFI-1, “*Wen Xiao Tuo 16*” and “*Wen Xiao Tuo 17*”, (pictured bottom left) designed and built for **Wenzhou Port Services Co., Ltd** were delivered and sailed smoothly. The tugboat’s overall length is 39.1m, the molded lines is 37m, the width is 10.6m, the depth is 4.9m, ahead bollard pull is 62.6mt and astern bollard pull is 58.6mt, endurance ability is 1,100nm, and the speed is 13.2kn.

The Hamburg tugboat company **Fairplay Towage** has separated from the two sister ships “*Bugsier 4*” and “*Bugsier 6*”, which entered the Fairplay fleet six years ago as part of the merger with the Bugsier Towage Company. The two so-called Rotor-Tugs were built in 2008 by ASL Marine Holdings in Singapore based on designs by the Dutch company Kooren Shipbuilding & Trading. They were then shipped to Northern Europe by heavy lift ship. In recent years, the 26 meter long tugs have been used for port assistance in the north German seaports, but also for sea towing, for example in the offshore industry. The two tugs, each with a pulling



power of 80mt, have been offered for sale on various websites by ship brokers in recent weeks at a sales price of 4.5 million US dollars each. The new owner is now **Fako Shipping** from Cameroon in West Africa, which will in future use the two tugs under the names “*Fako Namme Menyoli 1*” and “*Fako Namme Menyoli 2*” in the port of Lomé (and not in Doula as initially reported). So far, mainly foreign concessionaires such as Boluda Towage have been active there, but they have been terminated. For some years now, services previously provided by foreign companies have been carried out by local companies as part of a port reform in Cameroon. The two

tugboats are currently docked at the USM pier in Kaiserhafen I in Bremerhaven, the old ship names have already been painted over. Now the tugs are being prepared there for the transfer journey. For this purpose, the Dutch company **Redwise Maritime Services** was commissioned to transfer the tugs on their own keel to the approximately 5,000nm long route to West Africa. 9 January 2023, the former “*Bugsier 6*” departed from Bremerhaven bound for West Africa. The sister ship will remain in Bremerhaven for a few more days for repair work. (Source: *Weser Maritime News*)

In week 14 **Damen Shipyards Group** delivered two RSD Tugs 2513 to the **Fairplay Towage Group**. The vessels will operate in Germany and Poland, respectively. During the same week, the company signed a further contract which will see Damen delivering an additional three tugs to its client; two more RSD Tugs 2513 and an ASD Tug 2813. Although built to proven, standard Damen designs, the tugs are being built with a number of options to ensure their suitability for Fairplay Towage Group’s requirements. In the case of the RSD Tugs 2513, Damen is also providing ice reinforcement to enable the tugs to operate in light ice conditions. Due to Damen’s practice of constructing vessels in series for stock, the three vessels of the latest order will be delivered before the end of the year. Damen, which seeks to support its clients with a comprehensive portfolio of services spanning the entire lifecycle, is also arranging the transportation of the vessels from its yard in Vietnam via heavy lift ship. As part of ship delivery support, Damen Services provides a contact person who is available round the clock to provide any information that the customer may require. Additionally, Damen handles contact with the carrier, export documentation, drawings and calculations, transfer to location and all lashing and loading operations. Damen sales manager for Germany Joschka Boddeling said, “*We are very grateful to Fairplay Towage for this latest order. Starting with the Fairplay 37, the company has ordered a total of seven Damen vessels over the last eighteen months. It’s an honour to see the relationship between our two companies continue to develop in this way and I’m looking forward to continuing our collaboration.*”



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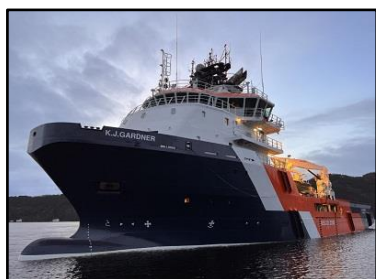
Tug Boat Market Report – May 2023



Alka Marine and Acta Marine strengthened their partnership and purchased a Multicat Damen 2712, operated by Alka Marine. The vessel is named “Coastal Aurora”. The joint-venture Alka Marine and Acta Marine team up within a joint-venture to buy a new vessel. The company called **Alka Marine International**, is incorporated under the French law and registered in Saint Nazaire. Built in 2014, the 27-meter-long vessel is perfectly adapted to offshore wind support operations, including anchoring works, subsea structure maintenance, amongst others. With its 2 x 9.8mt cranes at 16.5m, and a 150mt winch, the “Coastal Aurora” has a bollard pull of 34mt and has a 150m2 deck space. It just went through a complete

maintenance program to operate as soon as January 2023 at the highest security standards and productivity. The Damen Multicat 2712 class is a worldwide reference for its reliability and versatility. The “Coastal Aurora” will benefit from Alka Marine’s knowhow and experience. The crew consists of French officers with other international and will work in rotations, resulting in total 10 newly created jobs. Their recruitment is currently being finalized. The “Coastal Aurora” sails under the Dutch flag for the time being; with the aim to transfer to the French flag in the coming period. Alka Marine was hoping for a positive decision from the Commission Régionale de Sécurité des Affaires Maritimes in February 2023 to see it join the French fleet. Thibaut Choquer, Nicolas de Boer (Alka Marine’s management) and Govert Jan van Oord (Acta Marine management), comment: *“From our long-term partnership on workboats, we have decided to jointly invest in a reliable and known vessel that enables to carry out complex maritime operations safely. It’s a large, modern and comfortable vessel. With this new vessel, we keep track of our strategy to develop our services marine energies market and meet our customers expectations.”* The “Coastal Aurora” was chosen for maritime operation works in West Africa starting in January 2023.

The new addition to **Emar Offshore Services** the “E-Four” (IMO 9600712) has taken over from **Kotug** and is the former “SD Ranger” and renamed “E-Four”. From Turkey she sailed to Seville where she was completely taken care of. She will leave for West Africa next week. The “E-Four” is a Damen built ASD 2810 tug design built in 2011 at the Santierul Naval Damen Galati SA – Galatz; Romania under yard number 1203 contracted by Damen BV – Gorinchem with yard number 511575. In 2012 sold to Kotug BV – Rotterdam. She has a length of 28.67m, a beam of 10.43m and a depth of 4.60m. The two Caterpillar 3516TA-HD/C main engines develops a total output of 3,728kW (5,000BHP) and performed a free sailing speed of 13.6 knots and a bollard pull of 60 metric tons. She is the sister of the “SD Rover” and “SD Rebel”.



KOTUG Canada Inc. (a partnership between **KOTUG International** and **Horizon Maritime Services Ltd.**), strongly committed to reducing impact of operations on the environment, has recently applied revolutionary non-toxic noise reduction coatings to the hull of one of their vessels, the “K.J. Gardner”. KOTUG Canada has worked extensively with **Graphite Innovation and Technologies (GIT)**, an industry leader focused on manufacturing graphene-based sustainable marine coatings to meet these goals. KOTUG Canada used GIT’s XGIT-URN coating to help reduce underwater radiated noise emitted from the ship’s hull and the vibrations that disturb marine life. Aquatic life, such as mammals and the endangered Southern Resident

Killer Whale reside within the area of employment for KOTUG Canada’s vessels. These mammals rely on underwater noise to communicate, navigate, and find food. The “K.J. Gardner” is the first of three vessels using the GIT applications in support of KOTUG Canada’s mission to reduce the environmental impact, specifically related to the reduction of noise that potentially disturbs aquatic life in the Salish Sea and adjacent waters. Further applied to the “K.J. Gardner” were GIT’s XGIT-FUEL and XGIT-PROP coatings. These coatings will enhance the reduced impact with the additional benefits of considerably improving fuel efficiency and decarbonization. It is expected that over the next five years, this vessel will significantly reduce CO2 emissions. The “K.J. Gardner” is planning to continue working in Northwestern Europe over the next few months. She will then venture to the Western Coast of Canada, specifically the Salish Sea, host to a vibrant marine ecosystem. The other vessels receiving such coating applications will arrive in Canada later this year and early 2024.



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Amogy Inc., a pioneer of emission-free, energy-dense ammonia power solutions, at CERAWEEK® 2023 announced its plans to present its ammonia-powered, zero-emission tugboat in late 2023. Getting the first ammonia-powered vessel on the water signals a huge milestone in the journey to zero-emissions shipping, as ammonia is predicted to



become the leading fuel source for the world's giant cargo ships by 2050. Amogy is currently retrofitting a tugboat that was originally built in 1957, that uses diesel generators and electric motors, with its ammonia-to-power system. It will be outfitted with a 1-megawatt version of the unique system, three times larger than what has been field-tested on Amogy's ammonia-fueled semi truck earlier this year. Amogy's highly-efficient ammonia-to-power technology feeds liquid ammonia through its cracking modules integrated into a hybrid fuel cell system, which powers the electric motors for zero-carbon shipping. *"We're incredibly proud of unveiling the first ammonia-powered vessel later this year — especially*

because of the hope, promise and anticipation that ammonia has built as a zero-emission fuel in the heavy transportation industry — specifically in regards to maritime shipping," said Seonghoon Woo, CEO of Amogy. *"This is the first milestone of many you will see from Amogy in accelerating the accessibility and scalability of clean energy in the global maritime industry. With successful demonstrations of our ammonia-powered drone, tractor and semi-truck under our belts, we look forward to presenting the first ammonia-powered ship in 2023, with a target to fully commercialize in 2024."* **Yara Clean Ammonia (YCA)**, one of the world's largest ammonia producers, and the largest trader and shipper of ammonia around the world, will be providing green ammonia for the demonstration. Ammonia, which does not emit CO2 when used as a fuel, is expected to become a next-generation fuel as it contains properties ideally suited for the hydrogen economy. Furthermore, green ammonia, which is produced with renewable energy, results in zero greenhouse gas emissions from *"well to wake"*. Magnus Ankarstrand, President of YCA, says: *"We are excited to be a part of Amogy's tugboat project and to deliver green ammonia as a fuel for the world's first vessel powered by ammonia. Yara Clean Ammonia plans to launch the world's first Ammonia Bunker Network in Scandinavia, which is expected to expand YCA's capacity to produce and ship ammonia globally."* Other partners that are collaborating to bring the first ammonia-powered ship to life include **Seam**, Amogy's electrical systems integrator, **C-Job Naval Architects**, the independent ship design company integrating the ammonia system, and **Feeney Shipyard**, from whom Amogy sourced the tugboat, who will lead retrofitting construction, engine removal and more under supervision of C-Job Naval Architects. Additionally, Amogy is working with **Unique Technical Solutions (UTS)**, its electrical and systems integrator from prior demonstrations, for the electrical and systems work involved in scaling up the powerpack for pre-commercial use. The maritime industry is scrambling to replace dirty diesel fuel with cleaner alternatives. International shipping accounted for about three percent of global energy-related carbon dioxide emissions — a percentage that's expected to climb as more vessels deliver more goods and as other sectors reduce their share of global emissions. Amogy has developed a proprietary ammonia-to-power technology that converts ammonia to electric power effectively and efficiently. Amogy has a deep commitment to safety and compliance, working with the United States Coast Guard and partnering with leading classification society DNV to ensure close alignment with all maritime safety standards. *"DNV has been working with Amogy since December 2021, focusing on the safety aspects of the development of their ammonia system,"* says DNV's Senior Consultant in Maritime Environmental Technology, HansChristian Wintervoll. *"A high-level feasibility study was executed in early 2022, and Amogy has shown great momentum in development from that point, through the HAZID workshop in June the same year, to the HAZOP workshop in January this year. DNV is pleased to contribute to their continued success."* To date, Amogy has raised \$70M in funding from strategic investors such as Amazon, Saudi Aramco, SK Innovation, AP Ventures and DCVC. Amogy intends to sail the tugboat later in 2023 in upstate New York, pending further safety testing and regulatory discussions.

The *"Portobelo"*, hailing from Panama, has already reached Montevideo to reinforce **SAAM Towage's** fleet of eleven vessels in Uruguay. *"This makes our twelfth tug and it's the most modern in our fleet. It will enable us to continue to grow and offer our customers safe, efficient service,"* commented the country manager of SAAM Towage Uruguay, Javiera Hevia. The powerful, highly maneuverable *"Portobelo"* has a compact design (24m in length and 11m in beam), making it a perfect fit for small bays. The Damen ASD 2411 features azimuth thrusters, 70mt of bollard pull and safety equipment.



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May 3rd, 2023. **SAAM**, a company providing port, logistics and towage services in the Americas, concluded the purchase of 21 tugboats from the Brazilian company **Starnav**, which includes 19 tugs currently in operation and two additional vessels in the final phase of construction. *“This is one of the largest transactions in SAAM’s history and is part of our strategy to continue advancing our leadership in the towage industry. Brazil is home to our company’s largest operations and with this deal we will have one of the most competitive, most modern fleets in that country,”* commented CEO Macario Valdés. The new tugs are all state-of-the-art and high-capacity vessels. The agreed-upon value of the Starnav assets is US\$ 198 million.

The outstanding debt on the assets will be deducted from this amount at closing. Once the new assets have been integrated, the company will have a fleet of 69 tugboats in 19 Brazilian ports.

Kongsberg Maritime (Kongsberg) has signed an agreement to provide its US Series of azimuth thrusters to **Alexandria Shipyard** (ASY) for six new Azimuth Stern Drive (ASD) tugboats, each with 85 metric tons of bollard pull. This new contract considered a continuation of successful cooperation between Alexandria shipyard and Kongsberg whereas, last year Kongsberg has signed its first contract with Alexandria Shipyard for azimuth thrusters and deck machinery for the first ASD tug that the shipyard is building for the **Egyptian Navy** now, thus Kongsberg is now supplying high-performance thrusters for a total of seven tugboats under construction at Alexandria Shipyard, Egypt’s biggest shipyard. Those contracts represent the new partnership between Kongsberg and Alexandria shipyard towards major equipment supplies and construction work for ASD tugs in Egypt. The azimuth thrusters for the seven tugs will have efficient, heavy-duty slipping clutches, allowing for cost-efficient fire-fighting operations. Alexandria Shipyard and Kongsberg Maritime have also agreed that Kongsberg will deliver high pressure deck machinery for another three of the tugs to be built at ASY. Kongsberg Maritime’s US Series of azimuth thrusters is a popular choice among tugboat owners and shipyards. Over 7,000 units of Kongsberg’s US series of azimuth thrusters have been delivered in the past 50 years. The new contract also follows from a recent contract for Kongsberg Maritime to supply Alexandria Shipyard with design and integrated equipment packages for two, large salvage tugs being built for the **Suez Canal Authority**.



Robert Allan Ltd. is pleased to announce that the “*Svitzer Arthur*”, a RAmports 2300ERM tug, has been delivered by **Estaleiro Rio Maguari**. This marks the successful delivery of ERM’s first ASD tug, designed by Robert Allan Ltd., for **Svitzer Brazil**. She is the first of a series of six tugs of this design currently under construction at ERM for Svitzer. The RAmports 2300ERM design is optimized for maximum efficiency in ship- handling operations in harbours. With an overall length of 23.2 meters, the tug features a raised fo’c’sle deck for safer operations in heavier weather. Operational requirements are met with a single drum hawser winch from Ibercisa Deck Machinery, and heavy duty cylindrical fendering at the bow. Key

particulars of the RAmports 2300-ERM are: Length, overall (excluding fenders): 23.2m; Load Line length: < 24.0m; Beam, moulded: 11.4m; Depth, least moulded: 4.4m; Maximum draft (navigational): 5.5m; Gross Tonnage: < 300.

Main tank capacities at 100% are: Fuel oil: 65m³; Potable water: 12m³. The tugs were designed and constructed to the following ABS Notation: ⚡ A1, Towing Vessel, ⚡ AMS, ⚡ ABCU, Unrestricted Navigation, UWILD, PMP-CBM for Thrusters Only.

Propulsion machinery consists of: 2 x MTU 16V4000M63 main diesels 2 x Kongsberg US205S FP, 2,800mm diameter Z-drives. Ship-handling fenders at the stern consist of a row of W-fender. Sheer fendering consists of “D” rubber and “W” block type fendering at the bow. The accommodations for a crew of six have been outfitted to a high standard for crew comfort. The deckhouse contains an entrance lobby with a public WC, galley, mess, and one officer cabin with ensuite WC. The lower deck contains two double cabins with ensuite WC, and an additional officer cabin with ensuite WC. The wheelhouse is designed with a single split forward control station which provides maximum all-round visibility with exceptional visibility to the bow and side fendering, as well as operations on the forward deck. Trial results were as follows: Bollard pull, ahead 71mt; Bollard pull, astern 69mt; Free running speed, ahead 13kn.



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18 January 2023, **Sembcorp Marine Ltd** celebrated the naming of its first of a series of LNG hybrid tugs specially designed for domestic service in Singapore. The Singapore-flagged vessel was christened “*JMS Sunshine*”. As part of its decarbonisation initiatives and to lead maritime fleet renewal with green propulsion vessels, Sembcorp Marine commissioned the design and build of the world’s first LNG hybrid tug in 2018. Sembcorp Marine plans to build a fleet of tugs to progressively replace the existing diesel-powered fleet operated by **Jurong Marine Services (JMS)**, a wholly owned subsidiary of Sembcorp Marine Ltd and a licenced operator of the Maritime and Port Authority of Singapore. “*JMS*

Sunshine” is designed by **LMG Marin AS**, a wholly-owned subsidiary of Sembcorp Marine with a proven track record of delivering green and energy efficient solutions globally. The tug is classed by ABS (America Bureau of Shipping) and has a Cyber Secure 1 notation to safeguard the asset from growing cyber threats faced by the marine and offshore industry. The first of its kind, “*JMS Sunshine*” runs on pure LNG with a sizable energy storage system based on Lithium ion battery. This system allows emission-free operation of the tug during idling and low speed transit. It is capable of taking over the energy needs if a spike in power is warranted, and comes equipped with a “*take-me-home*” reserve capacity to ensure safe return of the tug in the event of engine failure. The tug is built with maximum operability, safety and manoeuvrability, reliability, efficient fuel consumption and comfort under all environmental conditions. It also has low lifecycle costs and leaves minimal environmental footprint. When delivered, “*JMS Sunshine*” will be deployed in Sembcorp Marine yards for ship manoeuvring, mooring and unmooring operations. It can also be deployed by ship operators to escort vessels within Singapore port limits. Mr Simon Kuik, Sembcorp Marine Head of R&D, said:



“Emission regulations on marine vessels are getting more stringent every year. The ultimate goal is to cut the Group’s greenhouse gas (GHG) emissions by at least 50% by 2050 compared to 2008. To stay ahead of the curve, we invest selectively in innovative design solutions. Sembcorp Marine has consequently aligned its strategic position to develop a suite of sustainable product solutions specifically tailored to address the shift towards a low carbon economy.”



The year is starting with a bang at **Ocean Group** in British Columbia. Indeed, a new tugboat has joined the already well established fleet in order to lend a hand to the various sites served by Ocean Group. The “*Ocean Cypress*” was built by DAMEN at the Damen SongCam shipyard in Haipong, Vietnam. The 28m vessel has the same technical specifications as its acolytes, the “*Ocean Granville*” and the “*Ocean Kitsilano*”, which are already at work in British Columbia. The vessel will be based mainly in North Vancouver for the next few months, but will also be able to support operations in other locations, including Delta Port and the Fraser River.

Ocean Group has been offering port towing services in the Vancouver area since 2020 and in 2021 acquired Samson Tugboat, which offers port towing services in the Fraser River. The Ocean Group fleet now consists of nine tugs.

Kongsberg Maritime has won a contract to provide the design and equipment for two powerful salvage tugs being built by **Alexandria Shipyard** as main contractor on behalf of the **Suez Canal Authority**. The tugs will be based on Kongsberg Maritime’s UT 722 CDT Design. The UT 722 tugboat design has a length of 71.6 meters, bollard pull of approximately 200mt, and it can operate independently for up to 35 days. Egypt’s Alexandria Shipyard successfully bid on this significant contract with the Suez Canal Authority in cooperation with Kongsberg Maritime, which is providing technical support including vessel design, main equipment deliveries, maintenance systems, and crew training.



Alexandria Shipyard is the main contractor for the building and delivery of the new tugs, which are to be completed in 2025 and 2026. Jørn Heltne - Kongsberg Maritime Vice President for Sales and Contracts “*The Suez Canal Authority’s tendering process for these tugs has been going for a long time, and a large number of designers, suppliers and shipyards have been involved in this international competition. The Authority recognizes the need for increased salvage capacity at the canal, which sees about 70 vessels transit each day and is responsible for about 12% of global trade by volume.*” “*The equipment and systems we are providing will ensure these tugs have trustworthy and precise handling and control, as well as the muscle needed to keep the Suez Canal open.*” The integrated equipment from Kongsberg for each tug includes Kongsberg Promas propulsion systems with Twin-In-Single-Out Reduction Gears, Kongsberg bow and stern tunnel thrusters, propulsion control systems, joystick control systems, integrated bridge control systems, power electric systems including switchboards, dynamic positioning, passive stabilization systems, deck machinery, and K-Fleet maintenance software systems.

Company News



Uzmar Shipyard has increased its production capacity and shortened delivery times, through investment in additional shipyard facilities during the pandemic between 2020 to 2022. Thanks to these investments, Uzmar has increased its production capacity by 95% and gained the opportunity to build more than 30 vessels simultaneously. The shipyard has five paint halls, which are equipped with new-generation technological equipment according to the utterly dust-free steel grid management. These halls are operating at full capacity within the scope of the production area expansion investments. Uzmar put into operation a closed engine room with semimechanised

loading support. It also has two completely closed production hangars, equipped with overhead cranes with a total carrying capacity of 270 metric tons. This enables 180mt blocks to be lifted in one piece without the need for additional support in the main production hangar. Uzmar started construction of an additional production area of 10,000m² in Q4 2022 to increase the simultaneously building capacity up to 37 vessels which are 23-100m in overall length. In the project, it is planned to construct an auxiliary 6,000m² of enclosed production hangars and an approximately 4,000m² of social facility complex for 1,500 people. The social facility building will have a modern and environmentally sensitive architectural design to comply with the basic needs of the blue and white-collar staff such as accommodation, resting areas, and food areas in the maximum comfortable and efficient way. In addition to the increase in production capacity with the new production hangars to be built, the production areas in the neighboring parcels will be completely connected to each other uninterrupted and a highly efficient production flow line will be created. The shipyard expanded its team of skilled engineers and designers in the design department to 35 people as of December 2022 and has successfully executed enhanced vessel construction projects.

Netherlands-based tug & workboat company **Herman Senior** has acquired all shares of **ST Marine Support**, a provider of quality maritime and offshore services. The acquisition includes ST's three existing vessels and their upcoming newbuild, a Damen Multi Cat 3313SD, which is expected to be delivered at the end of March this year. With the formal handover completed on 23 February, the acquisition has come into effect retroactively as of 1 January 2023. With this agreement ST Marine Support becomes part of the Herman Senior group of companies, integrating both fleets. Erwin van Dodewaard, Commercial Manager and Co-owner of Herman Sr says: *"We are proud to have been given the opportunity to acquire ST Marine Support by owners Vasco Tammes and Rienk Switjink. Knowing each other quite well, we got into informal talks about 13 months ago, over a beer. Vasco and Rienk have built a great company over the years with three robust and strong Multi Cat workboats that operate at the top of their market segments, especially in Dredging. They and their team have a lot of experience and their clear, no-nonsense way of handling projects aligns neatly with our own way of working. We feel proud to continue their legacy under the Herman Senior flag. This acquisition is a big move forward for our company and quite a special step for our family. We look forward to welcoming the new boats and their crew into our fleet and serving customers with them."*



This acquisition marks the expansion of Herman Senior's fleet from eight to 12 vessels, including the new Damen Multi Cat 3313SD currently under construction. The expanded company will serve customers on three continents - South America, Europe and Asia - and these four extra workboats strengthen its presence both there and in the wider in the maritime industry. Interestingly, Herman Sr continues to operate a 100% Damen fleet of Shoalbusters and Multicats, as ST Marine Support also had Damen workboats, i.e. the three Multi Cats "Odin" (Damen MC3013), "Nero" (Damen MC3013) and 35-meter "Auxilia" (Damen MC3515), all outfitted with strong cranes and winches. According to Herman Sr, the market is currently very favourable for these types of vessels. There's currently a shortage of workboats due to the large amount of projects that pull much of the available assets off the global market. At the same time, the cost of building new ships has skyrocketed, making that an unattractive option. Van Dodewaard: *"The vessels from ST Marine Support are a perfect fit with the Herman Senior fleet. We are confident that this move will help us serve our customers even better with equipment that we already know inside out, making for a seamless transition. Last, and this is a good moment to say this loud and clear, the success of our company is due to our experienced staff, both on board and on shore. We have dedicated crews per vessel, which ensures quality and consistency in project execution. Also, most people at our office come from a maritime background and many were sailors themselves. Their skills added with our combined assets make Herman Senior a partner that customers can trust to do the job. That being said, we look forward to all the opportunities and challenges that lie ahead."*

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Singapore's top two yards have completed their mega merger, ending a two-decade saga. **Keppel Offshore & Marine** (Keppel O&M) and **Sembcorp Marine** have joined forces and will trade under the Sembcorp brand with Keppel's Chris Ong taking charge of the yard giant. The combined yard group has a total orderbook of S\$18bn (\$13.4bn) lasting through to 2026. *"While integration of this scale will present challenges, the enlarged group is expected to benefit from greater synergies from the broader geographical footprint, larger operational scale and enhanced capabilities of Singapore's two leading O&M companies,"* Sembcorp Marine said. Merging the shipyard units of Keppel and Sembcorp has been mooted many times over the past 20

years as Singapore faces up to cheaper shipyard competition across Asia.

Sembcorp Marine Ltd is proposing to change its name from "*Sembcorp Marine Ltd*" to "**Seatrium Limited**" following completion of the combination of the businesses of Sembcorp and Keppel Offshore & Marine Ltd on 28 February 2023, and will adopt a new branding for the enlarged entity. The proposed change of name is subject to shareholders' approval and will not affect the identity of Sembcorp or any of its rights and obligations, nor will it affect any of the rights of shareholders or the Group's daily business operations and financial standing. Seatrium is a combination of two words – "sea" and "atrium". It is a reflection of the business and its aspiration to be a premier global player providing innovative engineering solutions for the offshore, marine and energy industries. To develop the proposed name, more than 1,000 names were generated, and a rigorous process of legal and linguistic screening was carried out to ensure that the chosen name would be viable. The enlarged entity will unite world-class talent and engineering capabilities to create transformative and sustainable offshore and energy solutions.



Through its wholly-owned subsidiary **PSA Marine Americas (Pte) Ltd**, **PSA Marine (Pte) Ltd** completed the acquisition of 45% stake in **Meyer's Tugs S.A.** from **Inversiones Maritimas CPT S.A.**, a wholly-owned subsidiary of **CPT Empresas Maritimas S.A.** on 27 April 2023 in Panama. MTSA was incorporated in 2015 and it is headquartered in Panama. MTSA offers reliable and efficient towage services between the Pacific and Atlantic coast in Panama. With a team of more than 60 highly professional and dedicated staff, it owns and operates a fleet of six harbor tugs with bollard pull strength ranges between 60 metric tons and 77 metric tons.

Subsequent to the completion of the acquisition, MTSA will be rebranded for a common identity to reflect its shared values and vision. Mr. Gabriel Forero, General Manager of MTSA, together with his key managers, will continue to lead and run the company and offer high-quality services to its customers.

On Jan. 1, 2023, **Kiewit Corporation** completed its acquisition of **Weeks Marine, Inc.** and its subsidiaries Healy Tibbitts Builders, Inc., McNally International, Inc. and North American Aggregates for an undisclosed amount.

"This acquisition offers substantial opportunities for both companies," said Kiewit CEO Rick Lanoha. *"For Weeks employees, they join one of the largest, most successful*



construction and engineering organizations in the world. For Kiewit, we gain an exceptionally skilled workforce and the ability to add Weeks' leading maritime engineering and construction capabilities, dynamic dredging expertise and renowned tunneling services to our portfolio of service." The Weeks Marine and Kiewit organizations have worked together on several joint ventures since the 1960s. *"We've worked closely with Kiewit on many strategic infrastructure projects across North America, including the Goethals Bridge, Willis Avenue Swing Bridge, the Euclid Storage Tunnel, the Toronto-York Spadina Subway Extension Tunnel, among others,"* said Eric Ellefsen, President and CEO of Weeks Marine. *"Through these partnerships, it was apparent that the companies share similar cultures and values."* *"Our shared cultures and values, which focus on the success and growth of our people, a relentless commitment to safety and quality, and demanding excellence in everything we do, will make this acquisition a success,"* Lanoha said. Weeks Marine and its subsidiaries will be independently branded subsidiaries of Kiewit.

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Acta Marine, a leading owner and operator of offshore service operating vessels that provides accommodation and walk to work services to the offshore wind industry, has announced the establishment of its French subsidiary and the opening of its new office in Montoir de Bretagne, France. The new office will be shared with its long-term partner Alka Marine and is part of Acta Marine's efforts to increase its local presence and position itself for the local market. The new subsidiary, **Acta Marine France**, will enable Acta Marine to better serve its clients in France, one of the largest and most promising markets for offshore wind in Europe. The new office in Montoir de Bretagne will also facilitate the deployment of

Acta Marine's fleet in the region and provide easy access to nearby offshore wind farms such as Parc du Banc de Guérande project on which Acta Marine was chartered by GE Renewable Energy in 2022 for the commissioning of its turbines, and Fécamp and Courseulles wind farms on which Acta Marine will assist Siemens Gamesa with turbine commissioning scopes in 2024 and 2025. Acta Marine France's President, Nicolas De Boer, commented on the company's move into France, saying, *"We are excited to establish the French subsidiary and expand Acta Marine's presence in the country. By opening this new office in Montoir de Bretagne, we are strengthening our commitment to the region and increasing our ability to provide our clients with the highest quality of service."* The new office will allow Acta Marine France to build up a strong local team. As Audrie Jordan, manager commercial affairs and corporate services confirms *"spending time with the Acta team, learning from their experience in offshore wind, and assisting them in getting familiar with the local constraints has already been an exciting experience. I'm thrilled to start in this new position and building up an Acta Marine France team. I'm grateful for their trust and look forward to managing the Acta Marine France business"*. Acta Marine has a long history of providing innovative solutions to the offshore industry, and its increasing fleet of CSOVs and SOVs is specially designed to provide safe, efficient and comfortable accommodation and walk-to-work services to offshore wind developers. With the establishment of its new subsidiary and office in Montoir de Bretagne, Acta Marine will be able to provide these services to its clients in France more efficiently and effectively.

With the acquisition of **Smit Lamnalco, Boluda Towage** - the business line of Boluda Corporación Marítima that focuses its activity on port, coastal and offshore towage, as well as maritime salvage - becomes the world's leading company in the sector, with a fleet of 600 tugboats and an intervention capacity in 50 countries and 148 ports around the world. The Dutch company Smit Lamnalco is 50% owned by Boskalis Group and Rezayat Group. It employs more than 1,600 people and owns 111 vessels. It is a reference in towage services for port terminals with a global and diversified customer base in the LNG, tanker, and bulk segments. This acquisition, which is still subject to regulatory approvals in several countries, confirms the expansion of Boluda Corporación Marítima worldwide, reaching strategic markets where Smit Lamnalco has a strong presence such as Australia, the Middle East, and West Africa. Vicente Boluda Fos, Chairman of Boluda Corporación Marítima states: *"Boluda is a company that has never stopped growing and transforming itself. This new stage is the logical consequence of previous evolutions that, over the last few years, have made us number 1 in port logistics services and in the towage sector. The industry is at a turning point, impacted by the climate emergency and geopolitical tensions. Shipping is at the center of these issues, facing challenges like never before. As a global leader, we are aware of our responsibilities and we will continue to commit to sustainable development, which benefits society and its development"*. *"Smit Lamnalco is a solid company with more than 55 years of operational experience, present in more than 20 countries and with more than 1,600 employees worldwide. I have no doubt that this operation will be fruitful for both parties and especially for our customers who will benefit from a consolidated team, a diversified offer, and a greater capacity for intervention and innovation,"* says Vicente Boluda Ceballos, Deputy Chairman at Boluda Towage. In recent years, Boluda Corporación Marítima, despite the tensions in the world economy, has strengthened its activities, both in its Shipping division and in the Boluda Towage division.

