Marine going green for Seawork 2017

The engine power approved for the HM series can go up to 1100kW

WITH HYBRID/ELECTRIC technology a hot topic within the industry right now, operators are looking for cost-effective and environmentally friendly solutions to ensure the future of their business.

This year at Seawork, propulsion and driveline experts, Marine and Industrial Transmissions will be showcasing the Transfluid HM560 Hybrid and Electric driveline system, suitable for marine applications.

The Transfluid solution has been developed to suit commercial applications such as: workboats, windfarm crew transfer boats, pilot vessels, patrol vessels and is also suitable for a range of pleasure craft operations.

Within Europe, the technology has already been heavily adopted, with over 10 boatyards installing the system into their applications. To date, the hybrid module has been installed into 13 single engine craft and five twin-engine craft, with German manufacturer Bavaria choosing the Transfluid solution as a partner to launch its first displacement boat with hybrid propulsion.

The HM560 module is engineering simplicity at its best. Designed to be fitted on any internal combustion engine with a suitable SAE flywheel and housing, and to any type of SAE standard transmission the electric machine has a double function, working as an electric motor in the electric mode and as an electrical generator in battery charging mode

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The system allows the user to work in three specific modes. Electric propulsion, to drive at zero emissions in absolute silence. Engine Propulsion, using the electric machine as a generator to recharge batteries, and booster, which allows the electric motor during acceleration to assist the engine - providing extra torque to the driveline.

The engine power approved for the HM series can go up to 1100kW (1475hp) while the electric motor power can reach 300kW (400hp) by using four heads as power take-offs to fit the nominal 75kW (100hp) electric machines.

To install the HM system, all that is needed is an additional few hundred millimetres between the diesel engine and the transmission, allowing the unit to be fitted on new vessels or installed as a retrofit.

The flexibility of the system allows users to install on any head of an electric motor not in use, and supply hydraulic or electric appliances for onboard facilities. The HM systems have a series of SAE standard power take-offs to install pumps or any other accessories normally used on vessels. The HM system can be easily fitted to any transmission system such as: mechanical or power shift variable speed drives, hydrostatic transmissions, marine gear boxes and cardan shaft.

The Twin Disc Dynamic Positioning interface, paired with QuickShift marine transmissions (MGX series) and the EC300DP power commander electronic control system is a game changer for delivering high-performance DP. The Twin Disc solution is available at a lower cost than standard shaft designs, and positions fleets for huge cost savings by allowing instantaneous, shock-less and virtually constant forward and reverse shifting - keeping supply vessels on station. Drivelines can execute directional reversals at variable torque levels and reduced engine speeds more than 30 times per minute maintaining fuel efficient engine speeds even with low prop rpm.

The Twin Disc QuickShift transmissions and EC300DP controls are compatible with DP0 - DP1 - DP2 systems with standard shaftline propulsion and DP interface control packages.

MIT will also be discussing standard marine drivelines and propulsion systems from across the product portfolio, including marine transmissions, single and multiple pump drives, standard and hybrid marine transmissions, anti-vibration systems, boat steering systems and air compressors.

MIT will be exhibiting within the Pacific Orange hall, stand P05, along with ATZ Marine Technologies who are part of the same group of companies. ATZ provide equipment sales, support, and consultation services to the marine, power generation, and petrochemical sectors and were established in 1998, becoming the sole UK agent for Deckma Hamburg, the oil-in-water monitoring specialists. The organisation then expanded its portfolio by becoming the sole UK agent for AEGIRMarine and ACM Bearings, along with innovative brands such as, ABCON, Wavestream, and Tribomar.

MIT has bases in southern and northern England, providing comprehensive UK and Ireland coverage along with an established global mobile support service, delivered by a highly trained and dedicated technical engineering team and a significant inventory of world class brands, including new and refurbished transmissions, driveline systems and spare parts. MIT is the sole UK distributors of Twin Disc, Transfluid, Rubber Design, Arneson, Rolla and Quincy compressors.

■ **Visit Marine Industrial Transmissions at Seawork International 2017 on stand P05**

New small diesel from Moteurs Baudouin

FRENCH DIESEL ENGINE manufacturer, Moteurs Baudouin has released in time for Seawork 2017, the new 4W105M marine engine.

This engine supplements the W105 series which has been operating successfully since 2010. The W105 product family now includes 4 and 6 cylinder engines (4.5L and 6.75L respectively) covering the range 95-185 kW.

Located in Cassis, France, Moteurs Baudouin is equipped with modern production facilities and the latest machining technical innovations. It claims that its numerically controlled machines, laser tools and the latest generation test bed help it obtain perfect technical control.

The company is now selling its M33 Series, available in inline six cylinder and V12 models. By JAKE FRITH

Moteurs Baudouin 4W105M

■ **See the Moteurs Baudouin range on the Proteum display at Seawork International 2017, on stand A55**