

KONGSBERG MARITIME AZIMUTH THRUSTERS

Azipull

Kongsberg Maritime azimuth thruster (Azipull)

Is a low drag, high efficient pulling thruster. It combines the advantage of the pulling propeller with the flexibility of using almost any type of drive to suit the customer's specific requirement. The Azipull is designed for continuous service speed at 24 knots, while maintaining excellent manoeuvrability.

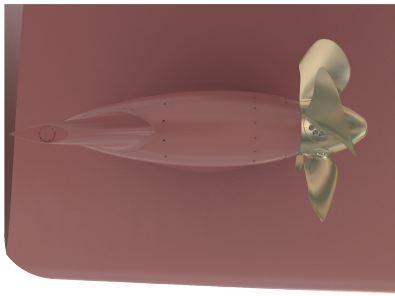
High hydrodynamic efficiency, fuel efficiency, course stability, low noise and vibration levels are other key characteristics of the Azipull.

Internally, it has a purely mechanical drive system based on well-proven technology using bevel gears at the top and bottom of the leg. Power is fed to the unit through a horizontal input shaft within the hull, and the unit incorporates its own steering motors for azimuthing.

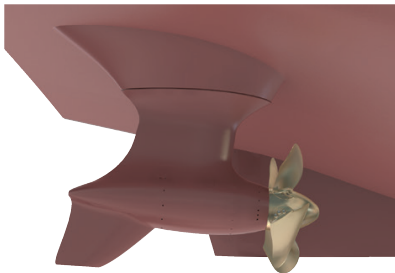
The Azipull combines the advantages of an azimuthing thruster offering high manoeuvrability, and low drag high efficient propulsor enabling high speeds. The flexibility of the unit is also enhanced by the fact that it is available in both CP and FP. The Azipull is delivered with remote control systems.

TYPICAL APPLICATIONS

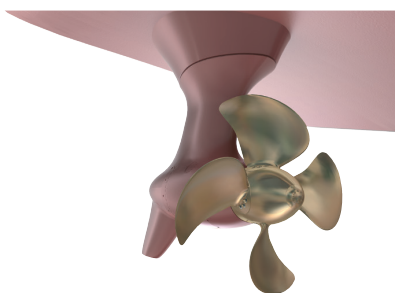
Suitable for offshore supply and service vessels, support ships, offshore stand-by ships, coastal tankers, car and passenger ferries, cargo vessels



The flow of water to a pulling propeller is only determined by the hull, and it is possible to obtain a more homogeneous inflow to the propeller in this type of thruster. More uniform inflow is decisive for reducing unsteady cavitation, and thereby cutting down propeller induced noise and vibration and reducing oscillations in shaft torque.



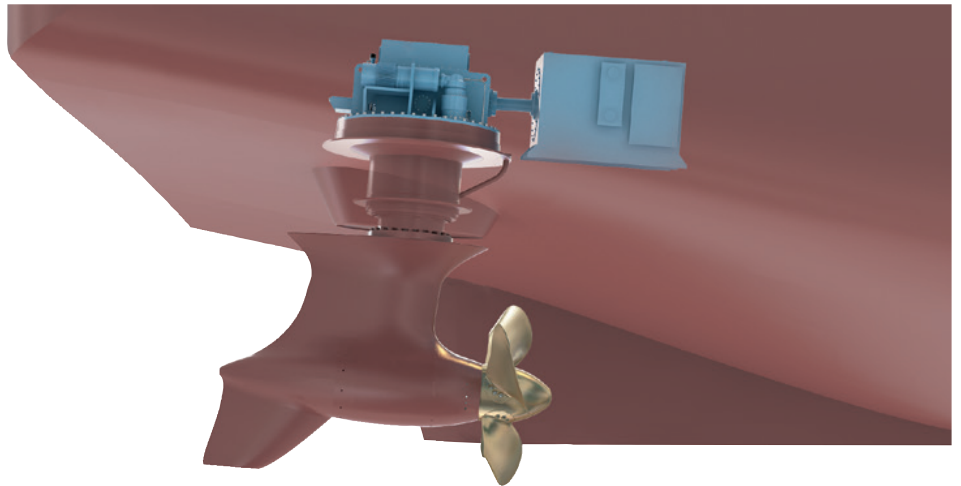
enclosed in a hydrodynamically optimised leg with a wide chord to provide rudder effect and improve the vessel's course stability. The leg incorporates a skeep extending below the gear housing.



The streamlined leg and skeep recover swirl energy from the slipstream of the pulling propeller, raising the overall propulsive efficiency because this otherwise wasted energy is converted to a forward force on the thruster leg.

The main characteristics are:

- Low drag, high efficiency pulling azimuth thruster
- High hydrodynamic and total efficiency
- Low noise and vibration levels
- Course stability
- Continuous service speed of 24 knots while maintaining good manoeuvrability
- Can be linked to any kind of prime mover, accepting diesel or gas turbine with mechanical or electrical drive
- Flexible with respect to vessel application, enhanced by availability in CP and FP versions



Within the hull of the vessel is the upper gear housing, steering gear and auxiliaries, and these are from the standardised Kongsberg Maritime azimuth thruster range to maximise commonality of spare parts and minimise technical risk.

TECHNICAL DATA

	AZP 85 CATAMARAN	AZP 85 STANDARD	AZP 100 STANDARD	AZP 120 STANDARD	AZP 150 STANDARD
Prop diameter (mm)	1900-2 300	1900-2 300	2300-2 800	2800-3 300	3300-4200
Power (max cont. rating)	1700	1700	2500	3500	5000
Nominal input speed (RPM)	720-1 800	720-1 800	720-1 800	720-1 200	600-1000
Dry weight (kg)	14000	20000	26000	44000	85000

All data is subject to change without prior notice.

Power is (max cont. rating) if depending on final propeller speed.

All models of Azipull can be supplied with CP or FP propeller (FP propeller can be supplied as monoblock or built on blades).

