

180 – 350 HP Azimuth Propulsion Systems

The 180 – 350 HP Hydromaster units have been specifically designed with vertical adjustment of the transmission to allow for optimum positioning of the propeller in changing draft conditions and to enable larger vessels to operate in shallow water environments. The heavy duty design criteria is maintained in this range of units with 100% backup inbuilt for both vertical adjustment and elevation. To ensure maximum propeller thrust with minimum fuel consumption the engine's speed and power are carefully matched to the Hydromaster's high performance transmission, overcentre triple plate clutch and propeller.

Torsional vibration calculations are carried out as part of the stringent requirements of our ISO 9001 quality system, to guarantee performance of the whole propulsion system.

All assemblies are mounted on a substantial fabricated and stress relieved steel chassis. A rigid steel canopy covers the engine and transmission, sized to provide appropriate internal ventilation for the engine and ease of maintenance.

As with all Hydromaster Units, this range requires only semi-skilled labour to bolt the unit to the vessel and connect to the free standing console supplied. All Hydraulic connections and electrical wiring are factory fitted, therefore, NO additional on site installation is required, just plug in cabling.



Propeller Depth Adjustment

700mm vertical adjustment of the propeller allows for changing load draft and shallow water operation powered by two hydraulic rams. In the unlikely event one ram should fail the system is still fully operational with only one ram, giving the operator 100% backup. The propeller depth can be safely adjusted from the wheel house at full speed or when the vessel is stationary. This feature ensures maximum thrust and control of larger vessels operating in shallow and varying depth situations.

Transmission Angular Elevation

The transmission can be hydraulically elevated from the water for routine maintenance and inspection of the underwater components without the need for docking. This is controlled by a hand hydraulic pump mounted on the propulsion unit. Twin rams ensure full backup should one ram fail. This system is completely independent of the propeller depth adjustment facility.