



The **RNLI SOFTRAK** has been developed in close partnership with the RNLI to an exacting specification. It must be able to launch and recover a D Class ILB or an Atlantic ILB at all states of tide on its 'Drive on Drive off' trolley. It had to be suitable for operating in extremely soft ground conditions such as estuary mud, soft sand, shingle or with the addition of suitable ballast, able to operate on wet clay conditions. The capability of wading to a depth of 1m and to be able to withstand momentary swamping by wave action (1M peak to peak) from the front or rear without the engine stalling or the cab glass cracking or shattering was paramount.

To minimise corrosion the RNLI SOFTRAK chassis, undercarriage, body and cab are shot blasted to SA2.5, followed by acid pickling and hot dip galvanising to BS EN1461. All fasteners and hydraulic fittings are Grade A4 stainless steel. Stainless steel shafts, seal carriers and cast iron mechanical face seals are fitted on track rollers and idlers, and mechanical shaft seals on the track motors.



Fitted with the 600mm wide Bridgestone Rubber Tracks the RNLI SOFTRAK is able to traverse steep slopes and cross very soft ground with ease with minimal damage to sensitive environments or highway surfaces. The rubber track has been designed with flexible edges so that it can deflect over obstacles and not cut into soft ground whilst travelling or manoeuvring, unlike rigid track systems and with floating bogies a smooth ride can be achieved over rough ground.

The track bodies are constructed in high tensile steels and are mounted on transverse cross tubes to allow the track width of the machine to be easily varied for different applications and tracks. The fully floating bogies are rubber mounted for vibration isolation

and maintenance free operation. The heavy-duty idler rollers are fully sealed with mechanical face seals (as found on Caterpillar excavators) to give unrivalled reliability and maintenance free operation in all conditions. Tensioning of the rubber track is by grease filled rams and can be easily adjusted with the supplied grease gun.

The powder coated, three-man cab comes with tinted glass, full height doors and opening side windows, polycarbonate front and rear screens and sound proofing as standard. The full heating and ventilation system ensures stress free operation in all weathers. The cab can be tipped forward hydraulically to allow easy access to the engine and transmission for service. The cab is fitted as standard with a heavy-duty suspension seat and lap belt for the driver and two fixed seats and belts for passengers.

The hydraulically tipped lightweight platform incorporates eight solid slat, seats with grab handles, a corrosion proof, easy clean, non slip floor with space for a stretcher and a rear fold-down access ladder. A galvanised rear grill is incorporated in the rear of the floor to aid visibility of the rear tow hitch when coupling up trailers etc. Four, high capacity, galvanised mesh lockers with hinged doors are located beneath the seats for secure storage of loose equipment.

The 67hp turbo diesel engine is installed in a water resistant engine bay with an automatic drain and the remote, high level, engine cooling system mounted in a stainless steel duct combined with high level air intake and exhaust means the RNLI Softrak can operate in heavy seas without swamping the engine. The engine is fitted with a hydraulic starting system to ensure reliable starting in all conditions. High pressure oil is stored in a gas filled accumulator which supplies oil to the starter motor via a foot operated valve. The accumulator is normally recharged by the hydraulic system but a hand pump provides a manual backup if required. This stored high-pressure oil is also used to enable the cab or body to be hydraulically tipped and the brakes released even with the engine stopped.

# LAUNCH AND RECOVERY