



Cut & Hold Grapnels MK

Asset no. GA1-2

Cable Types: -	Lightweight up to 76.2mm Maximum Some Light Wire Armour
Grapple Dimensions: -	
Length	3.43m
Width	1.09m
Height	0.84m
Weight	2.45 Tonnes
Maximum Operating Depth	5000 Fathoms
Operating Temperature	Minus 5C to + 50C
Storage Temperature	Minus 40C to + 50C
Power Pack Dimensions: -	
Length	1.0m
Width	0.8m
Height	1.2m
Weight	1.0 Tonne
Power Supply	3 Phase, 415V, 50 Hz
Oil Type	Tellus 32
Gas Type	Oxygen Free Nitrogen
Acoustic Receiver	114 or Equivalent
Pinger	138 or Equivalent

GLOBAL MARINE SYSTEMS LIMITED
EQUIPMENT MANUAL
CUT AND HOLD GRAPNEL Mk III

1 GENERAL DESCRIPTION AND TECHNICAL SPECIFICATION

1.1 General Description

With a maximum operational depth of 5000 fathoms the Global Marine Cut & Hold Grapnel can be used on all lightweight conventional cables and optical fibre systems.

The Grapnel has a built-in sonic transmitter which provides the surface vessel with an exact sea-bed operational status, allowing the vessel to respond instantly when cable contact has been made. This feature minimises the risk of cable and repeater damage caused by lateral disturbance.

Once the cable has been located and hooked by the grapnel, a hydraulic holding system secures it prior to cutting.

After cutting, the grapnel held cable end is recovered in a single operation. The remaining cable end can then be recovered, close to the original cut with the grapnel operating in a holding mode only. This reduces cable wastage and sea-bed disturbance, minimising the possibility of cable damage and fibre strain.

1.2 Technical Specification

Grapnel Size	3.430 m x 1.090 m x 0.84 m
Grapnel Weight	2.45 Tonnes
Maximum Operating Depth	5000 Fathoms
Maximum Cable Diameter	76.2 mm Armourless Cable
Power Pack Size	1.70 m x 0.95 m x 1.10 m
Power Pack Weight	1.0 Tonne
Power Supply Required	3 Phase 415 V, 50 Hz
Oil Type	Tellus 32
Gas Type	Oxygen Free Nitrogen