HYDRO-LEK
REMOTE HANDLING SPECIALISTS

Hydro-Lek Case Study

Assessing oil level within sunken vessels

Hydro-Lek's HLK HD5 five-function arm has been used to assess level of bunker oil trapped in a sunken cruise liner in Greece and to then identify and mark points for drilling and oil extraction.

Hydro-Lek Ltd

Specialists in remote handling for the nuclear, subsea and defence industries.

www.hydro-lek.com

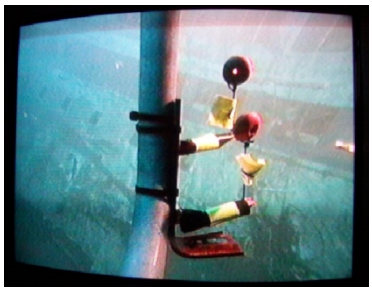
The Hellenic Centre for Marine Research was on immediate callout in 2007 when the cruise liner Sea Diamond grounded then sank in the Cauldera of Santorini in the Aegean Sea. Although it sank and rolled, the HMRC ROV system found the vessel lying upright in 120m during the immediate survey.

On repeat surveys, Hydro-Lek's HLK HD5 5-function manipulator attached to the ROV was used to help assess the position and amounts of bunker oil in the vessel. Much of the oil had floated up and become trapped in the vessel and the manipulator was used to insert a giant oil swab through various broken windows to assess the level of oil trapped in ceiling spaces.

The Hydro-Lek 5-function manipulator was also used to attach labelled magnetic markers to the hull to identify points for later drilling and oil extraction.

Giant cotton earbuds are used by the Hydro-Lek arm to assess oil levels

The HLK HD5 is used to push the giant cotton 'earbud' underwater through windows



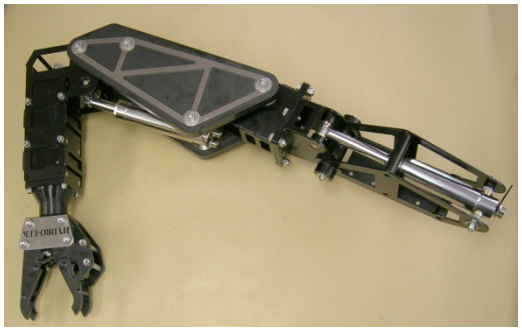
Marking the bulkheads with magnetic numbered tags

Hydro-Lek HLK-HD5
Specification

Dimensions	
Length of arm	819mm
Length of slew plate	280 mm
Height	145 mm
Width	380 mm (folded)
Capacities	
Rotate	360
Torque at 140 bar	38 Nm
Lift capacity at full reach	40 Kg
Max working pressure	210 bar
Weight	
In air	21.5 Kg
In water	16.5 Kg

Construction
316 Epoxy hard coated
HE 30 hard anodised aluminium
High density polyethylene

Ports
1/8NPT/7/16 SAE



The Hydro-Lek HLK-HD5 5-function Manipulator