

MU90

The Light-Weight Torpedo
for the 21st century



- UNMATCHED ENGAGEMENT DISTANCE
- VERY SHALLOW & CONFINED WATER CAPABILITY
- HIGH SPEED/ALTITUDE RELEASE FOR HELO & MPA
- ADVANCED ACOUSTIC COUNTER COUNTERMEASURE CAPABILITY

«The MU90 provides the Royal Australian Navy with a longrange capability for submarine engagement unmatched by any other Light-Weight Torpedo» (Royal Australian Navy).

Sea proven with more than 350 sea trials, including live firings in North and South hemispheres and over 1,000 units produced, the MU90 guarantees full operational maturity and reliability.

MU90 meets all of 21st century operational requirements, including sea-proven very shallow water & midget subs hunting-killing capabilities.

MU90 is the deterrent weapon to protect your maritime approaches and your naval forces deployments.

EQUIPPED NAVIES





KEY FEATURES

PROPULSION SYSTEM

The MU90 is powered through a silver oxide-aluminium (AgO-Al) sea-water battery using dissolved sodium dioxide powder as electrolyte and incorporating an advanced closed-loop electrolyte recirculation system. The battery offers depth-independent power and constant energy performances.

The MU90 is propelled by an electronically controlled motor driving a cavitation free pump-jet. It allows a continuously variable speed automatically selected by the tactical mission system and a very low engine noise.

Thanks to AgO-Al technology, power and energy available within the MU90 are beyond 110 kW and 12 kWh respectively. It represents a spectacular breakthrough in the LWT field, being twice the value of all other electrical and thermal LWTs.

This unique technology guarantees the MU90 an operational stand-off engagement distance over 12 km, thus repelling any submarine beyond its periscope depth identification distance.

WARHEAD

Ignited via an impact type exploder, the direct energy shaped charge warhead is composed of 32 kg of highly compressed V350 explosive.

It is proven to penetrate any type of double hull submarines and to grant depth-independent target destruction capability, including the close-to-the-sea surface littoral situation.

SAFETY

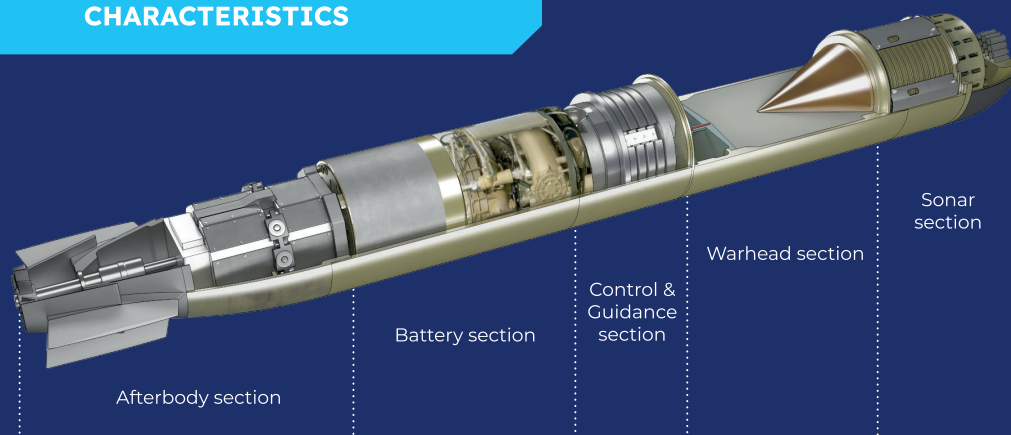
The MU90 is the only totally safe LWT:

- The AgO-Al battery electrolyte only starts when the torpedo has entered into the sea water,
- The warhead is qualified Insensitive Munition according to STANAG 4170 and 4439.

ACOUSTIC SEEKER

The advanced acoustic seeker features digital multi-preformed transmission and reception beams. Its multi-frequency, parallel processing and simultaneous acoustic modes operation allow multi-targets tracking, classification and analysis.

CHARACTERISTICS



DIAMETER / LENGTH / WEIGHT

323.7 mm / 2,850 mm / 300 kg

SPEED

Variable stepless from 29 kts to > 50 kts

OPERATIONAL ENGAGEMENT DISTANCE

> 12 km

MINIMUM WATER DEPTH AT LAUNCH

25 m

OPERATIONAL DEPTH

From 3 to > 1,000 m

AIR DEPLOYMENT SPEED / ALTITUDE

400 kts / 900 m

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