The MEPHISTO lethal package was designed, tested and produced by TDW for the TAURUS KEPD 350 modular stand-off weapon system already in service with the German and Spanish Air Forces and is ordered by the Air Force of the Republic of Korea.

Weighing 480kg, the MEPHISTO is composed of a distance sensor, a dual stage warhead (a pre-charge and a penetrator) and a fuzing system allowing it to neutralise high-value stationary and semi-stationary targets ranging from hard and deeply buried targets (HDBT) to bridges, runways and ships in port.

Its Programmable Intelligent Multi-Purpose Fuze (PIMPF) allows programming in-flight the detonation of the penetrator at a pre-selected spot, deep within the target structure. This is achieved through a layer counting and void sensing technology, which is unique worldwide. The shock robustness of PIMPF is unequalled.

The MEPHISTO lethal package is filled with an in-house developed insensitive blast-enhanced high explosive in order to deliver greater performance.

• Dual stage warhead system with ultimate penetration capability
• World unique Programmable Intelligent Multi-Purpose Fuze (PIMPF)
• Long service life
• High reliability
• Lethal package for the TAURUS KEPD 350 modular stand-off weapon system
• In service with the German and Spanish Air Forces and ordered by the Air Force of the Republic of Korea.
Furthermore MEPHISTO, TDW uses its expertise in system engineering and design concepts, simulation, assessment, mechanical design, prototype manufacturing, testing and evaluation to offer new types of penetrators with different shapes and dimensions mainly for Multi-Effect Warhead systems.

To offer the next generation penetrator as part of the lethal package, TDW is working on two objectives:

- Conducting research on the behaviour of explosives for supersonic penetration to meet the high shock load challenges in order to deliver the desired effect.

- Working on a new algorithm which allows the penetrator to detonate at the desired depth of burial. This new system will offer greater operational flexibility to the armed forces.

About TDW:

Since the 1950’s, TDW Gesellschaft für verteidigungstechnische Wirksysteme mbH has been developing, producing and maintaining all kinds of warheads and warhead systems as well as their associated components. With approximately 130 employees, TDW, which is a wholly owned subsidiary of MBDA Germany, operates as a full-service company at one integral site in Schrobenhausen, Germany.