TDW’s experience in the field of shaped charges began in the middle of the 1960s with worldwide successful programmes such as the Milan and HOT families. Today, TDW’s shaped charges are integrated in numerous products of European and international missile houses.

This includes:
- Man-portable weapons
- Anti-armour weapons for fixed and rotary wings
- Penetrator warhead systems
- Multi-Effect Warhead (MEW) systems
- Lightweight torpedoes

With system and design concepts, simulation, assessment, mechanical design, prototype manufacturing, testing and evaluation capabilities, TDW is able to deliver a full lethal package including warhead, safety and arming unit and fuze.

Furthermore, due to TDW’s own high explosive formulations and test facilities, delivered warhead systems are IM compliant (MIL-STD-2105, AOP-39, STANAG 4439, MURAT) to resist external threats such as bullet impact, fire, etc. The warhead systems of today have to fulfil high standards with respect to environmental conditions: long air carriage on fixed and rotary wings, submarine environment in order to safeguard the use by one’s own forces and to enhance the service life of the product.

Depending on the calibre, current shaped charges are capable of defeating a wide range of targets from infrastructures to main battle tanks equipped with the latest generation of explosive reactive armour.

- High explosive: less than 0.5 kg to more than 25 kg
- Calibre: 45 mm up to 250 mm
- All configurations
- Full IM compliant
- Long service life
- High reliability

“the difference!”

SHAPED CHARGE WARHEAD SYSTEMS FROM MAN-PORTABLE WEAPONS TO COMPLEX WEAPONS
In order to meet the new operational challenges, TDW is already preparing the future generation in a number of ways such as:

- Augmenting the shaped charge performance while reducing the size and mass of the warhead system. This implies work to improve the performance and insensitivity of the high explosive, the definition of new liner designs and the selection of new materials for the liner.

- Multi-effect warheads: the shaped charge is complemented with blast/fragmentation and a penetrating charge to defeat a wide range of targets. TDW successfully manages the challenge of the interaction between individual charges used in such a complex warhead system.

- The integration of a shaped charge inside a penetrator.

About TDW:

Since the 1950’s, TDW Gesellschaft für verteidigungstechnische Wirkysteme 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.

Products

- Milan 2 & 3
- HOT Family
- PARS 3 LR
- Brimstone 2
- Enforcer
- Taurus KEPD 350
- Sting Ray lightweight torpedo
- And many more