

Ensuring the survival of soldiers and operating resources is gaining more and more strategic importance in the face of a changed global security situation with asymmetrical threats.

MEHLER ENGINEERED DEFENCE GMBH offers you ballistic protection systems to **NATO** standards as well as extensive classifications for sea, air and land applications.

OUR SERVICES INCLUDE:

- Construction of the ballistic protection systems and integration into the weapons systems
- Development of a threat-specific protection system
- Construction with respect to the demands of specific applications (e.g. modular structure, customisation according to specific environmental conditions, fire characteristics, mounting, coating, etc.)
- System and environmental sustainability tests
- Mock-Up Construction
- Examination of construction details through tests series according to customer demands and internal quality control

The services of **MEHLER ENGINEERED DEFENCE GMBH** entail the development, production, testing and system integration of metallic, polymer and ceramic composite for terminal ballistic protection technologies for military and magisterial use. The systems offer the following characteristics and standards:

STANAG 4569 (as at May 2004)

STANAG 2920 (as at July 2003)

TR Schutzwesten (as at July 2005)

NIJ Standard 01.01.04 (as at June 2001)

PM 2000 (as at January 2002)

TR Durchschusshemmender Schild (as at 1997)

or customer specific threat scenarios

All orders are fulfilled in accordance with the **NATO QUALITY ASSURANCE REQUIREMENTS, AQAP 2110** as at November 2009



KONTAKT

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MEHLER

ENGINEERED DEFENCE



LIGHTWEIGHT NAVAL PROTECTION SYSTEMS

„YOUR FIRST CHOICE FOR FLEET
PROTECTION SYSTEMS“



Our Naval Armour Systems are available for STANAG 4569 KE Levels 1-4, various multihit capabilities or customer specific threat scenarios:

- Designed for the special requirements of naval applications, esp. handling and environmental conditions
- Unmagnetic, for use in counter sea mine units, signature management is possible
- No tools for mounting required, fast mounting
- Suitable for re-fitting of existing weapon systems as well for integration in new developments

SYSTEM INTEGRATION OF NAVAL ARMOUR

In order to integrate armour system non permanent, a fastener system is used, providing the following advantages compared to screw coupling:

- Short setup time, esp. for helipad rail mountings
- Vibration and g force resistance due to damping elements
- Easily removable
- No welding required
- Overlapping layout to close ballistic windows



System on Navy Ship, Helipad



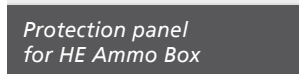
Integration on Portside Bridging



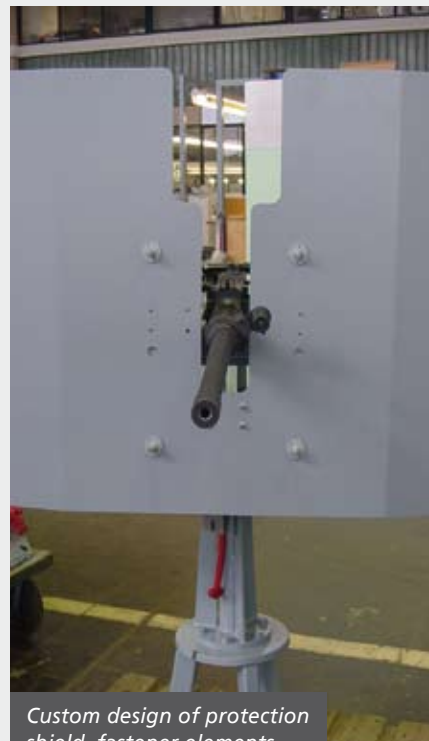
Rail integrated system on Helipad



CAD Design



Protection panel for HE Ammo Box



Custom design of protection shield, fastener elements

TECHNICAL SPECIFICATIONS:

SAMPLE FOR KE LEVEL 1 PROTECTION

| | |
|---------------------|------------------------|
| SYSTEM AREA DENSITY | : 22 kg/m ² |
| THICKNESS | : 23 mm |
| 7,62 NATO | : 830m/s |
| 5,56x45 (M193) | : 930 m/s |
| TEMPERATURE RANGE: | : -30°C TO + 70°C |

MULTIHIT CAPABILITY

: STANAG 4596 Annex B, App.2 , Table A2.2

MATERIAL

: High performance polyethelene, in housing with glass reinforced fibres or alumina

SS109 NOT INCLUDED

ADDITIONAL SYSTEM PROPERTIES

- Vibration resistance to naval specific vibration spectrum (1-120Hz, 1,5mm aplitude, all spatial directions, tested at WT71, German Navy)
- UV Stability
- Resistance against environmental conditions (saltwater, rain, dust)
- Wind load of up to 70 kn
- Conformity of integrated systems in accordance with BV0052 classification of german navy
- Ergonomic layout for safe handling in heavy seas
- On demand radar signature reducing layout
- Flame retardant
- Night goggle capable