



**MEHLER
PROTECTION**

PART OF MEHLER SYSTEMS

HOW TO USE THIS CATALOGUE

This catalogue gives you an overview of our entire product range. To learn more about a particular product category, simply scan its adjacent QR code. You'll then be taken directly to our website where you are going to find additional information.



➔ mehler-protection.com



CONTENTS

LIFESAVING PRECISION 2
CENTERED ON EXCELLENCE 3

BODY ARMOUR 4
BALLISTIC PROTECTION 6
CARRIERS 8
RIOT GEAR 16
M.U.S.T. 18
EXOM UP-ARMOURED EXOSKELETON 20
HELMETS 22
SHIELDS 24
ACCESSORIES 26



PLATFORM ARMOUR 28
M-RACC SYSTEM 30
MILITARY VEHICLES 32
NAVAL 33
AIRCRAFT 34
CIVILIAN VEHICLES 35
CRITICAL INFRASTRUCTURE 36
PROTEC3D 37
SCILT 38



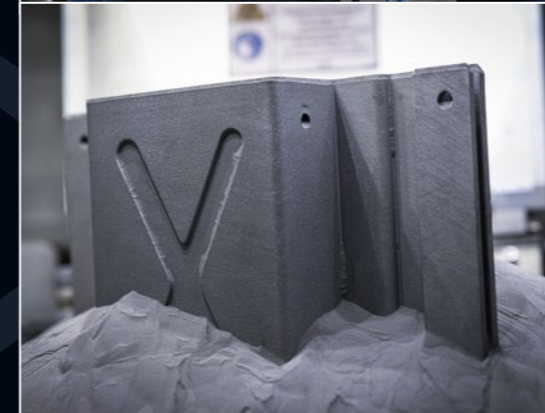
CONTACT 40

LIFESAVING PRECISION

Mehler Protection is a leading supplier of advanced ballistic protection systems to law enforcement agencies, military, and special forces. We are committed to ensuring safety and develop innovative, durable solutions that are precisely matched to mission requirements.

Our extensive portfolio includes ballistic body armour, stab and slash protection, helmets, shields, platform protection for naval, aircraft and land vehicles, and critical infrastructure.

As part of the Mehler Systems Group, we draw on forty years of experience in designing and manufacturing customised protective solutions.



CENTERED ON EXCELLENCE

01.

FOCUS ON PRECISION

We prioritise meticulous attention to detail in every aspect of our work to ensure the utmost accuracy and effectiveness in our protective solutions.

02.

CONSTANT INNOVATION

Our culture fosters a relentless pursuit of new ideas and technologies, driving us to stay at the forefront of safety and security innovation.

03.

QUALITY AT THE CORE

Quality is not just a goal; it's ingrained in our products and processes, assuring our customers of the highest standards of reliability and performance.

BODY ARMOUR

Personal ballistic protection is critical for military and law enforcement personnel exposed to a wide range of threats. Our cutting-edge solutions set new standards in safety, delivering superior performance and robust protection.





VPAM 6



BALLISTIC PROTECTION



MORE INFO



HARD BALLISTIC PLATES

Our hard ballistic plates offer effective protection against a wide range of projectiles, while providing comfort and freedom of movement. They meet ballistic standards including NIJ, VPAM, CAST and others, and can be used as stand-alone protection or in combination with soft ballistic. 3D-moulded options provide additional coverage for the upper arms, ribs and thighs. Female-anatomical plates are available in a range of sizes for an optimised fit.



SOFT BALLISTIC PANELS

Our soft ballistic panels provide superior protection for both male and female operators, meeting national and international standards (NIJ, VPAM and CAST). They are designed to be comfortable and fit ergonomically across multiple body shapes and sizes; on-site fitting services ensure optimal sizing and performance.



SLASH, STAB, AND IMPACT PROTECTION

Our advanced slash, stab and impact protection solutions are designed to provide optimal mobility and comfort. Explore our range of innovative textile solutions, flexible chainmail, segmented aluminium panels and specialised polymer protectors, all of which are rigorously tested and comply with international standards.



MORE INFO

COVERT VESTS



STANDARD COVERT VESTS

Our standard covert vests offer various adjustment options in the side and shoulder area for optimum comfort and freedom of movement. High-quality functional fabrics and an ergonomic cut ensure unrestricted performance, even when worn for long periods and in dynamic situations.



CONCEALABLE COVERT VESTS

Designed to be practically invisible, our discreet protective vests are specially crafted for covert operations. These vests are engineered to minimise their visibility when worn beneath clothing by utilising special processing and shaping techniques.



MULTI-PURPOSE COVERT VESTS

As mission requirements evolve, so do these versatile vests. With modular, interchangeable components, they can be quickly and easily fitted with tactical equipment, making them perfect for a wide range of operational scenarios. When upgraded with hard ballistics, they provide protection against high-calibre rounds and meet higher levels of protection.

OVERT VESTS



WAISTCOATS

Our waistcoats feature soft ballistic panels and can be upgraded with hard ballistic plates. They have attachment points for pouches and optional high-visibility elements. Their anatomical shape and intelligent 3D cut provide the perfect balance of protection and comfort. For added safety, they can be quickly fitted with an Amok Kit.



RIOT GEAR VESTS

Modular, layered vests offering impact, stab and ballistic protection. Flame-retardant and chemical-resistant options can be supplied.



TACTICAL VESTS

Tactical vests are designed for high-threat scenarios. These vests, along with their modular attachments, can be enhanced with additional hard ballistic plates to extend protection to different parts of the body. The integrated carrying system ensures efficient weight distribution, reducing the strain on the wearer even during the most demanding operations.



AMPHIBIOUS VESTS

Our amphibious ballistic vests are equipped with integrated lifejackets that can be inflated automatically or manually. In the event of unconsciousness, automatic activation ensures that the wearer is flipped onto their back and kept afloat in a life-saving position.

CARRIERS

 (continued)^{RO}

MORE INFO



HYBRID VEST

HYVE

HYVE (**Hybrid Vest**) is a sophisticated and practical personal protection solution for law enforcement personnel. The hybrid concept combines a personalised waistcoat with a one-size-fits-all plate carrier, ensuring optimal comfort, quick adjustment and maximum safety.

UNCOMPROMISING PROTECTION

Upgrade the waistcoat while equipment remains in place.

FAST RESPONSE

Quick insertion of the plate carrier without compromising the existing soft ballistic protection.

INDEPENDENCE

Increase the level of protection without external assistance.

EFFICIENT POOL SOLUTION

One-size-fits-all plate carrier that enables use across teams.

OUTSTANDING WEARING COMFORT

High level of comfort and mobility due to the precise fit of the waistcoat.

INTUITIVE SYSTEM

Plate carrier is quickly fitted and removed.

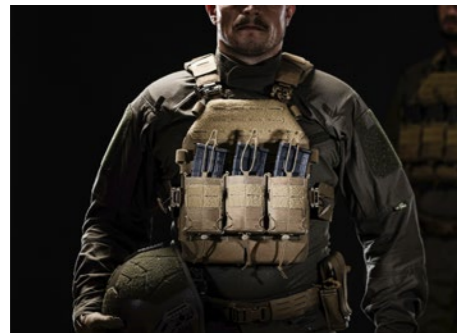


CARRIERS

 (continued)

MORE INFO

PLATE CARRIERS



MODULAR PLATE CARRIERS

The modular design allows for versatile configurations, from lightweight plate carriers to advanced protection systems. With numerous configuration setups, our plate carriers can be rapidly reconfigured to meet evolving operational requirements.



PLATE CARRIERS

Our custom plate carriers are tailored to each customer's requirements. They combine bespoke designs and precise measurements with premium materials and a choice of hard ballistic plates. They feature comfortable padding, adjustable side and shoulder closures, and an exceptional, secure fit.



SPECIAL APPLICATION PLATE CARRIERS


The convertible backpack system offers concealed ballistic protection for covert use. It can be rapidly converted into a plate carrier.



CARRIERS

 (continued)

MORE INFO



Our riot gear provides robust, lightweight, full-body protection for police and law enforcement in crowd control and dynamic conflict situations. It combines flexibility with ballistic options to provide effective protection against blunt and stabbing force. Featuring segmented aluminium panels for comfort and ease of donning, it is modular and can be expanded and adapted to different threats.

RIOT GEAR



IMPACT, STAB & BALLISTIC PROTECTION

Modular and scalable, allowing adjustment of protection level and coverage area to match operational conditions and extend wear time. Excellent mobility and comfort are ensured by special plate segmentation, an innovative alloy, and removable upper arm protectors.



IMPACT & STAB PROTECTION

Flexible and modular body protection system made of special aluminium segmentation for excellent mobility and wearing comfort in combination with ballistics. Provides optimum protection for the shoulder joint and collarbone. Removable upper arm protectors.



IMPACT PROTECTION

Segmented, flexible, anatomically shaped body protection protectors made of impact-resistant, tough-elastic polypropylene with very high wearing comfort. Removable upper arm protectors.



MORE INFO



M.U.S.T.

MODULAR UNIVERSAL SCALABLE TECHNOLOGY

M.U.S.T. is a highly modular protective system for special police and military units.

The M.U.S.T. system comprises more than 30 modular components that can be freely combined to meet virtually any operational requirement. Its range extends from discreet undergarments for concealed wear to overgarments with integrated plate pockets for vehicle crews, and to plate carriers fitted with four-hook buckles.

A wide selection of soft and hard ballistic extensions and multiple protective plate configurations for the front, back and sides are available. Soft ballistic components are offered in several designs that comply with current guidelines.



MORE INFO

EXOM

UP-ARMoured EXOSKELETON

Revolutionising the paradigm of weight management and ballistic protection, the ExoM Up-Armoured Exoskeleton is an avant-garde solution.

The project was initiated by the GIGN and co-developed through a collaborative effort between Mehler Protection and Mawashi Science & Technology, funded by the Defence Innovation Agency (DIA).



GAME-CHANGING LOAD BEARING SOLUTION

The ExoM Exoskeleton transforms the experience for military and law enforcement personnel tasked with extended wear of heavy equipment and demanding high-level ballistic protection. By redistributing up to 70% of the load from the shoulders to the ground, this technology alleviates physical strain, mitigates injuries, and allows operators to concentrate on their duties.

EXCEPTIONAL ERGONOMICS AND MOBILITY

Equipped with a flexible spine, sliding waist belt, and articulated hip, knee, and ankle joints, the ExoM Exoskeleton ensures operators maintain up to 99% ease and range of motion. This flexibility proves vital for navigating challenging terrains and confined spaces.

HIGH-LEVEL FULL-BODY ARMOUR

With exceptional load-bearing capabilities, the ExoM Exoskeleton enhances survivability by providing high-level ballistic protection. Upgrade options include fully ergonomic, full-body ballistic protection up to VPAM 8.

SELF-SUFFICIENCY IN REMOTE AREAS

Functioning as a passive Exoskeleton, it operates without the need for external power sources. This feature makes it perfect for extended missions or remote locations, eliminating the necessity for heavy batteries and charging equipment.



MORE INFO

HELMETS

The ballistic Omega helmets are made from high-quality materials to meet the highest protection standards. They combine seamless, lightweight comfort with top-tier safety. The helmet's modular platform offers upgradeable ballistic protection and compatibility with a range of equipment. We offer two helmet models, each tailored to different levels of threat.



OMEGA BALLISTIC HELMETS

High-Performance Polyethylene



OMEGA CORE HELMET

Primarily designed for military applications, the Omega Core Helmet offers reliable fragment protection as well as safeguarding against projectiles from handguns. Made from high-performance polyethylene, the high-comfort Omega Core Helmet provides excellent lightweight ballistic protection.

High-Performance Polyethylene

Titanium



OMEGA HYBRID HELMET

Designed for high-performance protection up to VPAM 3 in combination with outstanding comfort and versatility. The combination of minimal weight, extraordinary ballistic performance, and low residual energy is made possible by its novel, high-performance polyethylene outer shell, and supremely strong titanium inner shell.



MORE INFO

SHIELDS

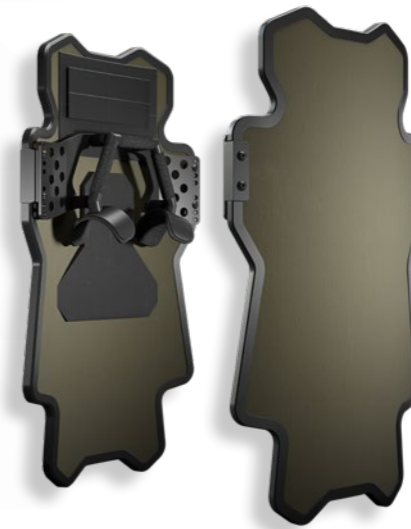


MORE INFO



WHEELED SHIELDS

Our lightweight yet rugged wheeled shields are extensively tested and certified, offer exceptional mobility and protection, feature intelligent folding and upgrade options, adapt with ease, and last a remarkably long time.



HANDHELD SHIELDS

Our advanced-technology handheld shields are designed for faster deployment and greater stability in confined spaces. With a focus on superior manoeuvrability and tactical precision, these shields give law-enforcement and special-forces the confidence and protection they need when engaging in high-risk encounters.



RIOT SHIELDS

Our riot shields have been designed to withstand the harshest conditions and provide a vital line of defence. Constructed from tough, transparent polycarbonate, they offer robust protection while maintaining essential visibility, allowing those on the front line to remain aware of their surroundings without compromising safety.



ACCESSORIES



GLOVES

Comfort and safety are hallmarks of our gloves, crafted for combat situations and riot-control operations, with many options available to enhance their versatility.



BELTS

Our duty, upper, and under belts are robustly constructed and allow heavier equipment to be carried. They are also characterised by above-average wearing comfort and maximum functionality.



POUCHES

Our modular pouches keep equipment secure and within easy reach during intense operations. They are available in a variety of configurations, including pouches for ammunition, commands and missions, tools, electronics and more.



MORE INFO

PLATFORM ARMOUR

Protection requirements for military and civilian platforms are complex and not always covered by standards. Against ballistic KE threats, mines, EFP, IED and RPG, we offer a modular product portfolio based on the NATO AEP-55 STANAG 4569 – our M-RACC product family.

This ranges from add-on systems to structure-bearing armour and spall liner systems.



M-RACC SYSTEM

M-RACC (**Multi-Role Armour Composites/Components**) is next-generation lightweight, modular and-, scalable platform armour. We created M-RACC so that the armour solutions can be precisely fitted to the unique, individualised requirements of platforms. As strong as it is versatile, M-RACC provides impressively effective ballistic protection for naval vessels, aircrafts, land vehicles, critical infrastructure, and more.

		PLATFORM				
		Military Vehicles	Civilian Vehicles	Naval	Aircraft	Critical Infrastructure
THREAT TYPE	Kinetic energy	●	●	●	●	●
	Shaped charges	●		●		●
	Mines	●	●			
	Blast		●			●
	IEDs	●				
	Bomblets	●				
	Overmatch	●		●	●	●

Kinetic energy **M-RACC KE**

Projectiles & fragment protection meeting/exceeding NATO AEP-55 STANAG 4569 and VPAM Bullet Resistant Vehicles (BVR 2009) standard

Shaped charges **M-RACC SC**

Shaped charges/anti-tank weapons protection meeting/exceeding NATO AEP-455 STANAG 4569

Mines **M-RACC MINES**

NATO AEP-55 STANAG 4569-satisfying protection against anti-tank, anti-personnel, blast & EFP mines and underfloor mine protection systems meeting/exceeding VPAM Explosive Resistant Vehicles (EVR 2010)

Blast **M-RACC BLAST**

Blast protection systems & concepts meeting/exceeding VPAM EVR 2010 standard

IEDs **M-RACC IED**

Innovative systems & concepts for NATO AEP-55 STANAG 4569-based protection against a spectrum of IED types

Bomblets **M-RACC BOMBLETS**

Top protection became more and more important by increasing threats like cluster bombs, bomblets, but also drone attacks

Overmatch **M-RACC OVERMATCH**


Protection for redundancy-free system component and dedicated protection systems that increase unit survivability in overmatch threat scenarios

M-RACC LINER

Liners from Aramide as well as UHMWPE produced in house



MORE INFO



M-RACC SC
Shaped charges/anti-tank weapons protection meeting/exceeding NATO AEP-55 STANAG 4569

M-RACC BOMBLETS
Top protection became more and more important by increasing threats like cluster bombs, bomblets, but also drone attacks

M-RACC LINER
Liners from Aramide as well as UHMWPE

M-RACC MINES
NATO AEP-55 STANAG 4569-satisfying protection against anti-tank, anti-personnel, blast & EFP mines

M-RACC OVERMATCH
Survivability hardening systems to mitigate risk of unit damage & driver/passenger injury

M-RACC KE
Projectiles & fragment protection meeting/exceeding NATO AEP-55 STANAG 4569

M-RACC IED
Innovative systems & concepts for NATO AEP-55 STANAG 4569-based protection against a spectrum of IED types


MILITARY VEHICLES

Advanced, comprehensive M-RACC solutions for military vehicles protect against projectiles, fragments, and shaped charges; all meet NATO AEP-55 STANAG 4569 ballistic, fragment, mine, and anti-tank threat standards.

Our adaptable, multi-threat-level M-RACC Mines system, for example, protects against under-chassis blasts and works with most vehicle types. To protect weapon stations, sensitive optronics, and other vulnerable pieces of vehicle equipment, M-RACC lightweight, moulded composite armour is an excellent choice. Additionally, our custom-designed 3D moulded M-RACC parts, crafted from HPPE and aramid materials, protect hatches and similarly intricate vehicle components.



MORE INFO



M-RACC KE
Protection tailored to counter projectiles & fragments in maritime threat scenarios

M-RACC SC
Customised protection for maritime fleets against shaped charges

M-RACC LINER
Liners from Aramide as well as UHMWPE

M-RACC OVERMATCH
Dedicated protection systems that increase unit survivability in maritime overmatch threat scenarios

NAVAL

Our lightweight M-RACC naval protection systems are designed to harden a ship's most critical areas, including the bridge, command centre, magazine, and engine room.

The advantage of M-RACC is found in its integrated, customisable modularity, which makes it easy to up-armour critical areas and significantly improve a ship's ability to survive a range of threat types, even in overmatch scenarios. Every M-RACC solution meets stringent maritime standards for safety, vibration resistance, and durability.

Also available are ballistic shields to protect weapon stations and helipads.



MORE INFO

M-RACC OVERMATCH

Protection for redundancy-free system components

M-RACC KE

Projectiles & fragment protection for demanding aircraft missions meeting/exceeding NATO AEP-55 STANAG 4569

M-RACC LINER

Liners from Aramide as well as UHMWPE

AIRCRAFT

M-RACC offers lightweight, adaptable solutions for keeping helicopters in the air and on course by enhancing pilot safety, protecting control and navigation systems, and shielding other critical onboard or exterior areas and sections. Produced from HPPE, ceramics, or other advanced materials, these solutions are certified to meet NATO AEP-55 STANAG 4569 KE Level 1-3 standards and are designed for use in specific threat scenarios aimed at helicopter cockpits, seats, cargo areas, and turbines.



MORE INFO

M-RACC KE

Projectiles & fragment protection meeting and exceeding VPAM Bullet Resistant Vehicles (BVR 2009) standard



M-RACC MINES

Underfloor mine protection systems meeting/exceeding VPAM Explosive Resistant Vehicles (EVR 2010) & NATO AEP-55 STANAG 4569 standards

M-RACC BLAST

Blast protection systems & concepts meeting/exceeding VPAM EVR 2010 standard

CIVILIAN VEHICLES

The best protection solutions for civilian vehicles at risk of terrorist- or crowd-attack threats are both discreet and robust. That describes our BRV/ERV standards-exceeding offerings, all of which comply with relevant laws and regulations.

With our M-RACC system, only minor modifications are needed to maximise the vehicle's ability to survive projectiles, fragments, and blasts. The reasons are M-RACC's specialised 3D moulded parts. These are engineered from lightweight yet super-strong HPPE aramid materials or armoured steel and can be used to cover everything from small, intricate vehicle components to large bulkheads and panels while preserving door functionality. Because they are customisable, the parts can provide floor protection for the most common makes and models of cars.



MORE INFO

CRITICAL INFRASTRUCTURE

Recent conflicts have shown that critical infrastructures are among the primary targets of military attacks. Maintaining the functionality of power plants, for example, is the focus of protecting such systems. In the civilian sector the protection of critical infrastructures, such as energy generating units, supply lines and substations, from sabotage or attacks is of growing importance.



MORE INFO



M-RACC PROTECTION FOR SUPPLY LINES

We offer systems for all types of supply lines, such as water or gas pipes. Whether single pipes or multi-line systems, M-RACC offers comprehensive protection to ensure the supply of critical systems.

M-RACC PROTECTION FOR CABLE TRAYS

Our retrofittable modular M-RACC system protects the electrical supply routes of critical equipment from fragments, explosions and fire.

M-RACC PROTECTION FOR CONTROL CABINETS

The protection of control cabinets can ensure the functionality and energy supply of one or more critical systems.

M-RACC PROTECTION FOR ENTIRE BUILDING AREAS

M-RACC protects larger critical areas within buildings with modular but stationary wall systems. These also offer reliable protection for people within the protected area.

PROTEC3D

New possibilities in design and functional integration for complex components with ballistic protection

3D printing, also known as additive manufacturing, is revolutionising numerous industries, including the production of ballistic protection solutions. Specifically, the 3D printing of armour steel offers new possibilities in design freedom, ballistic performance, the manufacture of complex components, and the integration of additional functions.

High ballistic performance

Ballistic performance is a critical factor in protection solutions. PROTEC3D has excellent ballistic properties. Layer-by-layer manufacturing allows for precise control of material properties, resulting in consistent resistance to ballistic threats. In addition, the mechanical properties can be further optimized through targeted adjustments in printing technology and post-processing.

Design freedom by PROTEC3D

A crucial advantage of PROTEC3D is the virtually unlimited design freedom. Traditional manufacturing methods are often limited by geometric constraints. In contrast, 3D printing allows for the creation of complex structures and shapes that were previously unimaginable. This enables the development of custom-made protection solutions that are perfectly tailored to specific requirements and operational conditions.



MORE INFO



PROTEC3D

SCILT — CLOSE RANGE ACTIVE C-UAV SYSTEM

SCILT is an active protection system defeating small drones in close and closest range by a hard kill countermeasure. Either kamikaze, FPV drones or loitering ammunitions are defeated with cost efficient effectors. The system can be operated by an operator, sensor supported through optronic, radar or image recognition as well as autonomously - reliably protecting platforms against single drones and drone swarms. The system can be operated with market available standard ammunition types covering less lethal, fragmentation and armour piercing rounds, allowing the operator to adapt to target requirements but also to manage the hazard zone.



SCILT LAND

Robust effector units placed at strategic positions ensure 360° coverage including elevation angles.



SCILT SEA

Equipped with an autoloader this system protects naval vessels on their missions.



SCILT AIR

Sensitive manoeuvres like fast roping of special forces are secured against drone attacks.



MORE INFO

CONTACT



BODY ARMOUR:

Mehler Vario System GmbH

Edelzeller Straße 51
36043 Fulda | Germany

+49 661 103 555

@ body.armour@mehler-systems.com

meehler-protection.com

PLATFORM ARMOUR:

Mehler Engineered Defence GmbH

Kupfermühlenberg 2
38154 Königslutter | Germany

+49 5353 919 310

@ info@mehlerdefence.de

meehler-protection.com

