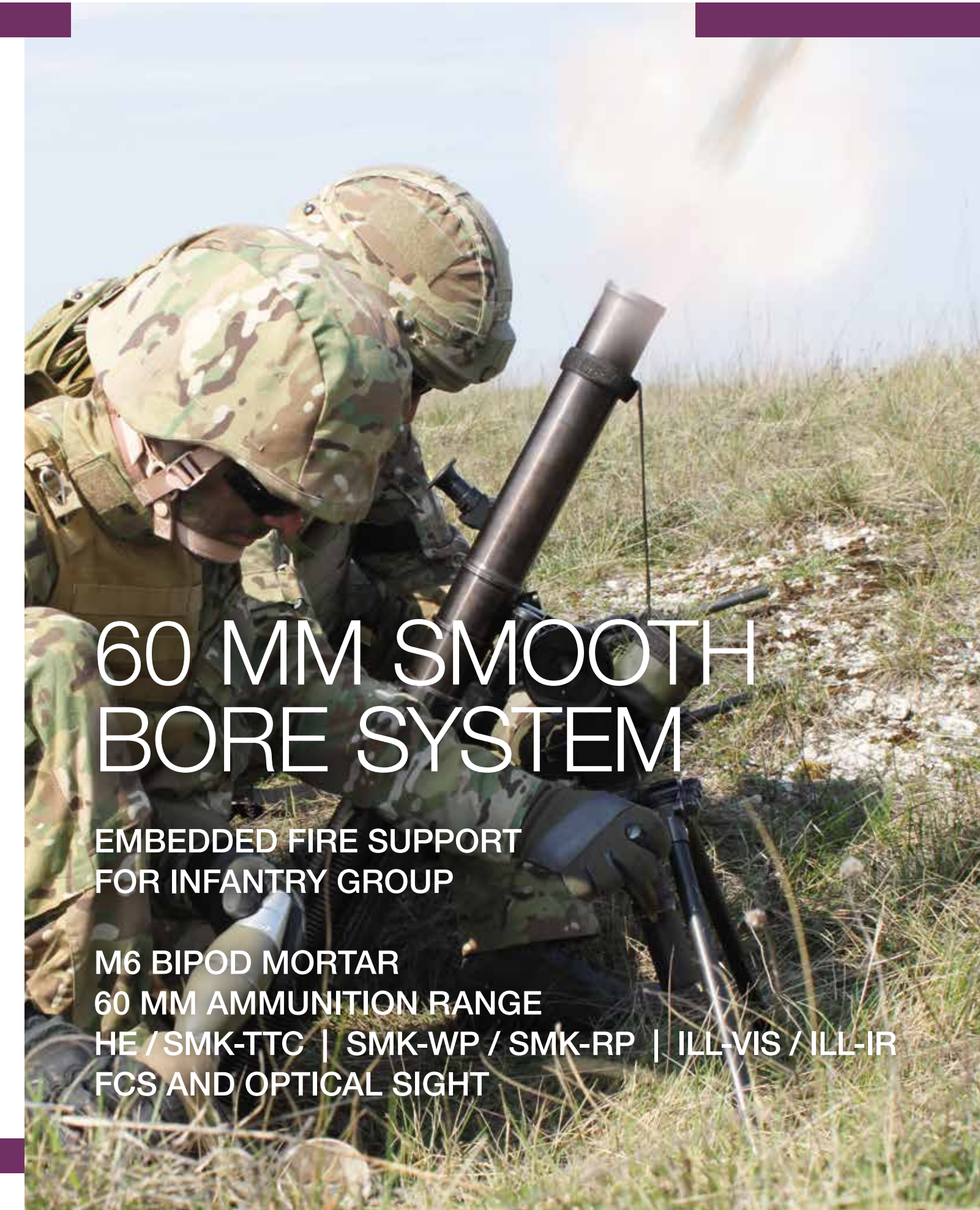




The Mortar Company.



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60 MM SMOOTH BORE SYSTEM

EMBEDDED FIRE SUPPORT FOR INFANTRY GROUP

M6 BIPOD MORTAR
60 MM AMMUNITION RANGE
HE / SMK-TTC | SMK-WP / SMK-RP | ILL-VIS / ILL-IR
FCS AND OPTICAL SIGHT

THE COMPREHENSIVE 60 MM SYSTEM

The 60 mm System is optimised for the quick and simple handling of the system by combining the advantages of each system component as weapon, the comprehensive ammunition range, R08 sighting unit, field auxiliary equipment and a lightweight Fire Control System HHMC.

BIPOD

The bipod carries the barrel clamp, the sealed gears and the shock absorbers, which manage the damping in all terrain and military environment conditions. The handling of gears, positioning of the sight eyepiece and the overall gunners position is optimised for ergonomic operation. All these features will result in a fast setup and easy handling and aiming process during operational employment trouble-free operation on all types of terrain.

BASE PLATE

The base plate is drop-forged and made of a high-strength aluminium alloy with reinforcing ribs. The design combines low weight with high stability so that the base plate is able to withstand highest impact stresses.

CONVERSION KIT

As a speciality, we offer a conversion kit, which can transform the 60 mm bipod mortar easily into a commando mortar within 2 minutes. The conversion kit consists of a handgrip with trigger and baseplate, an aiming device and carrying belt. In the Commando version, it may be used up to charge 3.

Transform within 2 minutes

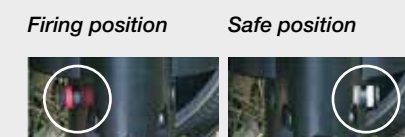


Quick change System:
The quick change system allows to change the base plates in less than 10 sec. without tools.

Included: Rectangular shaped base plate, especially for use on soft ground.



Safety lock: Enables the user to move with a round in the barrel.



SIGHTING SYSTEM

The Hirtenberger 60 mm mortar systems is equipped with the R08 mortar sight for indirect aiming process in azimuth and elevation. For a quick and easy setting of the elevation the mortar, the R08 sight is featuring a interchangeable metal plate which is carrying the different ballistic data of the ammunition. The ballistic data, the angle of elevation for each range in meters, of each type of mortar ammunition like HE, SMK or ILL is available. Within the sight a permanent MIL scale is integrated. With this ballistic plates the operator can adjust the mortar elevation according to range estimations or range measurements without additional ballistic calculations in the field. All vials and bubbles illuminated by LED's are enable the user to operate 24 hours, powered by two AA batteries directly on the sight.

BARREL AND BREECH CAP

The forged barrel which is available in ballistic length of 640, 895 and 1000 mm, made out of high-strength special steel with additionally fixing positions between bundles to prevent it from sliding at higher loads. Pre-adjustment of elevation is possible due to four different pre-set positions. The muzzle end is tapered on the inside to facilitate loading of bombs. The breech cap seals the barrel at the rear and is carrying the firing pin with partially hardened point which can be replaced in all mortar positions or retracted in case of misfire.

FIRE CONTROL SYSTEM

ROLE: FORWARD OBSERVER COMPUTER

- Observer Locations
- Firing planning function
- Variable correction option
- Simultaneous fire mission

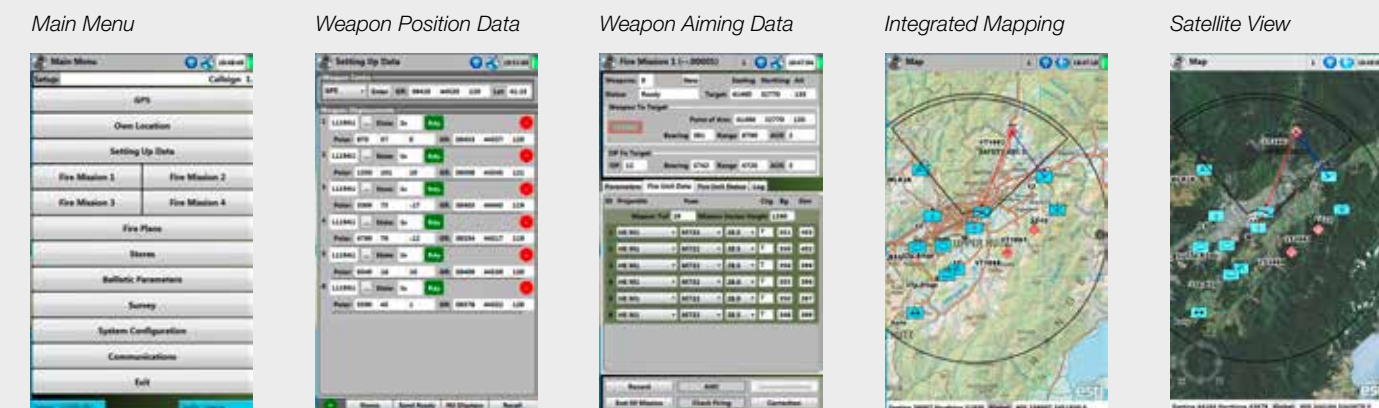


ROLE: MORTAR COMPUTER

- Control multiple weapons
- Ammunition stores
- Surveys calculation options
- Firing planning functions

FEATURES: MILITARY HANDHELD COMPUTER

- Internal GPS
- Long Battery
- Ruggedised
- Touch screen
- Mouse backup and hotkey



TECHNICAL DATA	M6 – 640	M6 – 895	M6 – 1000
Calibre	60 mm	60 mm	60 mm
Max. range*	2872 m	3610 m	3933 m
Commando version**	1921 m	2100 m	2401 m
Max. rate of fire	30 / min	30 / min	30 / min
Max. operating gas pressure	55 MPa	60 MPa	60 MPa
Weights			
Total	22.1 kg	23.0 kg	23.5 kg
Barrel	4.6 kg	5.5 kg	6.0 kg
Bipod	12.7 kg	12.7 kg	12.7 kg
Base plate	4.8 kg	4.8 kg	4.8 kg
Dimensions			
Length of barrel (overall)	742 mm	984 mm	1092 mm
Ballistic length	640 mm	895 mm	1000 mm
Diameter of base plate	351 mm	351 mm	351 mm

* with Hirtenberger HE Mk2 charge 6, except M6-640 (charge 5) | ** limited to charge 3
Due to continuous technical improvement this product is subject to modification

60 MM MORTAR AMMUNITION

AMMUNITION WITH IDENTICAL „HE“ TYPE BALLISTICS

60 MM PRACTICE Mk2

Filler
Inert
Terminal effect
Impact signature (only with life fuze).

60 MM HE-TNT Mk2 PD

Qualified in NATO
Filler
TNT
Terminal effect
Number of fragments > 5000 (> 1100 fragments with m > 0.18 g).

60 MM SMK-WP Mk2

Qualified in NATO
Filler
White phosphorus
Terminal effect
Screening by fast generation of smoke.

60 MM HE-TNT Mk2 PROX

Qualified in NATO
Filler
TNT
Terminal effect
Number of fragments > 5000 (> 1100 fragments with m > 0.18 g).

60 MM SMK-TTC Mk2

Qualified in NATO
Filler
Titanium tetrachloride
Terminal effect
Extraordinary fast generation of cold smoke.

60 MM HE CONFRAG® Mk2

Terminal effect
Increased lethality by more than 100%
Number of Fragments 2390 (1780 fragments with m > 0.18 g).

PYROTECHNIC AMMUNITION WITH IDENTICAL BALLISTICS

60 MM SMK-RP Mk2

Qualified in NATO
Filler
Red phosphorus
Terminal effect
Smoke generation.
Smoke duration: 90 sec.

60 MM ILL-VIS Mk2

Qualified in NATO
Terminal effect
Luminosity: 350000 cd
Illumination duration: 40 sec.
Descent rate: 5 m/s

60 MM ILL-IR Mk2

Qualified in NATO
Terminal effect
Illumination duration: 40 sec.
Descent rate: 5 m/s
High infrared emission, low visible emission.

60 MM	PRACTICE Mk2	HE Mk2	SMK-WP Mk2	SMK-TTC Mk2	SMK-RP Mk2	ILL-VIS Mk2	ILL-IR Mk2
Length	358 mm	358 mm	358 mm	358 mm	467 mm	467 mm	467 mm
Weight	1.79 kg	1.79 kg	1.79 kg	1.79 kg	1.63 kg	1.63 kg	1.63 kg

HE Mk2 / PRACTICE Mk2 SMK-WP Mk2 / SMK-TTC Mk2	MAX. RANGE M6 – 640 MM	MAX. RANGE M6 – 895 MM	MAX. RANGE M6 – 1000 MM	GAS PRESSURE MAX.
Charge 0	464 m	561 m	561 m	13 MPa
Charge 5	2872 m	3154 m	3500 m	45 MPa
Charge 6	–	3610 m	3933 m	54 MPa
ILL-VIS Mk2 / ILL-IR Mk2 SMK-RP Mk2 EJECTION HEIGHT 250 M				
Charge 1	777 m	854 m	891 m	16 MPa
Charge 5	2702 m	2865 m	3044 m	45 MPa
Charge 6	–	3273 m	3412 m	52 MPa

SHELL BODY

- Optimised aerodynamic shape
- Improved external ballistics
- Increased range
- Closed design
- No entrance of hot gases
- Body material for HE-TNT
- Special cast iron
- High number of fragments
- Increased combat efficiency

MONOBLOC DESIGN OF FIN TAIL

- No corrosion
- No break-up during firing
- Weapon cannot be damaged
- Improved storage capability

PROPULSION SYSTEMS

- Charge container with bent rim
- Increased mechanical stability
- No unintended loss during handling
- Watertight design
- Stable ballistics
- Improved storage capability
- Reliable function in wet conditions

- Latest celluloid composition
- Improved combustion characteristics
- No sticky residues
- No sticking bombs during firing
- Latest propellant composition
- Improved energy
- Improved muzzle velocity
- Reduced gas pressure
- Greater range capability

IGNITION CARTRIDGE

- Watertight aluminium design
- Stable ballistics
- Improved storage capability
- Reliable function in wet environment



Various available fuzes

Spindle shaped design

Canister shaped design