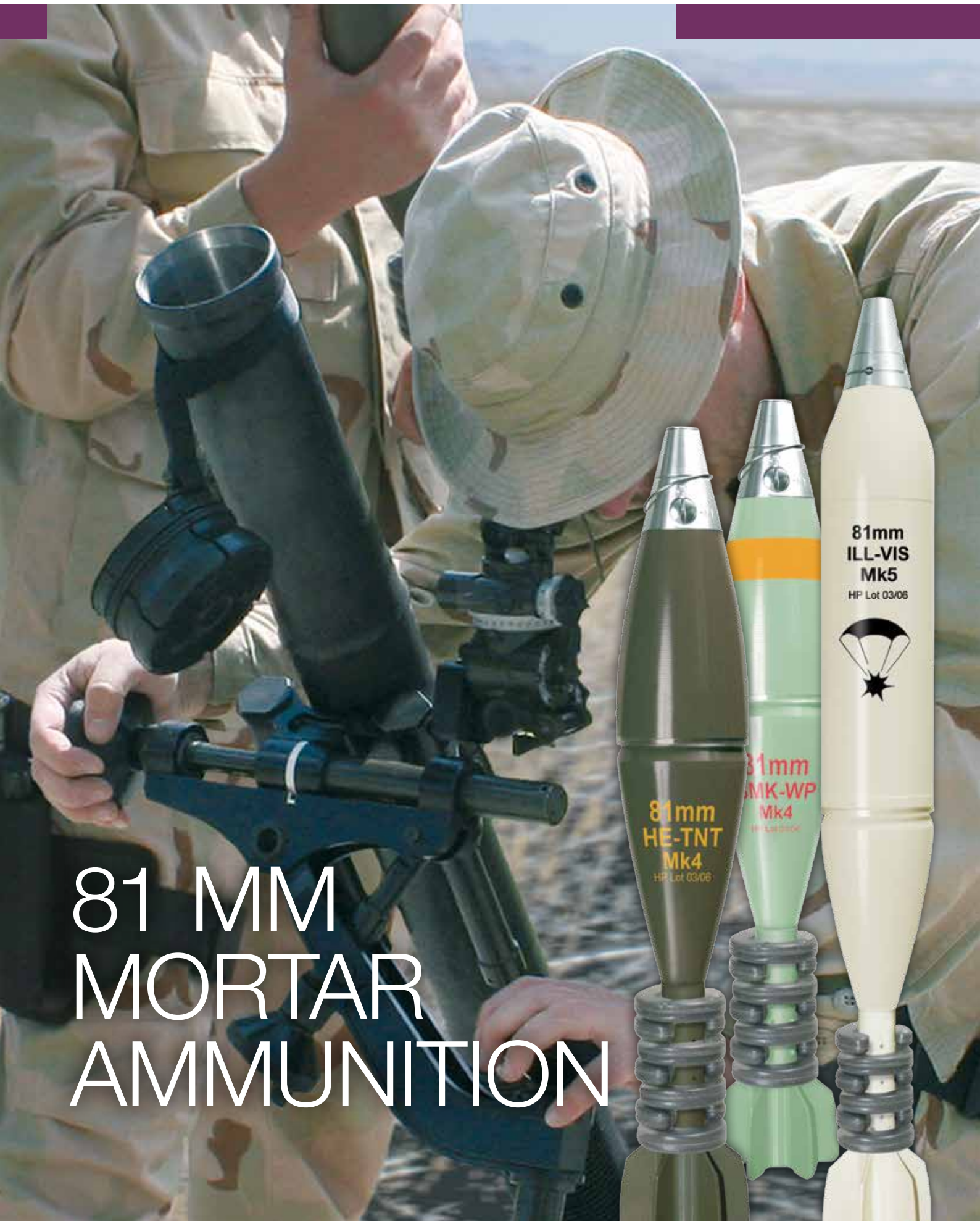


The Mortar Company.



**hirtenberger**  
Defence Systems



# 81 MM MORTAR AMMUNITION



## AMMUNITION WITH „HE“ TYPE BALLISTICS



81 MM  
PRACTICE  
Mk4

**Filler**  
inert

**Terminal effect**  
Impact signature  
(only with life fuze).



81 MM  
HE Mk4

**Filler**  
TNT

**Terminal effect**  
Number of fragments  
> 7000  
(> 3000 fragments  
with  $m > 0.18$  g).



81 MM  
SMK-WP  
Mk4

**Filler**  
White phosphorus

**Terminal effect**  
Screening by fast  
smoke generation.



81 MM  
SMK-TTC  
Mk4

**Filler**  
Titanium tetrachloride

**Terminal effect**  
Extraordinary fast  
generation of cold smoke.



### SHELL BODY

- optimised aerodynamic shape
- improved external ballistics
- increased range
- closed design
- no entrance of hot gases
- body material
- special cast iron
- high number of fragments
- increased combat efficiency



### 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

## PYROTECHNIC AMMUNITION WITH IDENTICAL BALLISTICS



81 MM  
SMK-RP  
Mk5

**Filler**  
Red phosphorus

**Terminal effect**  
Smoke generation  
Smoke duration:  
120 sec.



81 MM  
ILL-VIS  
Mk5

**Terminal effect**

Luminosity: 950000 cd  
Illumination duration: 38 sec.  
Descent rate: 5 m/s



81 MM  
ILL-IR  
Mk5

**Terminal effect**

Illumination duration: 40 sec.  
Descent rate: 5 m/s  
high infrared emission  
low visible emission



### MONOBLOC DESIGN OF FIN TAIL

- no corrosion
- no break-up during firing
- weapon cannot be damaged
- improved storage capability



### SPECIAL

- Bomb removal tool



# 81 MM MORTAR AMMUNITION



| HE Mk4 / PRACTICE Mk4<br>SMK-WP Mk4 / SMK-TTC Mk4               | MAX. RANGE WITH<br>1165 MM<br>BARREL | MAX. RANGE WITH<br>1365 MM<br>BARREL | GAS<br>PRESSURE<br>MAX. |
|---|--------------------------------------|--------------------------------------|-------------------------|
| Charge 0  | 562 m                                | 591 m                                | 15 MPa                  |
| Charge 4  | 4274 m                               | 4597 m                               | 50 MPa                  |
| Charge 5  | 5090 m                               | 5334 m                               | 70 MPa                  |
| Charge 6  | 5865 m                               | 6148 m                               | 85 MPa                  |
| Charge 7  | –                                    | 6669 m                               | 90 MPa                  |
| ILL-VIS Mk5 / ILL-IR Mk5<br>SMK-RP Mk5<br>EJECTION HEIGHT 350 M |                                      |                                      |                         |
| Charge 1  | 1425 m                               | 1521 m                               | 25 MPa                  |
| Charge 4  | 4090 m                               | 4254 m                               | 50 MPa                  |
| Charge 5  | 4791 m                               | 4999 m                               | 70 MPa                  |
| Charge 6  | 5263 m                               | 5593 m                               | 85 MPa                  |