COCKERILL® CSE 90LP

Lightweight
Robust
Effective

johncockerill.com/defense
Lightweight, Robust, Effective; the Cockerill® CSE 90LP weapon system delivers serious organic fire support to mechanized formations by day and by night. Based on the latest evolution of the world-famous Cockerill® 90 mm low-pressure gun, the CSE 90LP significantly increases the Unit Commander’s tactical options and autonomy of operation. Hard-hitting, rugged, yet easy to operate and maintain, the CSE 90LP is a real “soldier’s system”.

Value

John Cockerill Defense is acclaimed for its low-weight, high-impact weapon systems. John Cockerill Defense takes an innovative yet practical approach to designing turrets and weapon stations, using flexible modular architectures.

The Cockerill® CSE 90LP is a two-man weapon system that delivers the serious fire-power and flexibility of the proven 90 mm low-pressure weapon to mechanized forces. It does this in a compact package well-suited to light armoured vehicles. The Cockerill® CSE 90LP offers 24 hour day/night operating capability and a wide range of target effects. Ideal for peacekeeping and war-fighting alike, the in-service Cockerill® CSE 90LP provides a uniquely attractive combination of firepower, protection and high mobility.

Firepower

The Cockerill® CSE 90LP weapon system is based on the Cockerill® 90 mm Low Pressure (LP) gun. This weapon is rugged, reliable, effective and established; more than 2,300 of these guns have been sold into service around the world.

• Rifled barrel
• Calibre: 90 mm
• Barrel length: 3.25 m (36 cal)
• High efficiency single-stage muzzle brake
• Concentric hydro-spring recoil mechanism
• Indirect firing capability: 6 km range at 30° elevation
Target Effects

The Cockerill® CSE 90LP is able to fire a wide range of ammunition. 90 mm calibre gives a large payload so the system delivers a significant effect at target, despite being fired from a relatively light armoured vehicle. This gives the commander a wide range of tactical options.

<table>
<thead>
<tr>
<th>Type</th>
<th>Velocity</th>
<th>Effects on targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>APFSDS-T</td>
<td>1,200 m/s</td>
<td>RHA penetration (1,000 m) 100 mm @ 60° NATO</td>
</tr>
<tr>
<td>HEAT-T</td>
<td>865 m/s</td>
<td>130 mm RHA @ 60° NATO</td>
</tr>
<tr>
<td>HESH-T</td>
<td>800 m/s</td>
<td>Bunkers, walls and light vehicles</td>
</tr>
<tr>
<td>HE-T</td>
<td>700 m/s</td>
<td>Lethal radius &gt; 15 m</td>
</tr>
<tr>
<td>CANISTER</td>
<td>700 m/s</td>
<td>Shotgun effect</td>
</tr>
<tr>
<td>SMK-WP-T</td>
<td>700 m/s</td>
<td>Smoke screen</td>
</tr>
</tbody>
</table>

Sub-calibre devices (14.5 mm or 20 mm) are also available for training purposes.

Fire Control

The Cockerill® CSE 90LP turret incorporates a gunner’s day sight as standard, with night vision (image intensifying or thermal imaging) as an option. The weapon is aimed at target using an electro-mechanical gun and turret drive system. This permits fast movement of gun and turret during normal operation, and excellent slow-speed target-tracking for precision engagement. A laser range finder and ballistic computer permit precise target engagement. The gunner’s sight image may be displayed at the commander’s station to permit full command and control.

Support and capability solutions

John Cockerill Defense maintains a ‘cradle to grave’ philosophy to the design, development, introduction into service support and through-life support for all Cockerill® weapons systems. This professional support approach optimizes the total cost of ownership to the customer throughout the entire service life of John Cockerill Defense equipment. This whole-life support includes:

- **Integrated Logistics Support (ILS):** all Cockerill® weapons systems are designed for maintainability from the outset and are intimately supported during introduction into service to the customer organization. This includes the development of technical publications, operator and maintainer training development and delivery up to Master Gunner level, spares and supply chain optimization, special tools and test equipment, life cycle cost modelling and obsolescence management.
- **Through Life Support (TLS):** John Cockerill Defense Through Life Support team offers a Maintenance Management Information System (mmis) that allows the customers to optimize preventive maintenance of their weapons systems. It can also provide dedicated in-country support and engineering support for the mid-life upgrade of all Cockerill® weapons systems and for other manufacturers’ turrets.
- **Training & Simulation:** John Cockerill Defense designs and carries out world class trainings, encompassing the complete training spectrum. Covering both the theoretical and practical aspects, these trainings in particular include exercises with live firing and with John Cockerill Defense simulators. The latter can be virtual immersive, mobile, embedded and inter-connected to allow for training at platoon level. John Cockerill Defense also provides sub-calibre training devices for all Cockerill® weapons systems.
- **Capability Development:** John Cockerill Defense is constantly innovating in order to best anticipate the growing and evolving demands of modern land forces in terms of firepower, mobility and protection requirements. These innovations share the same objective: to provide the optimal level of capability and support to in-service and new Cockerill® weapons systems.
Compatible with a wide range of light armoured vehicles

Main Characteristics

- Two-man turret
- Wide range of ammunition and target effects
- Low weight (high mobility)
  - Ballistic protection: standard 7.62 mm NATO
  - Basic: Stanag 4569-level 1
  - Maximum: Stanag 4569-level 4
  - Electro-mechanical gun and turret drive
  - Wide range of sight and fire control system options
    - Day/night (I2 or TI)
    - Laser range finder
    - Ballistic computer
  - Coaxial and (optional) pintle-mounted 7.62 mm machine guns
  - Direct-view optics
  - Optional multi-purpose grenade launchers