

Artillery

**Advanced
Artillery
System**

SIAC155/52





Advanced artillery system



The SIAC is a state-of-the-art 155/52 caliber towed howitzer with self-propelled capabilities due to its integrated auxiliary power unit.

The SIAC's advanced design meets the most demanding requirements of modern field artillery and coastal defence missions, featuring rapid deployability, excellent first round hit probability and a swift “shoot and scoot” capability for higher survivability.

GDELS' Automatic Gun Laying System (AGLS), Digital Navigation Aiming and Pointing System (DINAPS) and Fully Automatic Ramming System (FIRS) are integrated in the SIAC for superior performance in the battlefield.

GDELS offers a worldwide and well proven Integrated Logistics Package for the SIAC howitzer.

The 155/52 SIAC Howitzer is one of the world's most technologically advanced Artillery Systems, capable of delivering ordnance on target from the first round fired



SIAC main features

- 155/52 towed howitzer with self propelled capability
- NATO joint ballistic MoU compatible
- Firing range over 40 km (with Base Bleed ammunition)
- Quick entering in position and moving away in autonomous mode
- 10 rounds in the first minute
- AGLS (Automatic Gun Laying System)
- DINAPS (Digital Navigation Aiming and Pointing System)
- FIRS (Fully Integrated Ramming System)

PHYSICAL FEATURES	SIAC
Mass	14,300 Kg
Overall Dimensions	
Length in travel position	10.35 m
Maximum Width	2,82 m
Maximum Height	2.20 m
Ground Clearance	0.3 m

FUNCTIONAL FEATURES / PERFORMANCES	SIAC
Operational Times	
Entering the position	1,5 min
Leaving the position	1,5 min
Navigation	
Inertial & GPS Hybrid Reference Unit	Yes
Towed Truck Display	Yes
Driver Display	Yes
Fire Control & Aiming	
Ballistic Computer	Yes
Muzzle Velocity Radar	Yes
Chamber Temperature Sensor	Yes
Recoil Meter	Yes
EFC Rounds Counter	Yes
Automatic Laying	Yes
Automatic Firing	Yes
Indirect Fire Optics	Yes
Direct Fire Optics	Yes
Software Training Module	Yes
Command, Control, Communications	
C2 Linkable	Yes
Radio Integration	Yes
Tow Truck Integration	
Mechanic, Pneumatic, Electric	Yes
Command & Control, Navigation	Yes
Communications	Yes

Quick deployability
Extreme accuracy
Superior fire rate & power
Exceeding tactical and strategic mobility





WEAPON SYSTEM

- Barrel: Single block autofrettaged
- Caliber: 155 mm
- Tube length: 52 calibers
- Grooving: 60 grooves dextrorsum
- Turn grooving: 1 turn in 20 calibers
- Chamber volume: 23l
- Breech type: Screw
- Obturation: Bange
- Breech action: Automatic
- Primer loading: Automatic Primer Magazine (10 primers)
- Muzzle brake: Closed, 3 stages
- Brake: Recoil and counter recoil, hydraulic rod with absorber
- Counter recoil mechanism: Oleo-pneumatic

AUTONOMOUS MOBILITY

- Maximum road speed: 18 km/h
- Maximum sand-track speed: 12 km/h
- Maximum off-road speed: 8 km/h
- Maximum slope: 30%
- Fording capacity: 0.7 m
- Turning radius: 13 m

TOWING VEHICLE INTEGRATION

- Command and Control Unit connection
- Inertial Navigation
- Howitzer systems control
- Communications
- Can be towed by any 10 ton class vehicle

NAVIGATION SYSTEM

Hybrid (Inertial + GPS) Navigation System with:

- Ring laser gyro
- Accelerometers
- GPS
- Kalman's Filter algorithms

FIRING CAPABILITY

- Ballistic computer providing fast firing data calculation
- Ammunition: All NATO compatible ammo and others
- Range:
 - Conventional ammo: 30 km
 - With Base Bleed ammo: 40 km
 - With Special ammo: up to 60 km
- Burst rate:
 - 10 rounds in the first minute
 - 3 rounds in the first 11 seconds
 - 4 rounds in the first 20 seconds
- Sustained fire rate: 2 rpm
- MRSI: 4 rounds

HIGHER SURVIVABILITY

- Entering in position timing: 2 minutes
- "Shoot and scoot" capability
- Moving away timing: 1.5 minutes

COMMAND AND CONTROL COMMUNICATIONS

- Ballistic computer
- Muzzle velocity radar
- Chamber temperature sensor, recoil meter sensor and EFC round counter SW controlled
- Integration with in-service C2 / C4 ISR
- Radio communications

The Transatlantic Partner for Land Defense in Europe

GENERAL DYNAMICS
European Land Systems

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