



Radar & Advanced Targeting

MIRACH 100/5 INTEGRATED AERIAL TARGET SYSTEM

Mirach 100/5 is the standard high-performance reusable, multi-threat target, designed and manufactured by Selex ES. In use with worldwide Armed Forces to train and qualify major Weapon Systems, Mirach 100/5 delivers reliability and manoeuvrability, making it the best state-of-the-art, multirole, target drone system on the market.

GENERAL DESCRIPTION

The system is controlled by a modern Ground Control Station that allows mission planning and re-tasking, mission rehearsal and play back, operators training.

A wide and flexible selection of mission payloads, installed inside the fuselage and under the wings, effectively complies with the requirements of most complex missile systems engagement scenarios for training and weapon systems test and evaluation.

Certified by the Italian Joint Forces in 1998, since its debut on the market, the Mirach 100/5 System has been in use by the Armed Forces in the UK, Italy, France, Argentina, Belgium and Denmark, and has been continuously upgraded.

The Mirach 100/5 Aerial Target System simulates most of the present-day threats and their performances, among which very-low-altitude sea skimming missions, tight formation flights and 3D manoeuvres up to instantaneous 8g sustained load factors, covering a flight envelop between 3 and 12.500 metres above sea level. The top-performing Mirach 100/5 System combines great operational flexibility (e.g. rapid adaptation to mission planning changes) with a NATO certified Mission Reliability of more than 98%.

MAIN FEATURES

- State-of-the-art High Subsonic Aerial Target System
- Routinely used by major European Armed Forces
- NATO Certified Mission Reliability >98%
- Lowest Overall Life Cycle Costs
- Simulates most present-day threats in terms of kinematics and signatures, including: Sea Skimming ASM, Fighters and strike aircrafts, Cruise missiles, Fast UAS
- Ground or sea recovery with respectively 1 or 3 hours Turn Around Time
- Customised, turn-key configurations.

The Mirach 100/5 target drone is launched using two JATO boosters, thus offering a full day/night - adverse weather capability, from fixed ground (e.g. ranges) and from mobile facilities (e.g. ships). It can be recovered on ground or at sea, with a turn around time of less than one hour for ground recovery and 3 hours for sea recovery.

A fully automatic pre-flight test prevents system failures in order to increase overall mission reliability. Furthermore, an operator is not required to manually perform the check, thus optimising personnel involvement and safety.

IMPROVED AND INCREASED PERFORMANCES

Selex ES has also developed a specific payload for the Mirach 100/5, consisting of an expendable air launched, jet-propelled, autonomous sub-target, named Locusta.

This allows a direct hit on an independent fast flying threat without establishing a "friend or foe" procedure, thus improving the realism of the tactical scenario in the most cost-efficient way.

The Locusta Drone can be provided as a stand-alone product and can be fired from an aircraft or helicopter.

TECHNICAL SPECIFICATIONS

Physical

Length	4.07m
Wingspan	2.30m
Height	0.89m
Fuselage Diameter	0.40m
MTOW	330Kg

Performances (ISA conditions)

Endurance	90 minutes
Max Speed	Mach 0.85
Min Altitude	3m
Max Altitude	12,500m
Load Factor	Instantaneous: 8g Sustained: 6g
Max payload	> 60Kg

Payloads

- Active and passive RCS augmenters
- IR augmenters
- IR and chaff dispenser (IRCM/A and IRCM/M)
- 2 Towed body systems (IR, active/passive RF Tow targets)
- 2 Air launched autonomous expendable sub-targets (Locusta)
- Missile seeker head simulators (eg. AN DPT-1)
- Mirach 100/5 - Integrated aerial target system

