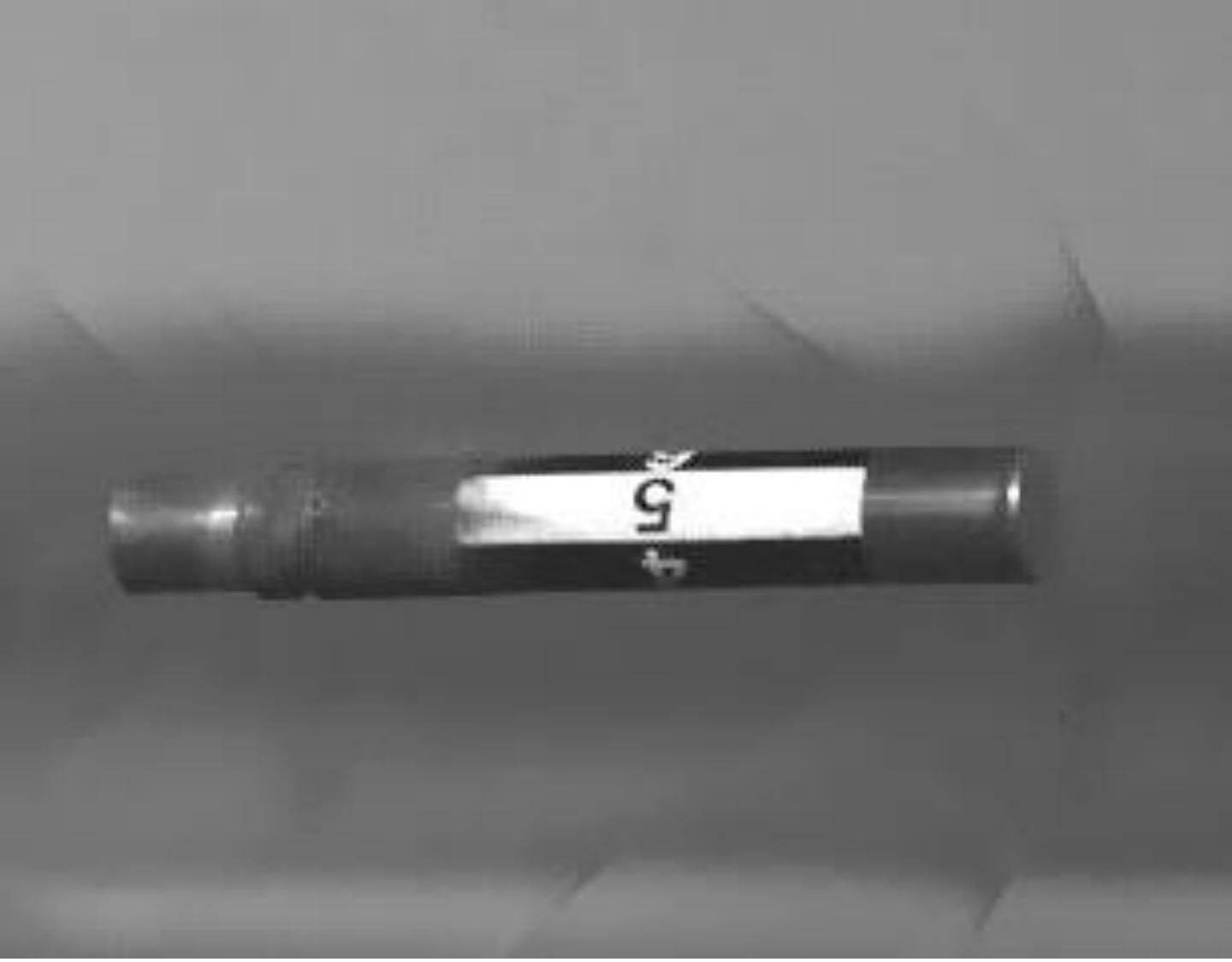

MIRROR TRACKER

HIGHEST AVAILABLE ACCURACY FOR TRACKING MOUNTS, FIXED CAMERAS OR STORES RELEASE

The Trajectory Tracker(from Specialized Imaging) and the Flight Follower (from DRS) has been in use for several years providing images of ballistic and non-ballistic projectiles using a high speed camera in combination with a rotating mirror to follow the flight path. This allows detailed visual observation of the projectile as well as the possibility to analyze data mathematically.

POWERFUL

Handles and analyses at rapid speed large quantities of data from high speed cameras and other sensors. The operator can choose between a large number of tracking algorithms and track an unlimited number of points throughout the image sequence.

SYNCHRONIZED

The User Interface is fully synchronized: any change of parameters or set-up will directly effect all parts of the tracking session, updating results, graphs and tables.

COMPATIBLE

The system handles all major image formats on the market and has options to control most of the available high speed cameras on the market.

FLEXIBLE

The flexible windows based user interface makes it fast and easy to find the best setup for your application

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ADVANCED TECHNOLOGICAL SYSTEMS

Milano Systems S.r.l.
Via Umbria 10 – 20090 Segrate (MI) Italia
www.milanosystems.it

image SYSTEMS
MOTION ANALYSIS

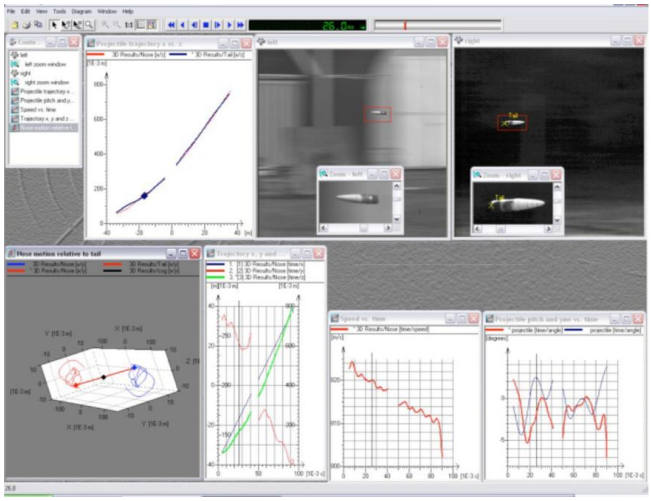
USER INTERFACE

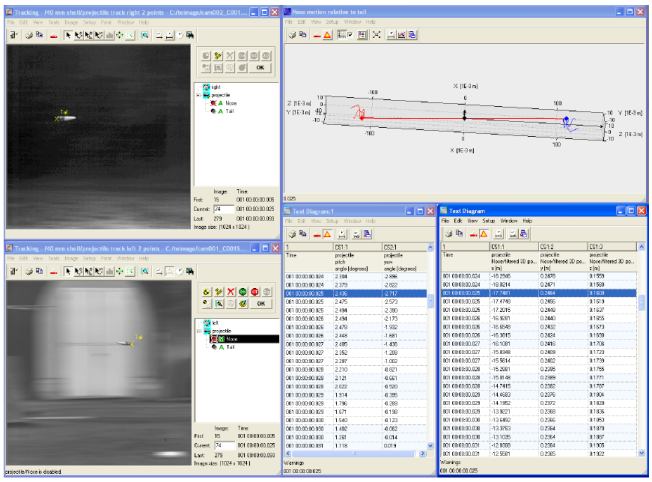
The images, as seen from camera(s), are recorded and together with the exact angle of the mirror it is possible to visualize the flight path and also to analyse object characteristic; typically 2D/3D position, attitude (pitch and yaw) and roll rate.

When two Trajectory Trackers or Flight Followers are used data can be calculated in three dimensions. The camera(s) first have to be calibrated in combination with the mirrors using a series of surveyed targets, preferably along the intended flight path.

This is done by recording images of the surveyed targets as the mirror(s) rotate and then calculating the effective camera position and orientation as a function of the mirror angle, using the tracked x & y position of the reference targets in the 2D images.

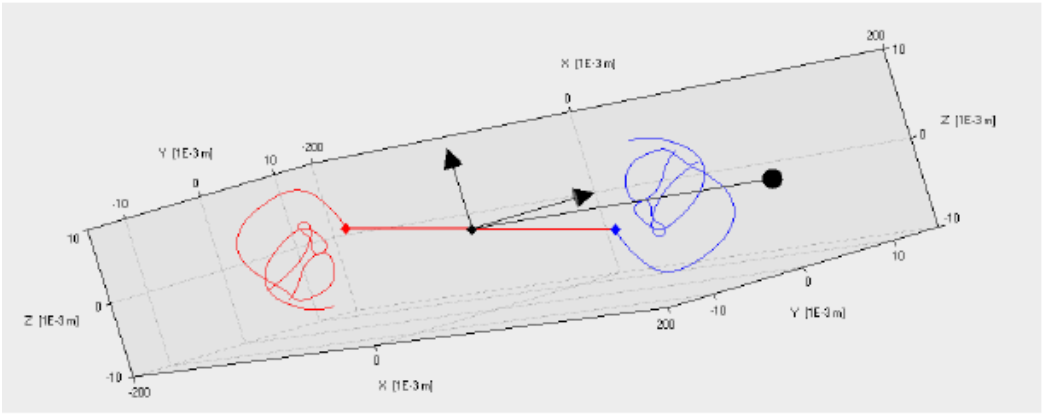
When the projectile is fired, a trigger is used to provide a common time base and, knowing the mirror angle, for each camera used the tracked 2D x & y position of the projectile can be measured. From the operator point of view prepared templates will be used. A template contains all the settings, connections, graphs etc needed for a repeatable test.





TYPICAL OUTPUT

	One camera	Two cameras
2D	OK	OK
3D	-	OK
pitch		OK
yaw		OK



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