

MIRROR TRACKER

HIGHEST AVAILABLE ACCURACY FOR MIRROR TRACKING TESTS

Mirror Trackers, such as the Trajectory Tracker (from Specialized Imaging) and the Flight Follower (from DRS) provides images of ballistic and non-ballistic projectiles using a high speed camera in combination with a rotating mirror to follow the flight path. Mirror Trackers in combination with Image System's Mirror Tracker analysis software allows for detailed visual observation of the projectile as well as advanced analysis of the data derived.

POWERFUL PLATFORM

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SYNCHRONIZED

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

WIDE COMPATIBILITY

The application is compatible with all major camera brands on the market. External data from GPS and other instrumentation data can easily be imported and synchronized with the image data.

FLEXIBLE

The flexible and intuitive windows based user interface makes it fast and easy to find the best setup for your mirror tracking scenario.

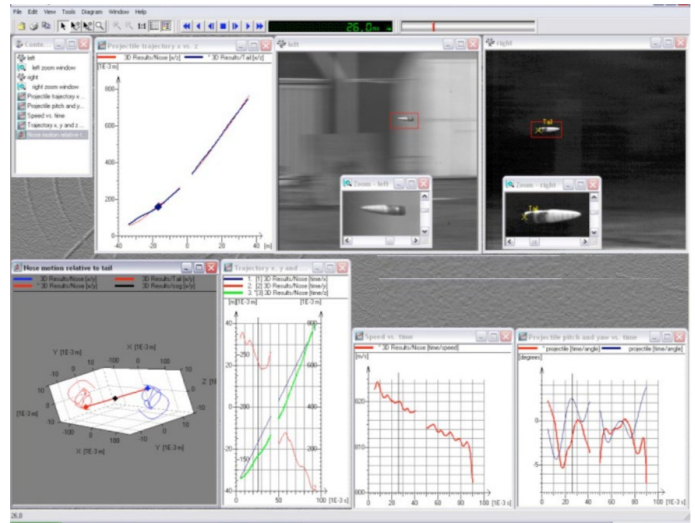
USER INTERFACE

By combining the image sequences from the cameras, with the exact angle of the mirror it is possible to visualize the flight path and analyze the motion of the projectile; typically 2D/3D position, attitude (pitch and yaw), roll rate, velocity and acceleration.

When two Trajectory Trackers or Flight Followers are used data can be calculated in up to six dimensions.

To calibrate the cameras and mirror trackers prior to the test, the operator records images of surveyed reference targets along the intended flight path by rotating the mirrors. The Mirror Tracker software then calculates 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 and graphs needed for a repeatable test.



TYPICAL OUTPUT

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

