ARENA
EXPLOSION ANALYSIS

ARENA is a dedicated analysis software for explosion and arena tests. The software is a derivative from the Track-Eye product line and optimizes the usability and the repeatability of arena testing. During an arena test, the ARENA application collects inputs from one or several cameras monitoring a single or multiple screens which are pierced by shrapnel and particles. The location and timing of each piercing is recorded.

POWERFUL

Given the often high number of shrapnel and particles, ARENA features an automated analysis process designed to analyze large amounts of data at rapid speeds.

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 in the process.

COMPATIBLE

ARENA 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 test data.

FLEXIBLE

The flexible windows based user interface makes it intuitive to use and is optimized for arena testing.

image
SYSTEMS
MOTION ANALYSIS

FUNCTION

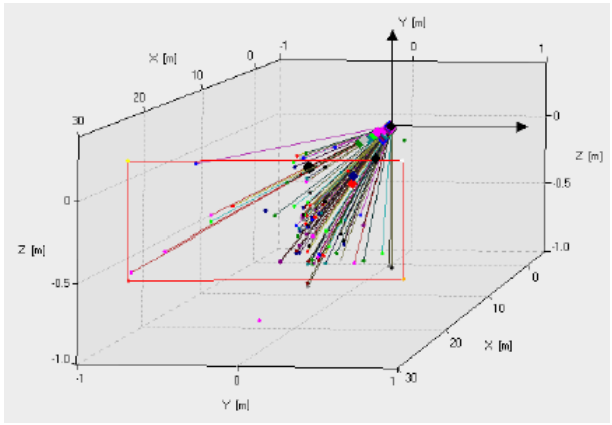
1. Shrapnel and particles ejected from an explosion in the center of the testing grounds penetrate target screens mounted at a distance from the explosion.
2. Cameras monitor the screens and record images of the event. The position of each screen has been entered into ARENA with surveyed 3D coordinates acting as reference points.
3. ARENA identifies the shrapnel and particles the moment they hit the target screens and then proceeds to quantify and visualize the passage through the screen.

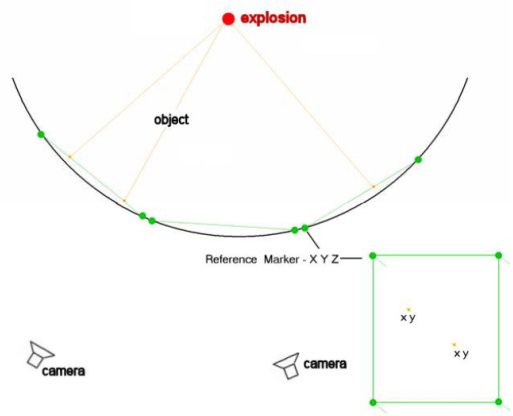
VISUALISATION

ARENA includes dedicated visualisation tools so that the operator easily monitors the automatic tracking as the objects appear from the explosion.

DATA OUTPUTS

- Time of impact
- Area of impact
- Azimuth/elevation of hit (as seen from the origin)
- Panel hit (in a multi-screen scenario)
- Average Speed to Screen for fragments
- Max, Min and Average of these averages for the fragments
- Fragments speed versus angle
- Number of fragments versus angle
- Total number of fragments versus time





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