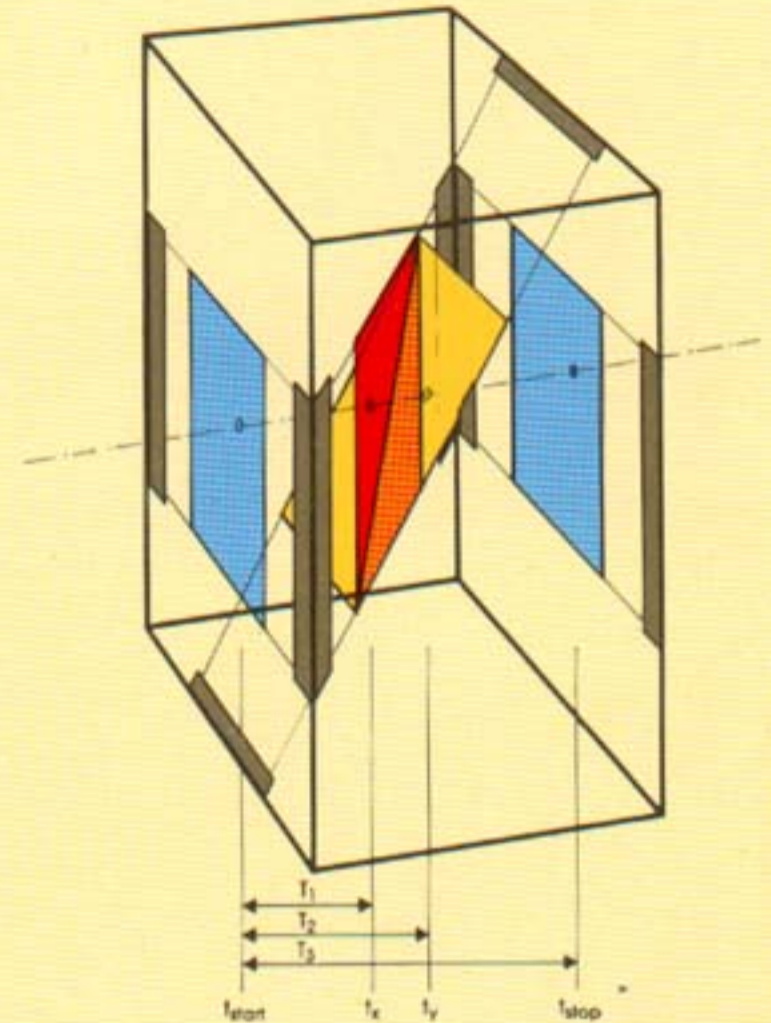


Measuring principle

The figure illustrates the basic measuring principle

- t_{start} ... (projectile passage) start-screen
- t_x ... (projectile passage) X-screen
- t_y ... (projectile passage) Y-screen
- t_{stop} ... (projectile passage) stop-screen
- T_1 ... flight time from start screen to X-screen
- T_2 ... flight time from start screen to Y-screen
- T_3 ... flight time from start screen to stop screen



The evaluation of the X- and Y-coordinates of each hit is based on flight time measurements as the projectile passes the four sensor screens. The

sensor screens are arranged in such a way that the exact hit position can be calculated from the flight times of the projectile.

System description

The four analog signals from the sensor screens of the B 570 Sensor Array are converted into digital pulses in two Control Units B 470 CU and transferred as trigger inputs to the Time Measuring Unit B 415 UTS.

The built-in microprocessor evaluates the flight times and transfers the data to the Coordinate Processor B 570 CP via RS 232 interface.

In the Coordinate Processor B 570 CP the flight times are converted into hit coordinates. The results are displayed in numerical and graphical formats on the VDU and are also presented on a graphics printer by pressing the corresponding key.

Furthermore, the results can be stored on a floppy disc for later evaluation. Important operating functions can be controlled via a remote control panel at the firing place.

