

Instructions for How to Calibrate a Radar Speed Gun.

There are many types of radar speed guns and they can all be used to set targets provided that the gun has been calibrated for those specific targets. We need to remember that Radar guns measure 'speed' (miles per hour or kilometres per hour) and calibration allows it to be converted into distance.

The biggest problem is getting everyone to measure the targets in the same place. By far the best place to measure the target is at the first possible point, which is right behind or beside the trap itself, therefore getting the speed of the target at its fastest initial velocity.

Every brand of trap throws targets at different velocities. Therefore, each ground will need to calibrate their machines and targets, to their own brand of radar gun.

Example: A Matterelli machine throwing CCI targets will be different to a Promatic machine throwing Laporte targets. One speed from a radar gun does not equal the same distance for different traps, especially with fast off the arm or slow off the arm machines.

Calibration

You need to wait for a perfectly still day and set the height and distance of the target by the normal method. When the machine is throwing a consistent target, you can then measure the speed with the radar gun. That speed then becomes the calibrated measurement for that height and distance, for that particular target coupled with that particular trap machine. Speed lists can then be kept especially if a ground has multiple different trap makes.

If a ground has terrain problems then the radar gun is calibrated by putting the trap elsewhere on the shooting ground and test firing until the correct height and distance is achieved, then the speed is recorded with the radar gun.

For Skeet this would mean sending the target through the height hoop to the correct distance for either English Skeet or Olympic Skeet and measuring speed.

For the trap disciplines, both OT and UT use a set of schemes that detail the height and distance for each target to be thrown. Therefore, the speed would have to be measured for each of the distances at each of the heights (1.5m, 2m, 2.5m, and 3m). The speed results can then be listed on a specific grid for that specific scheme.

You can calibrate each part of a scheme by using one machine. Normally this is trap 8 on an Olympic Trap layout or trap 3 on a UT layout.

You must remember that as the machine springs slacken over time, so does the velocity. Therefore, over the years it is advisable to check or re-calibrate depending on the usage. If you change either your radar gun or your trap/clay combination, you will need to do a new calibration exercise.