6 May 2025

Notice to Manufacturers

Notice of Proposal - Mechanical Golfer Setup for the Overall Distance Standard

On 11 February 2025, The R&A and the USGA distributed an Area of Interest noting an interest in exploring whether the reproducibility of the Overall Distance Standard (ODS) test could be improved through setting the speed of the USGA/R&A Calibration ball ("the control ball") used for setting up the mechanical golfer.

The attached research paper demonstrates that excellent reproducibility is achieved by controlling the speed of the control ball when setting up the mechanical golfer. When specifying the required speed of the control ball when struck by the mechanical golfer (V_{ALC}) it is necessary to account for both the age and condition of the ball, both of which can affect the resultant ball speed. Regardless of ball age or condition, there is a very strong correlation ($R^2 = 0.96$) between V_{ALC}, its coefficient of restitution (e) and its contact time (t_c) determined at an impact speed of 143.8 ft/s (as derived from the Initial Velocity test):

$$V_{ALC} = 180.13 + 123.712e - 0.04309t_C$$

where t_c is reported in microseconds and V_{ALC} is calculated in ft/s.

The R&A and the USGA are proposing an update to the Overall Distance Standard and Symmetry Test Protocol which will require the control ball speed to meet the expected value as defined by this equation, using values of e and t_c which were recently measured using the Initial Velocity test.

Clubhead speed would remain specified at 120 mph but to avoid over-constraining the test setup would be considered a reference value only.

Manufacturers are invited to offer comments on this notice. Please send these communications by 4 June 2025 to Dr. Steven Quintavalla at squintavalla@usga.org