

PO1088

**Wear measurement in real time with a new ball cratering equipment**Reinhold Bethke<sup>1</sup>, Nadine Noecker<sup>1</sup>, Michael Eder<sup>2</sup><sup>1</sup>Fraunhofer IST, Braunschweig, Germany <sup>2</sup>BAQ, Braunschweig, Germany

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Wear measurements using a modified ball cratering arrangement operated in a new way wherein the crater-depth is measured in real time reveal additional information on the wear behaviour of coatings and materials. The position of the rotating sphere is controlled during the measurement by a sensor. The crater-depth (wear coefficient) is displayed simultaneously. This method allows realizing measurements of the wear behaviour depending on the pressure, different to the traditional ball cratering operation. The study of dynamic wear behaviour provides additional more useful information. The Poster will show the modified ball cratering test, the technical innovation and fields of application (hard coating and surface-treated materials)

**Keywords**

ball cratering test

crater depth

in situ wear measurement