

SLEEVE CONE ANGLE MEASUREMENT SYSTEM

ABSTRACT

For repeatably and accurately measuring characteristics of workpieces, such angle of taper of a conical cavity defined by a workpiece, examples may include a system having a stage movable in predictable and repeatable increments, and a compliancy fixture. The compliancy feature may include a sapphire to metal interface. Such examples may also include a mechanism, such as an elongate body or an arm, for alternately disposing each of a first object of a first size and a second object of a second size in the conical cavity. Examples may use spherical objects, or portions thereof. Systems further include at least one sensor for determining positions of the first and second objects in the conical cavity and logic for determining the characteristics, such the taper angle, based on the position of the first object and the second object in the conical cavity.

FIGURE 6