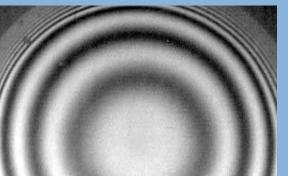


## Sliding spindle sliding shoe



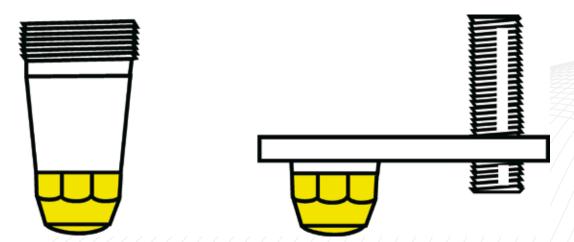






The task of the diamond on the sliding spindle and sliding shoe is to maintain a consistent, defined distance between the stylus diamond tip and the copper surface. The cutting depth for the first printing tone is determined using the sliding spindle in the case of fine screen systems up to the K306 and defined engraving current at the engraving amplifier, and using the sliding shoe in the case of coarse screen systems (40 and 48 screen). The 0 method, Sprint Easy or PR (test cut) method is used for the K405 system onwards.

The spherically ground, octagonal diamond of the sliding spindle is soldered directly into the fine pitch threaded spindle. The diamond therefore also rotates when the spindle is adjusted. In contrast, the

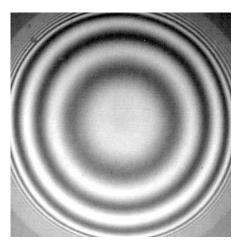


diamond on the sliding shoe used for coarse screen systems always retains its position when the distance between stylus and cylinder is changed. The cut of the diamond is spherical in both cases and is intended to ensure optimum support on the cylinder with the smallest possible contact surface.



## **Normal Wear**

When used over a long period, this diamond is also subject to mechanical wear. With the sliding spindle, however, this wear is not especially noticeable because the position of the diamond is changed each time the sliding spindle is adjusted. After a certain time, the spherical tip of the sliding spindle develops facets which may be more or less pronounced depending on the length of time that the spindle was held at a particular position.



The fixed sliding shoe used for coarse screen systems, however, grinds down continuously against the cylinder diameter without changing position.

This grinding process extends over a relatively long period and depends on the above mentioned criteria such as copper hardness and cylinder surface characteristics.



## Correct handling

If the wear of the spindle diamond has progressed to a point where the edge of one of the ground facets cuts into the copper cylinder and the configuration of the engraving system does not allow the spindle to be rotated, the sliding spindle must be changed and reground. (In a worst case scenario, the edge can act like a turning tool!)

In case of the sliding shoe used for the coarse screen system, changing or regrinding becomes necessary when scratches on the copper indicate that the diamond has been completely ground down on the diameter of the copper cylinder.

