

CLAMPING APPARATUS FOR FIXING A COLLET TO A CHUCK

Abstract of the Disclosure

The clamping apparatus comprises a chuck member and a collet member to be clampingly fixed thereto. The collet member comprises, at its rear side, a peripheral shoulder. The top side of this shoulder is provided with a thrust surface adapted to engage radially displaceable clamping balls of the chuck member. The bottom side of the shoulder is provided with four centering grooves, corresponding in size and location to and cooperating with four centering cams provided in the chuck member. Upon clamping the collet member to the chuck member, the collet member is positioned in X- and Y-directions as well as regarding the angular orientation around the Z-axis by means of the centering cams of the chuck member engaging the centering grooves of the collet member. For defining an exact position of the collet member in Z-direction, the collet member is provided with an annular rear surface adapted to rest on Z-reference surface portions of the chuck member upon clamping the collet member to the chuck member.

(Fig. 1)