

CONSTITUENT MEMBER OF COLLET CHUCK, COLLET AND FASTENING NUT AND COLLET CHUCK

Abstract

It is an object of the invention to provide a constituent member of a collet chuck, a collet and a fastening nut as well as a collet chuck capable of reinforcing a holding force of a tool. As means therefor, in a collet chuck 10 including a chuck body 20 having a taper hole 22 in an inwardly converging shape, a diameter contractable collet 40 having a first taper face 44 fitted to the taper hole 22, and a fastening nut 60 screwed to the chuck body 20, it is characterized to include a force increasing collet 80 with a first contact face 82 and a second contact face 86 respectively brought into contact with a second taper face 46 formed at an outer peripheral face of a front end portion of the collet 40 and inclined to reduce an outer diameter as proceeding to a front end thereof, and a third taper face 70 formed at an inner peripheral face of a front end portion of the fastening nut 60 and inclined to reduce an inner diameter as proceeding to a front end thereof, wherein in a state of fastening the fastening nut 60 to the chuck body 20, a front side of the first contact face 82 of the force increasing collet 80 is not brought into contact with an outer peripheral face of the collet 40 in a state of pressing the collet 40 frontwardly.

Figure 2