

The invention relates to metal forming and can be used at rolling infinite bodies of revolution such as flat rings and disks. An asymmetric circular rolling mill comprises two conical disk rolls, which creates an area of deformation. The axles of conical rolls are arranged in parallel to each other in a vertical plane, and the distance between them makes a half of the maximum diameter of conical rolls. The invention reduces the metal resistance to plastic deformation, as well as it provides for opportunity of improvement of rolling thin range of rolled products and obtaining accurate dimensions of finished products.