Method for cutting workpiece with wire saw

Abstract

Provision of a method for cutting a workpiece with a wire saw whereby a large-diameter workpiece can be cut accurately and efficiently without any defects such as breakage occurring.

When cutting a workpiece, a saw wire 1 is positioned so that at entry/exit points A which are the two ends of an meshing area M, the saw wire 1 is located above the surface of an abrasive grain slurry 6, and is not immersed into the abrasive grain slurry 6. Furthermore, the saw wire 1 and a workpiece W are immersed into the abrasive grain slurry 6 so that the surface of the abrasive grain slurry 6 is located between the entry/exit points A of the saw wire and a maximum bending point B where the saw wire 1 is bent most in the direction in which the workpiece is pushed.

Moreover, all nozzles 4r and 4l are positioned in a manner that sprayed-on points P to which the abrasive grain slurry 6 is supplied, are located on the outside of the entry/exit points A of the saw wire 1.

Fig. 2