WHAT IS CLAIMED IS:

1. A cleaning tool mountable to a spindle configured such that an annular cutting blade containing abrasive grains is mountable thereto, the cleaning tool being configured to remove swarf that has been generated during processing of a workpiece by use of the cutting blade and that is present in a processed region processed by the cutting blade of the workpiece, from the processed region, wherein

the cleaning tool has in its central part thereof, an opening for mounting to the spindle,

the cleaning tool is formed in an annular shape from an elastic material having a Vickers hardness of less than 10.6 GPa and does not contain abrasive grains, and

the cleaning tool has a width (thickness) smaller than a width of a processing mark (kerf) formed in the processed region by the cutting blade, such that the cleaning tool is insertable into the processing mark.

2. A workpiece processing method to be used when processing a plate-shaped workpiece, the workpiece processing method comprising:

a processing step of causing a cutting blade being rotated to cut into the workpiece while supplying liquid

to the cutting blade, to thereby process the workpiece; and

a swarf removing step of causing a cleaning tool being rotated to pass through a processed region processed by the cutting blade of the workpiece and formed with a processing mark while supplying liquid to the cleaning tool, to thereby remove swarf present in the processed region,

wherein the cleaning tool is formed in an annular shape from an elastic material having a Vickers hardness of less than 10.6 GPa and does not contain abrasive grains, and has a width (thickness) smaller than a width of the processing mark such that the cleaning tool is insertable into the processing mark.

3. The workpiece processing method according to claim 2, wherein,

the processing mark is a rectilinear processing mark formed by causing the cutting blade to cut into a rectilinear scheduled processing line set on the workpiece.

4. The workpiece processing method according to claim 2, wherein, in the swarf removing step, the liquid supplied to the cleaning tool contains a chemical agent having a cleaning power.