

Abstract

A water circulating device (30) configured to cool a spindle section (6) with use of first water (W1) or second water (W2), the spindle section (6) being configured to rotate a blade (8) for cutting an object to be cut (Sb), includes: a tank (31) configured to store the first water (W1); a pump (32) connected to the tank (31) and configured to force out the first water (W1) toward the spindle section (6); a circulation flow path (F) configured to let the first water (W1) flow from the tank (31) through the pump (32) and the spindle section (6) back to the tank (31); a switching valve (34) configured to cause the second water (W2) to flow through the circulation flow path (F) instead of the first water (W1); and a control section (50) configured to control operation of the pump (32) and operation of the switching valve (34), the control section (50) being configured to, in response to detecting an abnormality of circulation of the first water (W1), control the switching valve (34) to cause the second water (W2) to flow through the circulation flow path (F).

[Fig. 3]