

ABSTRACT

The application relates to the technical field of wire cutting, and specifically provided are a wire cutting machine and a control method therefor. The wire cutting machine comprises a wire saw unit; the wire saw unit comprises a wire winding assembly; the wire winding assembly comprises a wire dispensing and retrieving mechanism (2) and a tension mechanism (4), wherein the wire dispensing and retrieving mechanism (2) comprises: a wire dispensing and retrieving roller component (21), which comprises a rotatable wire dispensing and retrieving roller (211); and a wire guide component (22), which can drive the wire dispensing and retrieving roller (211) to move in the axial direction thereof; wherein the tension mechanism (4) comprises: a tension wheel (41); and a driving part, which is connected with the tension wheel (41); the tension wheel (41) is at least able to rotate on the basis of torque provided by the driving part; wherein the side of the wire guide component (22) away from the wire dispensing and retrieving roller component (21) is arranged on a side wall of a winding chamber, and/or the tension mechanism (4) is arranged on the top wall of the winding chamber, and/or the wire dispensing and retrieving roller component (21) is arranged at the bottom of the winding chamber. By means of this structure, it is hoped that a wire guide wheel and a direction changing wheel can be omitted while still ensuring the operational reliability and cut quality of the wire cutting machine. Also, it is hoped that a combination of side hanging and upside-down hanging optimizes the layout of the winding chamber.

[Fig. 5]