CLAIMS

1. A wire cutting machine, comprising a winding chamber, characterized in that the wire cutting machine comprises a wire saw unit, wherein the wire saw unit comprises a winding assembly, and the winding assembly comprises a winding/unwinding mechanism and a tension mechanism; wherein the winding/unwinding mechanism comprises: a winding/unwinding roller assembly comprising a rotatable winding/unwinding roller; and a wiring assembly which is capable of driving the winding/unwinding roller to move in its axial direction; wherein the tension mechanism comprises: a tension wheel; and a driving component connected to the tension wheel, wherein the tension wheel is at least capable of rotating based on the torque provided by the driving component; wherein one side of the wiring assembly that is away from the winding/unwinding roller assembly is arranged on a side wall of the winding chamber; and/or the tension mechanism is arranged on a top wall of the winding chamber; and/or the winding/unwinding roller assembly is arranged at the bottom of the winding chamber.

2. The wire cutting machine according to claim 1, wherein the tension wheel is at least capable of generating a movement around a first axis based on the torque provided by the driving component, the wire saw unit comprises a cutting mechanism, and the cutting mechanism is arranged between the winding/unwinding roller and the tension wheel, so that a cutting wire unwound from the cutting mechanism is guided to the tension wheel, or a cutting wire unwound from the tension wheel is guided to the cutting mechanism, thereby allowing the cutting wire to reciprocate between the winding/unwinding mechanism, the tension mechanism, and the cutting mechanism.

3. The wire cutting machine according to claim 1, wherein the wire cutting machine comprises a frame and a wire passing mechanism, the frame is formed with a cutting chamber, and the wire passing mechanism comprises a wire passing plate; the wire cutting machine comprises a sealing assembly, and the sealing assembly comprises: a sealing substrate, which is provided on the frame and is formed with a chamber capable of collecting a cutting liquid from the cutting chamber, wherein a first movement port and a second movement port are provided on the frame and/or the sealing substrate, and the wire

passing mechanism is capable of penetrating into the cutting chamber through the second movement port and the first movement port; and a pressing assembly, which is arranged at the first movement port and/or the second movement port, wherein the pressing assembly comprises a first pressing component and a second pressing component, the wire passing mechanism passes through a space between the first pressing component and the second pressing component, and the first pressing component and the second pressing component can abut to the wire passing mechanism.

4. The wire cutting machine according to claim 3, wherein the pressing assembly comprises a pressing support component, and the first pressing component and/or the second pressing component are arranged on the sealing substrate through the pressing support component; wherein the pressing support component is arranged on the sealing substrate in a movable or deformable manner; preferably, the pressing assembly is arranged at the first movement port; and/or a flexible shielding component is arranged at the second movement port; preferably, the wire passing plate has a routing groove capable of accommodating the cutting wire, and the first pressing component or the second pressing component abuts to a position of the wire passing mechanism that corresponds to the routing groove.

5. The wire cutting machine according to claim 3, wherein the sealing assembly comprises: a reflux groove, wherein the reflux groove is arranged at the bottom of the chamber, and the cutting liquid entering the chamber can flow back to the cutting chamber through the reflux groove; and a shielding component, wherein the shielding component is arranged on the sealing substrate, and at least a part of the shielding component is located above the reflux groove, so as to shield the cutting liquid splashed out from the reflux groove.

6. The wire cutting machine according to claim 5, wherein the shielding component comprises a shielding component substrate, and a shielding structure extends from a position of the shielding component substrate that corresponds to the reflux groove; preferably, there are multiple shielding structures, and at least some of the multiple

shielding structures have a communication structure therebetween; preferably, the shielding structure is arranged at a position of the sealing substrate that is near the second movement port.

7. The wire cutting machine according to claim 3, wherein the sealing assembly comprises a blocking component, which is arranged at a position of the sealing substrate near the top or arranged above the sealing substrate to block the cutting liquid in the cutting chamber from falling into an area corresponding to the sealing substrate; preferably, the blocking component is arranged at a position of the sealing substrate that is near the first movement port.

8. The wire cutting machine according to claim 7, wherein the blocking component is arranged in a movable manner at a position of the sealing substrate near the top or arranged above the sealing substrate; preferably, the blocking component is arranged at a position of the sealing substrate near the top or arranged above the sealing substrate in such a way that it can be flipped.

9. The wire cutting machine according to claim 3, wherein the sealing substrate comprises a side surface portion and a top surface portion; the side surface portion, the top surface portion and the frame form the chamber; the frame has a step surface at a position corresponding to the sealing assembly, wherein the side surface portion, the top surface portion and the step surface form the chamber.

10. The wire cutting machine according to claim 3, wherein the wire passing plate has a routing groove capable of accommodating the cutting wire, and the wire passing mechanism is provided with a blowing assembly; the routing groove is provided with an air outlet, and the blowing assembly can ventilate the routing groove through the air outlet and thus blow off the cutting liquid on the cutting wire; preferably, the air outlet is arranged at least on a groove wall of the routing groove, and a groove bottom of the routing groove is provided with a drainage port.

11. The wire cutting machine according to claim 1, wherein the wire passing mechanism and the tension mechanism of the wire cutting machine can be connected to each other, so as to install the tension mechanism and the wire passing mechanism in a modular manner to a target position.

12. The wire cutting machine according to claim 2, wherein the tension mechanism comprises a connection assembly, which comprises a first connection component and a second connection component; wherein the first connection component is formed with an installation space, and at least a part of the second connection component is accommodated in the installation space and is rotatably connected with the first connection component, so that under the action of an external force, at least the tension wheel can move around a second axis; wherein the first axis and the second axis are not coplanar and have an angle between them.

13. The wire cutting machine according to claim 12, wherein the first connection component comprises a first branch and a second branch, and the installation space is formed between the first branch and the second branch; preferably, a first rotating structure is arranged or formed on the first branch and/or the second branch, and correspondingly, a second rotating structure corresponding to the first rotating structure is arranged or formed on the second connection component; the first connection component and the second connection component are rotatably connected through the cooperation between the first rotating structure and the second rotating structure; preferably, the tension mechanism is provided with a limiting structure at a position corresponding to the first branch and/or the second branch; preferably, the first branch and the second branch are symmetrically arranged.

14. The wire cutting machine according to claim 13, wherein a rotational damping assembly is provided between the first rotating structure and the second rotating structure, and a groove is formed between the second connection component and the rotational damping assembly; the rotational damping assembly comprises a bearing, and a groove bottom of the groove is located radially inward of a slit between an outer ring of the bearing

and an inner ring of the bearing; preferably, the rotational damping assembly comprises a cover, and one end of the slit that is away from the groove is covered by the cover.

15. The wire cutting machine according to claim 14, wherein the tension wheel has a tension wire groove into which the cutting wire can be wound, and the second axis is in the plane where the wire groove is located, or the second axis is parallel with the plane where the wire groove is located; and wherein first axis and the second axis are perpendicular to each other.