What is clamed is:

1. A film stepless biaxial tension method based on saddle-shaped surface transition, characterized in that: in a film surface biaxial stretching process, lateral and longitudinal tensile forces are applied respectively to a different tangent plane to make the film subjected to smooth transition in a three-dimensional space from a narrow plane via a saddle-shaped surface to a wide plane, with the thickness uniformity of the biaxial tension film regulated by controlling the shape of the saddle-shaped surface.

2. A film stepless biaxial tension device based on saddle-shaped surface transition for implementing the method according to claim 1, characterized in that: the device comprises a herringbone wheel unit and a parallel wheel unit, the angle between the two lateral tension wheels in the herringbone wheel unit being adjustable, the two longitudinal tension wheels in the parallel wheel unit being arranged in parallel; a binding rope is used to bind the left and right edges of the film to a circumferential surface of the lateral tension wheel and the longitudinal tension wheel; the lateral tension of the film is achieved by the rotation of the lateral tension wheel, and there is a linear velocity difference between the lateral tension wheel and the longitudinal tension wheel; the lateral tensile forces of the parallel wheel unit and longitudinal tensile forces of the herringbone wheel unit are applied respectively to a different tangent

plane; the herringbone wheel unit includes lateral sub-units which comprises one lateral tension wheel, a first support plate provided outside the lateral tension wheel, an underplate provided vertically at the bottom of the first support plate, a fork positioning column and a fork; the fork cooperates with the screw to realize the stepless biaxial tension of the film.

3. The film stepless biaxial tension device based on saddle-shaped surface transition according to claim 2, characterized in that: the herringbone wheel unit comprises two lateral sub-units arranged symmetrically, each of which is further provided with two symmetrically arranged lateral tension wheels forming a herringbone; the lateral tension wheel is provided at the bottom with a first binding assembly, and the axle of the lateral tension wheel passes through the first support plate; the underplate is provided at the end close to the inlet of the herringbone wheel unit with a fork positioning column, and at the end near the outlet of the herringbone wheel unit with a first outlet positioning column, with a fork arranged at the fork positioning column; the respective forks are connected at the end to a first lead screw through a corresponding inlet nut, and the respective first outlet positioning columns are connected to a second lead screw through a corresponding first outlet nut.

4. The film stepless biaxial tension device based on saddle-shaped surface transition according to claim 3, characterized in that: the first

binding assembly comprises a first binding rope, a first sliding wheel and a first preloaded wheel, the first binding rope being wound on a plurality of the first sliding wheels and provided outside with the first preloaded wheel; and the axle of the respective first sliding wheels passes through the first support plate.

5. The film stepless biaxial tension device based on saddle-shaped surface transition according to claim 2, characterized in that: the parallel wheel unit comprises two longitudinal sub-units arranged symmetrically, each of which is provided with one longitudinal tension wheel, with the two symmetrically arranged longitudinal tension wheels arranged in parallel; the longitudinal tension wheel is provided at the bottom with a second binding assembly, and outside with a second support plate in parallel, with the axle of the longitudinal tension wheel passing through the second support plate; the second support plate is provided at the end near the inlet of the parallel wheel unit with a guide hole, and at the end near the outlet of the parallel wheel unit with a second outlet positioning column; the respective guide holes are connected with a guide rod, and the respective second outlet positioning columns are connected to a third lead screw through a corresponding second outlet nut.

6. The film stepless biaxial tension device based on saddle-shaped surface transition according to claim 5, characterized in that: the second binding assembly comprises a second binding rope, a second sliding

wheel and a second preloaded wheel, the second binding rope being wound on a plurality of the second sliding wheels and provided outside with the second preloaded wheel; and the axle of the respective second sliding wheels passes through the second support plate.

7. The film stepless biaxial tension device based on saddle-shaped surface transition according to claim 2, characterized in that: in the herringbone wheel unit, the angle β between the two lateral tension wheels is in the range $0° < \beta < 180°$.