Claims

1. A weight disposed around a suspended-load rope suspended from a derricking member of a construction machine to detect over-winding of the suspended-load rope, the weight comprising

a weight body to be suspended from the derricking member through at least one string-like part, the weight body having a cylindrical shape capable of enclosing the suspended-load rope, wherein:

the weight body is formed with a rope insertion space partially with respect to a circumference direction, the rope insertion space passing through the weight body in a radius direction of the weight body to allow the suspended-load rope to be inserted through the rope insertion space in the radius direction;

the rope insertion space has a shape cutting through the weight body from one end of the weight body to the other end on an opposite side to the one end in an axis direction that is parallel to a center axis of the weight body; and

the rope insertion space includes at least one oblique slit part oblique to the center axis so as to prevent the suspended-load rope from passing through the oblique slit part in a state where the center axis and the suspended-load rope are parallel to each other, characterized in that

the at least one oblique slit part includes a first oblique slit part and a second oblique slit part that are apart from each other in the axis direction; and

the rope insertion space further includes an intermediate opening part interposed between the first oblique slit part and the second oblique slit part, the intermediate opening part having a width larger than a width of the first oblique slit part and larger than a width of the second oblique slit part.

2. The weight according to claim 1, wherein

the at least one oblique slit part includes an oblique slit part having an average of obliquity angle of 30° or more and 60° or less to the center axis.

3. The weight according to claim 1 or 2, wherein

the at least one oblique slit part includes an oblique slit part having a constant obliquity angle to the center axis.

4. The weight according to any one of claims 1 to 3, wherein

the at least one oblique slit part includes an oblique slit part having a width decreasing inward from an outside in the radius direction of the weight body.

5. The weight according to any one of claims 1 to 4, wherein

the at least one oblique slit part includes a spiral slit part extending along a spiral around the center axis as a center, and the spiral has a number of turns that is smaller than 1.

6. The weight according to any one of claims 1 to 5, wherein

the rope insertion space is composed of only the at least one oblique slit part.

7. The weight according to any one of claims 1 to 6, wherein

the at least one oblique slit part includes a first oblique slit part and a second oblique slit part that are located at respective positions different from each other in the axis direction.

8. The weight according to claim 7, wherein

the first oblique slit part and the second oblique slit part have respective obliquity angles to the center axis, the obliquity angles being different from each other.

9. The weight according to claim 8, wherein

the first oblique slit part and the second oblique slit part are oblique to the center axis in reverse directions to each other.

10. The weight according to any one of claims 1 to 5, wherein

the center line of the second oblique slit part is deviated from an extension of the center line of the first oblique slit part.

11. The weight according to claim 10,

the first oblique slit part and the second oblique slit part are oblique to the center axis in reverse directions to each other.

12. The weight according to any one of claims 1 to 5, 10 and 11 , wherein

the first oblique slit part has a first opening-side end which is an end continued to the intermediate opening part, and the second oblique slit part has a second opening-side end which is an end continued to the intermediate opening part, the second opening-side end being located at a position deviated from a position of the first opening-side end in the circumference direction of the weight body.

13. The weight according to claim 12, wherein:

the intermediate opening has a first edge and a second edge that are opposed to

each other in the axis direction, each of the first edge and the second edge extending in the circumference direction of the weight body;

the first opening-side end is continued to one half of the first end edge with respect to the circumference direction; and

the second opening-side end is continued to the other half of the second end edge in the circumference direction.

14. The weight of claim 13, wherein

the intermediate opening has a shape of rectangle when viewed of the weight body in the radius direction, the rectangle having upper side and lower side that are formed by the first end edge and the second end edge, respectively.

15. The weight according to any one of claims 1 to 14, further comprising a pair of attachment parts which are provided at a pair of attachment positions deviated from the rope insertion space on an outer peripheral surface of the weight body and configured to be connected to a pair of string-like parts included in the at least one string-like part, respectively, the pair of attachment positions being positions opposed to each other in the radius direction across the center axis.