CLAIMS

1. A twisting device (10) for twisting or stranding electrical or optical lines (12) to form a line bundle (13), comprising at least a first twisting head (15) and a clamping device (25), wherein the first twisting head (15) and the clamping device (25) are spaced apart from each other, and at least one detecting device (30) for capturing an item of information indicative of a lay length of the line bundle (13), in particular for capturing an image, characterized in that the twisting device (10) further comprises at least one support device (40) for supporting the lines (12), and in that the at least one detecting device (30) and the at least one support device (40) are~~is movable, preferably~~ independently movable~~,~~ relative to the first twisting head (15) and the clamping device (25).

2. The twisting device (10) according to Claim 1, characterized in that the twisting device (10) includes a guide device (20), wherein the at least one detecting device (30) is arranged on the guide device (20).

3. The twisting device (10) according to Claim 1 or 2, characterized in that ~~the twisting device (10) includes at least one support device (40) for supporting the lines (12), and~~ the support device (40)~~, preferably~~ has a support unit (45) having a shape chosen from the group consisting of cylindrical shape, T-shape, and V-shape.

4. The twisting device (10) according to Claim ~~3~~2, characterized in that the at least one support device (40) is arranged on the guide device (20) and is preferably movable relative to the first

twisting head (15), in particular together with the detecting device (30).

5. The twisting device (10) according to any one of Claims 1 to 4, characterized in that the at least one detecting device (30) comprises a camera (32) or a laser sensor for capturing the indicative information of the lay length of the line bundle (13).

6. The twisting device (10) according to any one of Claims 1 to 5, characterized in that the twisting device (10) is equipped with a lighting device (35) and the lighting device (35) is preferably arranged on the at least one detecting device (30). ~~and in particular is an integral component of the camera (32).~~

7. The twisting device (10) according to Claim 5, characterized in that the twisting device (10) is equipped with a lighting device (35) and the lighting device (35) is preferably arranged on the at least one detecting device (30), and is an integral component of the camera (32).

~~7~~8. The twisting device (10) according to any one of Claims 1 to ~~6~~7, characterized in that the twisting device (10) is equipped with a control device (50) for controlling or regulating the twisting device (10) and/or an evaluator (55) for evaluating the indicative information of the lay length of the line bundle (13), wherein the at least one detecting device (30) is connected to the evaluator (55) for exchanging data, in particular the evaluator (55) is connected to the control device (50).

~~8~~9. The twisting device (10) according to Claim ~~7~~8, characterized in that the evaluator (55) is connected to at least one database (58) for the purpose of providing reference data.

~~9~~10. The twisting device (10) according to any one of Claims 1 to ~~8~~9, characterized in that a length compensation device (18) is provided to compensate for the change in length of the lines (12) during a twisting process or stranding process, which device preferably includes a displaceable length compensating slider (19).

~~10~~11. A method for determining or checking a lay length of a twisted or stranded line bundle (13) on a twisting device, in particular on a twisting device (10) according to any one of Claims 1 to ~~9~~10, wherein the method comprises the following steps:

- Making the line bundle (13) available;

- Positioning at least one detecting device (30) for the line bundle (13), in particular at a certain distance from the line bundle (13),

characterized in that the at least one detecting device (30) is moved to any first position relative to the line bundle (13), in particular along a longitudinal axis (14) of the line bundle (13);

- Capturing at least one item of information indicative of the lay length of the line bundle (13), particularly an image of the line bundle (13), at the first position on the line bundle (13) with the aid of the at least one detecting device (30), and

- at least a section of the line bundle (13) is supported by means of at least one support device (40) in particular in the region of the at least one detecting device (30) before the at least one item of information indicative of the lay length of the line bundle (13) is captured,

wherein the moving of the at least one detecting device (30) and the at least one support device (40) is independent from a first twisting head (15) and a clamping device (25) of the twisting device.

~~11~~12. The method according to Claim ~~10~~11, characterized in that the at least one item of information indicative of the lay length of the line bundle (13) is transmitted to an evaluator (55) for evaluating the lay length of the line bundle (13).

~~12~~13. The method according to either of Claims ~~10~~11 or ~~11~~12, characterized in that the at least one detecting device (30) is moved to a further position relative to the line bundle (13) and captures one item of information indicative of the lay length of the line bundle (13) at the further position on the line bundle (13).~~, and preferably captures at least one item of information indicative of the lay length of the line bundle (13) on the travel path to this one further position and transmits it to the evaluator (55).~~

14. The method according to Claim 12, characterized in that the at least one detecting device (30) is moved to a further position relative to the line bundle (13) and captures one item of information indicative of the lay length of the line bundle

(13) at the further position on the line bundle (13), and captures at least one item of information indicative of the lay length of the line bundle (13) on the travel path to this one further position and transmits it to the evaluator (55).

~~13~~15. The method according to ~~either~~anyone of Claims ~~11~~12 ~~or~~to ~~12~~14, characterized in that the evaluator (55) compares the at least one item of information indicative of the lay length of the line bundle (13) from the first and/or further position with reference data and assigns a first and/or a further lay length to the line bundle (13) at the respective position.

~~14~~16. The method according to Claim ~~13~~15, characterized in that the first and/or further assigned lay length is stored in at least one database (58).

~~15. The method according to any one of Claims 10 to 14, characterized in that the twisting device (10) has at least one first twisting head (15) and a clamping device (25) for supplying the line bundle (13), and the at least one detecting device (30) is moved, relative to the first twisting head (15) and the clamping device (25), and is preferably moved independently.~~

~~16. The method according to any one of Claims 10 to 15, characterized in that at least a section of the line bundle (13) is supported by means of at least one support device (40) in particular in the region of the at least one detecting device (30) before the at least one item of information indicative of the lay length of the line bundle (13) is captured.~~

17. The method according to any one of Claims ~~10~~11 to 16, characterized in that the at least one support device (40) is moved relative to the line bundle (13), and preferably the at least one support device (40) is moved together with the at least one detecting device (30), wherein in particular the at least one support device (40) and the at least one detecting device (30) are moved while the lines (12) are being twisted or stranded.

18. A computer-implemented method for automatic determination and generation of datasets based on at least one item of information indicative of the lay length of a line bundle (13), in particular in a method according to any one of Claims ~~10~~11 to 17, and/or for controlling a twisting device, in particular a twisting device (10) according to any one of Claims 1 to ~~9~~10, based on at least one item of information indicative of the lay length of a line bundle (13), comprising the following steps:

- Capturing at least one item of information indicative of the lay length of a line bundle (13), particularly an image of the line bundle (13), with at least one detecting device (30), wherein at least a section of the line bundle (13) is supported by means of at least one support device (40) in particular in the region of the at least one detecting device (30) before the at least one item of information indicative of the lay length of the line bundle (13) is captured;

- Comparing the at least one item of information indicative of the lay length of the line bundle (13) with reference data;

- Defining correction data ~~of~~on the basis of the comparison of the reference data with the at least one item of information indicative of the lay length of the line bundle (13);

- Transmitting the correction data to a control device (50) of the twisting device (10) for the correction of a twisting process or stranding process at the twisting device (10).

19. A computer program product comprising movement commands which when executed on a computer or control device (50) cause it to carry out the steps of the computer-implemented method according to Claim 18 on a twisting device, in particular a twisting device (10) according to any one of Claims 1 to ~~9~~10.

20. The control device (50) for controlling a twisting device, in particular a twisting device (10) according to any one of Claims 1 to ~~9~~10, with a computer program product according to Claim 19.

21. Use of a twisting device, in particular a twisting device (10) according to any one of Claims 1 to ~~9~~10, to carry out a method for determining or checking a lay length of a line bundle (13) according to any one of Claims ~~10~~11 to 17.

22. An upgrade kit (60) for a twisting device comprising at least one detecting device (30) for capturing at least one item of information indicative of a lay length of a line bundle (13), in particular at least an image of the line bundle (13), and a computer program product according to Claim 19.

23. The upgrade kit (60) according to Claim 22, characterized in that the upgrade kit (60) includes a guide device (20) which can be mounted on the twisting device, wherein the at least one detecting device (30) is arranged movably on the guide device (20) and the upgrade kit (60) preferably comprises a control device (50) for controlling the at least one detecting device (30) and/or the twisting device (10).