CLAIMS

1. Adapter (12) for an offshore foundation construction (2) including a cylindrical sleeve (16) for receiving a pile (22a, 22) of the offshore foundation construction (2), and a device (26) for verifying a bearing capacity of a first pile (22a) of the offshore foundation construction (2), after its insertion, the device (26) comprising a body (28), a first means for connecting the body (28) to a referential element, a second means for connecting the body (28) to the first pile (22a), a means for applying (34) a load on the first pile (22a) in a direction parallel to the axis of the first pile (22a), characterized in that it further includes a means for measuring a displacement of the first pile (22a).

2. Adapter (12) according to claim 1, wherein the first means for connecting includes a contact surface intended to rest against a frontal surface of the referential element.

3. Adapter (12) according to claim 1 or 2, wherein the second means for connecting includes a contact surface intended to rest against a frontal surface of the first pile.

4. Adapter (12)according to any of claims 1 to 3, wherein the first means for connecting is intended to fasten the body to a structure or to an adapter of the offshore foundation construction.

5. Adapter (12)) according to any of claims 1 to 4, wherein the first means for connecting is configured to connect the body (28) to a second pile (22) of the offshore foundation construction.

6. Adapter (12)according to claim 5, wherein the first means for connecting and the second means for connecting are substantially identical.

7. Adapter (12)according to any of claims 1 to 6, wherein the first means for connecting includes a first means for securing a second pile (22) of the offshore foundation construction to the body (28).

8. Adapter (12)according to claim 7, wherein the first means for securing is further configured to secure at least a third pile (22) of the offshore foundation construction to the body (28).

9. Adapter (12)according to claim 7 or 8, wherein the first means for securing is configured to grip the second pile (22).

10. Adapter (12) according to any of claims 1 to 9, wherein the second means for connecting includes a second means for securing the first pile to the body (28).

11. Adapter (12)according to claim 10, wherein the second means for securing is configured to grip the first pile.

12. Adapter (12)according to any of claims 7 to 11, wherein at least one of the first and the second means for securing includes at least two radially movable clamping chucks (32).

13. Adapter (12)according to any of claims 1 to 12, wherein the means for applying (34) is so configured to apply a load in a way tending towards pushing the first pile (22a) into the seabed (3).

14. Adapter (12)according to any of claims 1 to 13, wherein the means for applying (34) includes a cylinder (36) and a piston (38).

15. Adapter (12)according to claim 14, wherein the means for measuring (41) is able to measure directly the displacement of the piston (38) with respect to the cylinder (36).

16. Adapter (12)according to any of claims 1 to 15, wherein the means for measuring (40) is able to measure the displacement of the first pile (22a) with respect to the body (28).

17. Adapter (12)according to any of claims 1 to 16, wherein at least one of the first means for connecting, the second means for connecting and the means for applying (34) is actuated by a hydraulic energy and/or an electric energy.

18. Adapter (12) according to claim 17, wherein the cylindrical sleeve (16) is so designed to receive a pile (22a, 22) having a circular radial cross-section with a diameter (d_{22}) within a range 0.6 m to 1.5 m.

19. Adapter (12) according to claim 17 or 18, including at least two cylindrical sleeves (16) each intended to receive a pile (22a, 22) of the offshore foundation construction (2).

20. Method of verifying a bearing capacity of a first pile (22a) of an offshore foundation construction (2), preferably of an offshore foundation construction intended to support an offshore wind turbine, the offshore foundation construction including an adapter (12) according to any of claims 1 to 19, the method including placing a device (26) of the adapter (12) on the

offshore foundation construction (2) so that the body (28) is connected to a referential element, connecting the body (28) to the first pile (22a), applying a load to the first pile (22a) in a direction parallel to the axis of the first pile (22a), measuring the load, and measuring a displacement of the first pile (22a).