Claims

1. A uniaxial eccentric screw pump, comprising:

a rotor of an external thread type; and

a stator enabling the rotor to be inserted therethrough, the stator comprising:

a liner portion being integrally formed so as to have an inner peripheral surface of an internal thread type;

an outer cylinder portion mounted in a pressed state on the liner portion,

wherein the outer cylinder portion comprising a plurality of outer cylinder components fastened with respect to one another, the outer cylinder components enclosing outer periphery of the liner portion.

2. A uniaxial eccentric screw pump according to claim 1, further comprising an end stud arranged on one end side of the stator,

wherein the end stud and an end portion of a pump casing connecting to another end side of the stator are coupled and fastened by a screw rod so that the stator is integrally coupled to the pump casing together with the end stud.

3. A uniaxial eccentric screw pump according to claim 1, wherein the liner portion comprising collar portions protruding radially outward at both end portions thereof.

4. A uniaxial eccentric screw pump according to claim 3, wherein end portions of the outer cylinder portion abutting on the collar portions.

5. A uniaxial eccentric screw pump according to any one of claims 1 to 4, wherein the end portions of the outer cylinder portion abut on the end stud and the end portion of the pump casing, respectively.

6. A uniaxial eccentric screw pump according to any one of claims 1 to 5, further comprising a fitting portion enabling at least one of the collar portions to be fitted thereto, the fitting portion being provided at the end stud and/or the end portion of the pump casing,

wherein, at the fitting portion, the at least one of the collar portions is sandwiched between the end stud and the outer cylinder portion and/or between the pump casing and the outer cylinder portion.

7. A uniaxial eccentric screw pump according to any one of claims 1 to 6, wherein the liner portion has a polygonal outward shape.

8. A uniaxial eccentric screw pump according to claim 7, wherein the outer cylinder portion is bent into a shape conforming to the outward shape of the liner portion.

9. A uniaxial eccentric screw pump according to any one of claims 1 to 8, further comprising a protrusion provided on an inner peripheral side of the outer cylinder portion,

wherein the protrusion is held in press-contact with an outer peripheral surface of the liner portion.

Claims

1. A uniaxial eccentric screw pump, comprising:

a rotor of an external thread type;

a stator enabling the rotor to be inserted therethrough, the stator comprising:

a liner portion being integrally formed so as to have an inner peripheral surface of an internal thread type,

an outer cylinder portion mounted in a pressed state on the liner portion;

an end stud arranged on one end side of the stator;

wherein the end stud and an end portion of a pump casing connecting to another end side of the stator are coupled and fastened so that the stator is integrally coupled to an end portion of a pump casing together with the end stud.

2. A uniaxial eccentric screw pump according to claim 1, wherein the end portions of the outer cylinder portion abut on the end stud and the end portion of the pump casing, respectively.

3. A uniaxial eccentric screw pump according to any one of claims 1 to 2, further comprising a fitting portion enabling a collar portion of the stator to be fitted thereto, the fitting portion being provided at the end stud and/or the end portion of the pump casing.

4. A uniaxial eccentric screw pump according to any one of claims 1 to 3, wherein at the fitting portion, the collar portion is sandwiched between the end stud and the outer cylinder portion and/or between the pump casing and the outer cylinder portion.

5. A uniaxial eccentric screw pump according to any one of claims 1 to 4, wherein the liner portion has a polygonal outward shape.

6. A uniaxial eccentric screw pump according to claims 1 to 5, wherein the outer cylinder portion is bent into a shape conforming to the outward shape of the liner portion.

7. A uniaxial eccentric screw pump according to any one of claims 1 to 6, further comprising a protrusion provided on an inner peripheral side of the outer cylinder portion,

wherein the protrusion is held in press-contact with an outer peripheral surface of the liner portion.