CLAIMS

1. A pipe joint comprising:

first and second sleeves having fluid flow paths communicating with each other;

an annular gasket interposed between abutting end surfaces of the first and second sleeves;

a male screw member having a through hole into which the first sleeve is inserted; and a female screw member having a through hole into which the second sleeve is inserted, the first and second sleeves being joined by screwing the male screw member with the female screw member,

wherein the pipe joint has a leak port that opens at an outer peripheral surface of the male screw member at a portion not covered by the female screw member and communicates with a gap between the male screw member and the first sleeve to detect a leak fluid leaked from gaps between the first and second sleeves and the gasket.

2. The pipe joint according to claim 1, wherein the male screw member is fixed with respect to the first and second sleeves and the female screw member is rotated with respect to the first and second sleeves when the male screw member and the female screw member are fastened.

3. The pipe joint according to claim 1 or 2, wherein the male screw member has a tip end portion that is formed in a cylindrical shape, extends to the second sleeve and covers an outer peripheral surface of an abutting portion between the first sleeve and the second sleeve, and

the pipe joint further comprises:

an annular first seal member that prevents the leak fluid from leaking through a gap between the tip end portion of the male screw member and the second sleeve to a gap formed in a screwed portion between the male screw member and the female screw member and a gap between the second sleeve and the female screw member; and

an annular second seal member arranged on a rear end side of a position of the leak port in the male screw member and seals a gap between the first sleeve and the male screw member.

4. The pipe joint according to claim 3, wherein the second seal member is deformed between the first sleeve and the male screw member to serve as a temporary fixing member that restricts rotation of the male screw member with respect to the first sleeve.

5. The pipe joint according to claim 3 or 4, wherein the first seal member is held by the female screw member, is compressed and deformed between a tip end surface of the male screw member and the female screw member as tightening of the female screw member progresses, and comes into close contact with an outer peripheral surface of an abutting portion of the second sleeve.

6. The pipe joint according to claim 4 or 5, wherein the first seal member is deformed to prevent the leak fluid from leaking through the gap between the tip end portion of the male screw member and the second sleeve, to the gap between the tip end portion of the male screw member and the female screw member leading to the screwed portion, and to the gap between the second sleeve and the female screw member.

7. The pipe joint according to claim 5, wherein the first seal member is provided between the tip end portion of the male screw member and the abutting portion of the second sleeve.

8. The pipe joint according to claim 3, wherein the first and second sleeves each has a flange portion in the abutting portion,

the male screw member comprises: a small diameter hole portion in which the first sleeve is inserted; a large diameter hole portion which has a diameter larger than an inner diameter of the small diameter hole portion and receives a flange portion of the first sleeve; and an annular engagement surface formed by a step between the small diameter hole portion and the large diameter hole portion and abuts on an annular wall surface of the flange portion of the first sleeve, and

a groove portion that communicates a gap between the first sleeve and the small diameter hole portion and a gap between the flange portion and the large diameter hole portion is formed on a part of the engagement surface or the wall surface.

9. A pipe joint comprising: first and second sleeves having fluid flow paths communicating with each other; an annular gasket interposed between abutting end surfaces of the first and second sleeves; a male screw member having a through hole into which the first sleeve is inserted; and a female screw member having a through hole into which the second sleeve is inserted, the first and second sleeves being joined by screwing the male screw member with the female screw member,

wherein the pipe joint has a leak port which communicates with a space in contact with an outer periphery of the gasket through the through hole of the male screw member in a portion of

an outer peripheral surface of the male screw member not covered by the female screw member.