the shape change.

[0060] (2) By associating the inflection point information with the load F to be applied to the gasket 8, optimization of the load on the gasket 8 can be realized by confirming the inflection point information from the shape information.

[0061] (3) It is possible to facilitate load setting and load adjustment for the gasket 8.

[0062] [Third Embodiment]

Fig. 5 illustrates the gasket control system 20 according to the third embodiment.

The configuration illustrated in Fig. 5 is an example, and the technology of the present disclosure is not limited to such a configuration.

[0063] For the gasket control system 20, a spiral wound gasket 80 disposed between the flanges 6-1 and 6-2 is used as an observation target of a shape change due to a load F applied from the flanges 6-1 and 6-2. For example, as illustrated in Fig. 5, the gasket 80 is a laminate in which a plurality of members having different diameters is coaxially arranged, and the gasket 80 includes an outer ring 801, a gasket body 802, and an inner ring 803.

[0064] The outer ring 801 and the inner ring 803 are made of, for example, a metal material such as stainless steel, carbon steel, or titanium, and are formed in an annular shape having a predetermined thickness or a shape close thereto.

[0065] The gasket body 802 is configured by winding a laminate of a thin plate-like member made of, for example, a metal material and a buffer material (filler) such as graphite or fluororesin in a spiral shape between an inner wall surface of the outer ring 801 and an outer wall surface of the inner ring 803. The laminate constituting the gasket body 802 is formed to have, for example, a "V" shape in cross section, or a waveform shape close thereto. The laminate has end surfaces, for example, adhered to the outer ring 801 and the inner ring

and 14-4 is set at a target, a relationship between the shape change and the load F can be identified.

[0085] <Example 3>

A of Fig. 10 illustrates the gasket 8 according to Example 3. In Example 3, as with Examples 1 and 2, the restrained portion 8-1 and the non-restrained portion 8-2 are set concentrically with the same width or substantially the same width.

[0086] The non-restrained portion 8-2 has an inner cut 62 on each of the shape observation portions 14-1, 14-2, 14-3, and 14-4. The inner cut 62 is a through hole formed in the non-restrained portion 8-2 of the gasket 8.

[0087] The inner cuts 62 are arranged at angular intervals of a center angle of 90 degrees in the non-restrained portion 8-2, but the present disclosure is not limited thereto.

[0088] As illustrated in B of Fig. 10, the inner cut 62 is an arc-shaped groove which is concentric with the peripheral edge portion of the gasket 8 and has a constant width W3, and the inner cut 62 penetrates the upper and lower surfaces of the gasket 8. That is, the inner cut 62 has, inside the gasket 8, vertical surface portions 64 and 66 and concentric arcuate portions 68 and 70 facing each other with the constant width W3 therebetween and a constant length L2.

[0089] When a load F is applied from the flanges 6-1 and 6-2 to the restrained portion 8-1 of the gasket 8 having the inner cut 62, as illustrated in C of Fig. 10, the distance between the arcuate portions 68 and 70 is reduced according to the load F as indicated by arrows "e" and "f", and the edge surface of the gasket 8 extends outwardly as indicated by an arrow "g". Such a shape change can be easily detected by the strain sensor 22.

[0090] Incidentally, a sensor member such as metal or resin may be placed in a space of the inner cut 62, and a shape change of the inner cut 62 may be found by the sensor