【Claim 1】

A method for manufacturing a de-powder device for piping comprising:

a heater manufacturing step (S1) comprising a step (S11) of manufacturing an intermediate product by installing a heating wire connected to a power source inside a metal pipe and filling it with an insulating agent and a step (S12) of cutting the intermediate product and connecting one end portions of exposed heating wires;

a winding step (S2) of manufacturing a heating coil which has a predetermined outer diameter by winding the heater around a jig and at least a portion of which is inserted into a pipe; and

a coupling step (S3) of coupling the flange and the heating coil by inserting an end portion of the heating coil into an exposed hole formed in a metal flange

wherein the heater manufacturing step (S1) further comprises:

a step (S13) of covering one of openings on both sides of the metal pipe where a portion where a pair of heating wires are connected is exposed with a metal cover of which the inside is filled with the insulating agent; and

a step (S14) of connecting the metal pipe to the metal cover.

【Claim 2】

The method for claim 1, wherein the step (S12)

comprises:

a step (S121) of exposing both end portions of a pair of heating wires installed inside the metal pipe by cutting both end portions of the metal pipe and both end portions of the insulating agent; and

a step (S122) of connecting one end of any one to one end of the other one of the pair of heating wires.

【Claim 3】

The method for claim 1, wherein the winding step (S2) comprises:

a step (S21) of fixing one end portion of the heater to a rod body of the jig; and

a step (S22) of rotating the rod body in a state in which the other end portion of the heater is fixed.

【Claim 4】

The method for claim 1, wherein the coupling step (S3) comprises:

a step (S31) of forming a tensile end part by stretching the end portion of the heating coil; and

a step (S32) of inserting the tensile end part into the exposed hole.

【Claim 5】

The method for claim 1, wherein the coupling step (S3) further comprises a step (S33) of blocking the exposed hole through which the end portion of the heating coil penetrates with a sealing member.

【Claim 6】

The method for claim 1, wherein the coupling step (S3) further comprises a step (S34) of fixing an exposed portion of the heating coil with a fixing member in a state in which a portion of the heating coil is exposed to the outside of the exposed hole.

【Claim 7】

The method for claim 1, further comprising a step (S4) of inserting the temperature sensor through a second exposed hole formed in the metal flange so that a measuring part of a temperature sensor is located inside the metal flange.

【Claim 8】

A method for installing a de-powder device for piping, the method comprising:

a heating coil manufacturing step (S100) comprising a process of installing a heating wire inside the metal pipe and filling it with the insulating agent;

a step (S200) of manufacturing a de-powder device for piping by inserting an end portion of the heating coil into an exposed hole formed in a metal flange and coupling the metal flange and the heating coil; and

a step (S300) of inserting a portion of the heating coil into a pipe.

【Claim 9】

The method of claim 9, further comprising a step (S250), which is performed before the step (S300), of penetrating

the heating coil through the O-ring so that an O-ring is disposed between the flange and the pipe in the step (S300).

【Claim 10】

The method of claim 9, further comprising:

a step (S400) of installing a locking means, which comprises a first body, a second body connected to the first body, a movement limiting jaw provided on the first body and the second body, and a tightening member for adjusting a distance between end portions of the first body and the second body, at a connecting region between the flange and the pipe; and

a step (S500) of coupling the flange and the pipe to each other by adjusting the distance between the end portions of the first body and the second body through the tightening member.