Title (en)

DEVICE TO AVOID THE FORMATION OF FISSURES ON THE INNER SIDE OF FEEDWATER INLET NOZZLES OF A PRESSURE VESSEL

Publication

EP 0045034 B1 19830413 (DE)

Application

EP 81105706 A 19810720

Priority

DE 3027630 A 19800721

Abstract (en)

[origin: WO8200330A1] Installation for preventing the formation of cracks at the inner surface of the sleeve of a water supply conduit (13) opening into pressure tanks, particularly a pressure tank of a nuclear reactor or a vapour generator. The feeding of the supply water in the water-vapour chamber (II), of a pressure tank (DE) is done by a portion of a mainly horizontal conduit (140) and by a portion of an ascending conduit (141) up to the overflow edge (Ü) of the end of the portion of the ascending conduit (141). From there, the supply water is mixed by means of a descending conduit piece (142) and possibly by a conduit ring which is attached thereto, in the middle in the water-vapour chamber (II) respectively in the pressure chamber (8) of the pressure tank (DE). Thereby, the formation of the different temperature layers from the water return current hotter in the sleeve is prevented. Further, it is important to maintain the ratio A<un>u/D<ui>u as small as possible. A ratio between 0.5 and 2 has proved to be feasible in practice. (A<un>n) is the horizontal distance of the inner wall of the pressure tank to the axis (M<uÚ>u) which passes by the gravity centre of the cross-section at the overflow edge (Ü). (D<ui>u) is the inner diametre of the water supply conduit opening into the pressure tank.

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CPC (source: EP US)

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Citation (examination)

US 3661123 A 19720509 - ROMANOS NICHOLAS D

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FR2562639A1; EP0297968A1; FR2617570A1; US4870927A; EP0607071A1; FR2700383A1; US5396948A; WO9320386A1

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