

Title (en)

PROCESS FOR THE REPAIR OR PROTECTION OF ONE EXTREMITY OF A METALLIC HEAT EXCHANGER TUBE, AND SLEEVE FOR CARRYING IT OUT

Publication

EP 0271739 B1 19901003 (FR)

Application

EP 87117143 A 19871120

Priority

FR 8616231 A 19861121

Abstract (en)

1. A method of repairing a damaged area or an area (4) submitted to corrosion (4) of a metal tube end of a heat exchanger (1) near the inner surface of its tube sheet (2), whereby a metal sleeve (5) having an outer diameter slightly smaller than the tube's inside diameter is inserted from the outer surface of the tube sheet into the tube to a sufficient length in order to penetrate into the tube beyond the damaged area or the area submitted to corrosion, a localized bulging (6) of the sleeve end situated on the side of the outer surface of the tube sheet on the tube is performed, this end of the sleeve is locally (8) welded to the corresponding end of the tube, the end of the sleeve (7) is applied to the tube beyond the damaged area or an area submitted to corrosion and this end of the sleeve is locally (9) welded on the inside of the tube with partial penetration into the latter, characterized in that the localized welding (8) inside the bulged area (6) inwards from the edge of the sleeve is carried out, with partial penetration of the weld into the tube, and in that then a bulging of the end area of the sleeve against the tube in an area situated inside the tube sheet above the localized weld (8) is carried out.

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IPC 8 full level

F28F 11/02 (2006.01)

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Cited by

EP0416848A1; US5155894A; FR2736989A1; US5924743A; CN1069391C; WO9704268A1

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