

Title (en)

Tool for the remote cleaning of the pipe ends of a pipe bundle.

Title (de)

Werkzeug zum fernbedienbaren Reinigen der Rohrenden eines Rohrbündels.

Title (fr)

Outil pour le nettoyage à distance des extrémités des tubes d'un faisceau tubulaire.

Publication

EP 0120355 A2 19841003 (DE)

Application

EP 84102394 A 19840306

Priority

DE 3310325 A 19830322

Abstract (en)

1. A tool for the remote-controllable cleaning of the outer sides of exposed tube ends of a tube bundle in a heat exchanger having a tube plate assigned to the tube bundle and on which the tool is centered, characterized in that the tool has a hollow shaft (20) which in the operating position can be inserted into a tube (2) of the tube bundle and which, at its free end, is closed by a conical guide head (28) ; that the hollow shaft (20) has a slot (29) adjacent to the guide head (28) ; that a double-armed lever (30) is pivotably mounted in the slot (29), which lever at its end facing the guide head (28) is provided with a friction attachment (52) which is pulled into the interior of the hollow shaft (20) against a stop (36) by a spring (35) ; that on the side of the lever (30) which faces away from the guide head (28), a rod (40) is arranged which is displaceable in the longitudinal direction of the hollow shaft (20) ; and that the rod (40) engages into a recess (50) at the end (39) of the lever (30) which faces away from the guide head, by means of a head (45) which is angled in longitudinal cross-section through the axis of the rod (40), and is laterally offset in relation to the pivot axis (31) of the lever (30), the friction attachment (52) appearing on the longitudinal axis of the hollow shaft (20) in the operating position.

Abstract (de)

Zum fernbedienbaren Reinigen der Außenseite von Rohrenden (13) eines Rohrbündels in einem Wärmetauscher wird ein Werkzeug (14) eingesetzt, das in einer Hohlwelle (20) einen schwenkbar gelagerten zweiarmligen Hebel (30) aufweist. Das eine Ende des Hebels (30) ist zum Beispiel mit einer Stahlbürste (52) als Reibaufsatz versehen und wird von einer Feder (35) in das Innere der Hohlwelle (20) gezogen. Am anderen Ende greift eine Stange (40) an, mit der der Hebel (30) aus der Hohlwelle (20) herausgedrückt werden kann. Die Erfindung ist insbesondere für die Reparatur von Dampferzeugern in Kernkraftwerken vorgesehen.

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F28G 3/00; **F28G 3/04**

IPC 8 full level

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