

Title (en)

DEVICE FOR RESTORING OR FOR INSTALLING THE THERMALLY INSULATING EXTERNAL JACKET OF PIPES, TUBES, HOSES, CONNECTION ELEMENTS AND OTHER JACKETED ELEMENTS

Title (de)

VORRICHTUNG ZUR WIEDERHERSTELLUNG ODER ZUR INSTALLATION VON WÄRMEISOLIERENDEN EXTERNEN BUCHSEN VON LEITUNGEN, ROHREN, SCHLÄUCHEN, ANSCHLUSSELEMENTEN UND ANDEREN ELEMENTEN MIT BUCHSEN

Title (fr)

DISPOSITIF DE RESTAURATION OU D'INSTALLATION DU GAINAGE EXTERNE ISOLANT THERMIQUEMENT DE CONDUITES, TUBES, TUYAUX, ÉLÉMENTS DE RACCORDEMENT ET AUTRES ÉLÉMENTS GAINÉS

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Application

EP 08761772 A 20080117

Priority

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Abstract (en)

[origin: FR2911382A1] The device for restoring and installing heat insulation capacity of external sheathing of sheathed elements such as tubular pipes, connecting element and other sheathed elements such as valve that are positioned on a sea bed for utilizing an oil tanker, comprises a multilayered elastomeric component (2-20 wt.%) with gel type thermal insulation placed inside an envelope of the device. The device is formed of envelope comprising fasteners and/or clamps to be mounted on the sheathed elements. The elastomeric component creates a trimming/packed or openworked mattress. The device for restoring and installing heat insulation capacity of external sheathing of sheathed elements such as tubular pipes, connecting element and other sheathed elements such as valve that are positioned on a sea bed for utilizing an oil tanker, comprises a multilayered elastomeric component (2-20 wt.%) with gel type thermal insulation placed inside an envelope of the device. The device is formed of envelope comprising fasteners and/or clamps to be mounted on the sheathed elements. The elastomeric component creates a trimming/packed or openworked mattress, which is joined with the envelope and compressed by clamping on the sheathed element during its installation. The elastomeric component is made of a thermoplastic elastomeric polymer constituted by the copolymers sequences of bi or tri-blocks, linear, branched, multi-branched or star branched, and a substrate forming a multi-layered composite using a bond welding, gluing and pasting. The elastomeric component contains a hydrocarbon base at a rate of 99-58 wt.% and additives such as biocide agents (0.1-6 wt.%) and antioxidants (0.1-6 wt.%). The copolymer sequence is mixed or combined with a polymer. The elastomeric component is of parallelepipedic form or in a shape of a framework optionally closed by a base made in a material. The substrate is made of a thin metallic sheet joining with a mesh, which supports the sheet. The mesh represents a role of anchoring of elastomeric component during molding of the elastomeric component. The elastomeric component and the substrate is joined with the envelope by assembling of substrate on the envelope, where the assembling is carried out by mechanical fastenings such as riveting, screwing, chemical fixing, pasting, gluing and welding. The fasteners and clamps of the envelope are made of detent mechanical type of screw and nut. The fasteners and/or clamps are intended for holding the envelope to compress the elastomeric component against the sheathed element to be restored. The substrate is presented in a form of a sheet, a semi-rigid plate or a flexible plate to be bent to fit a surface of the sheathed element to restore by adopting a tubular form. The envelope is made in a single piece bent back on itself, where the edges of the single piece join together to completely enclose a circumference of the sheathed element to restore. The fasteners and/or clamps are attached to the envelope, and are comprised of two complementary parts fitted to two opposite sides of the substrate in sheet or plate form, where the complementary parts hold each other to fasten the envelope against the sheathed element to be restored. The envelope is constituted of two sides of semi-tubular shell, where the each side is fitted with fastener complementary of each half shell joining among themselves to fix two semi-tubular shells one with the other to create a compression of the elastomeric component against the sheathed element to be restored. The device is contacted with the sheathed element, which is to be restored itself is an insulating coating. An independent claim is included for a process of producing an elastomeric component with gel type thermal insulation.

IPC 8 full level

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CPC (source: EP US)

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