Title (en)

THREE-LAYER STEEL CORD THAT IS RUBBERIZED IN SITU AND HAS A 2+M+N STRUCTURE

Title (de)

IN-SITU GUMMIERTES DREILAGIGES STAHLSEIL MIT 2+M+N-STRUKTUR

Title (fr)

CABLE METALLIQUE A TROIS COUCHES GOMME IN SITU DE CONSTRUCTION 2+M+N

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Application

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Abstract (en)

[origin: WO2011000950A2] The invention relates to a steel cord (C-1) with three layers (C1, C2, C3) and a 2+M+N structure, that is rubberized in situ and comprises: a first layer or central layer (C1) formed by two wires (10) of diameter d1 assembled in a helix at a pitch p1; a second layer (C2) formed by M wires (11) of diameter d2, which are wound around the central layer (C1) in a helix at a pitch p2; and a third layer (C3) formed by N wires (12) of diameter d3, which are wound around the second layer in a helix at a pitch p3. The cord is characterised in that it has the following characteristics: (d1, d2, d3, p1, p2 and p3 being expressed in mm): - 0.08 = d1 = 0.5; - 0.08 = d2 = 0.5; - 0.08 = d3 = 0.5; - 3 1 2 3 < 50; for any 3 cm-length of cord, a rubber composition known as "filling rubber" is present in each of the capillaries defined by the 2 wires of the first layer (C1) and the M wires of the second layer and by the M wires of the second layer (C2) and the N wires of the third layer (C3); and the level of filling rubber in the cord is between 10 and 50 mg per gram of cord. The invention also relates to the method of producing one such cord and to a multi-strand cord, in which at least one of the strands is a three-layer steel cord (C-1) rubberized in situ in accordance with the invention.

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