Title (en) BEAM ASSEMBLY AND CONSTRUCTION ERECTED THEREWITH

Title (de) TRÄGERANORDNUNG SOWIE DAMIT ERRICHTETE KONSTRUKTION

Title (fr) ENSEMBLE DE SUPPORT ET CONSTRUCTION ÉRIGÉE AU MOYEN DUDIT ENSEMBLE DE SUPPORT

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Abstract (en)
[origin: WO2014033103A1] The invention relates to a beam assembly, comprising a substantially straight beam (2), which is arranged between two bearings $(4,6)$ and extends in a longitudinal direction (8) and comprises at least three segments $(10,2,14)$, which are arranged one behind the other in the longitudinal direction (8) and which are connected to each other by means of two head plate joints (22), namely a middle segment (10) and two outer segments $(12,14)$, wherein the bearings $(4,6)$ are prevented from moving in the longitudinal direction (8), should permit controlled relief of thermal constraining forces while the load-transferring function is simultaneously maintained and while external dynamic forces are evenly distributed within the construction. According to the invention this is achieved in that the middle segment (10) has a middle segment head plate (18) at each of the two ends of the middle segment and each of the two outer segments $(12,14)$ has an outer segment head plate $(20)$ at the end of the outer segment directed toward the middle segment (10), each outer segment head plate (20) is oriented complementarily to the middle segment head plate (18) facing the outer segment head plate in such a way that the outer segment head plate and the middle segment head plate together form a head plate joint $(22)$, the two head plates $(18,20)$ of each head plate joint $(22)$ are connected to each other by means of connecting bolts (28), which are inserted through openings (26) in the head plates (18, 20), the openings (26) in at least one of the head plates (18) of each head plate joint (22) are designed as elongated holes (34), and both head plate joints (22) are angled in opposite directions with respect to a plane normal to the longitudinal direction (8) in such a way and the elongated holes (34) are arranged and oriented in such a way that lateral displacement of the middle segment $(10)$ in relation to the two outer segments $(12,14)$ is possible in the event of thermal expansion or contraction of the segments $(10$, 12, 14).

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