TRANSPORT CAR FOR A CRAWLER CRANE

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ABSTRACT

A transport car comprises a loading platform for transporting a crawler crane having a pair of crawler treads, and undercarriages supporting the platform for moving the transport car along a track, the loading platform extending in a longitudinal direction and having two lateral edges extending parallel to the longitudinal direction. A pair of transversely spaced support plates on the loading platform retain and support each crawler tread on the loading platform, and drives are provided for repositioning the support plates relative to the loading platform perpendicularly to the longitudinal direction into an assembling position in which the support plates project beyond the lateral edges of the loading platform.
TRANSPORT CAR FOR A CRAWLER CRANE

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a transport car comprising a loading platform for transporting a crawler crane having a pair of crawler treads, and undercarriages supporting the platform for moving the transport car along a track.

[0003] 2. Description of the Prior Art

[0004] EP 0 725 859 B1 discloses such a transport car for a crawler gantry crane for transporting straight track sections. To enable wider track switch sections to be handled by the crane, it is necessary for the crawler treads to be spaced apart more widely in a direction perpendicular to the longitudinal direction of the loading platform. This makes it necessary to disassemble the crawler treads which project beyond the lateral edges of the loading platform.

SUMMARY OF THE INVENTION

[0005] It is the primary object of this invention to improve a transport car of the first-described type so that a simple change-over between operating and transport positions of the crawler crane is assured.

[0006] This is accomplished in accordance with the invention with a transport car comprising a loading platform for transporting a crawler crane having a pair of crawler treads, and undercarriages supporting the platform for moving the transport car along a track, the loading platform extending in a longitudinal direction and having two lateral edges extending parallel to the longitudinal direction. The present invention provides a pair of transversely spaced support plates on the loading platform to retain each crawler tread on the loading platform, and drives for repositioning the support plates relative to the loading platform perpendicularly to the longitudinal direction into an assembling position in which the support plates project beyond the lateral edges of the loading platform.

[0007] This arrangement is of particular advantage in cases where the two crawler treads of the crawler gantry crane are so far apart that they project beyond the lateral edges of the loading platform during transport to an operating site. This requires them to be disassembled. The repositionable support plates make it possible to move the crawler treads supported on the support plates transversely until they project beyond the edges of the platform and into a position where they may readily be reassembled with the gantry crane.

DESCRIPTION OF THE DRAWING

[0008] The above and other objects and advantages of the present invention will become more apparent from the following description of a preferred embodiment thereof, taken in conjunction with the accompanying drawing wherein

[0009] FIG. 1 is a fragmentary side view of a transport car on which a crawler gantry crane is loaded;

[0010] FIG. 2 is a simplified top view of such a transport car; and

[0011] FIG. 3 is a simplified end view of the transport car.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

[0012] Transport car 1 illustrated in FIGS. 1 to 3 comprises loading platform 2 for transporting crawler gantry crane 10 having two pairs of crawler treads 11, and undercarriages 3 supporting the platform for moving transport car 1 along track 4. Platform 2 extends in a longitudinal direction indicated by arrow 5 and has two lateral edges 6 extending parallel to the longitudinal direction.

[0013] A pair of transversely spaced support plates 7 is arranged on loading platform 2, each support plate supporting and retaining a crawler tread 11 on the loading platform. The four plates 7 may be transversely repositioned along guide 8. For this purpose, drives 9 are actuated for repositioning support plates 7 relative to loading platform 2 perpendicularly to the longitudinal direction from an inner transport position (shown on the left in FIG. 2) into an outer assembling position (shown on the right in FIG. 2), in which support plates 7 project beyond lateral edges 6 of the loading platform, as clearly shown on the right side of FIG. 3.

[0014] When crawler crane 10 is to be transported to an operating site, crawler treads 11 must be detached from crawler tread frame 12 since they would project beyond the edges of the loading platform.

[0015] To attach crawler tread 11 to a vertically adjustable carrier 13 of crawler tread frame 12, support plate 7 with crawler tread 11 supported thereon is repositioned into the assembling position, in which it projects beyond lateral edges 6 of the loading platform. Subsequently, the crawler tread frame, which is connected to crane frame 15 by telescoping extensible crossbeam 14, is rotated about vertical axis 16 until each vertical carrier 13 is aligned with coupling 17 of crawler treads 11 (see left side of FIG. 2). After the crawler treads have been coupled to the vertical carriers, drives 18 in crawler tread frame 12 are connected to crawler treads 11 and are operated to lift the crawler treads slightly off their support plates. The support plates can now be retracted into the transport position so that the crawler treads may be freely lowered onto the ballast bed supporting track 4 so that the crawler crane may be moved on the ballast bed at the operating site.

[0016] The crawler treads are detached from crawler tread frame 12 and are supported on support plates 7 by reversing the above steps.

What is claimed is:

1. A transport car comprising:

(a) a loading platform for transporting a crawler crane having a pair of crawler treads,

(b) undercarriages supporting the platform for moving the transport car along a track,

(1) the loading platform extending in a longitudinal direction and having two lateral edges extending parallel to the longitudinal direction,
(c) a pair of transversely spaced support plates arranged on the loading platform to retain each crawler tread on the loading platform, and

(d) drives for repositioning the support plates relative to the loading platform perpendicularly to the longitudinal direction into an assembling position in which the support plates project beyond the lateral edges of the loading platform.

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