

SP 2000

New Concept of 2nd Generation Heavy Gantry Cranes for Shipyards

The existing 1st generation of these cranes has its origins in the sixties and early seventies when a majority of this crane "population" was designed and built.

To the knowledge available today, no new concept appeared on the market ever since; prompted, no doubt, by adequate supply of the yards with cranes of theoretical (= calculated) lifespan of 30 years as well as disappearance of many original suppliers.

The practical lifespan is estimated at 40 years plus, depending on severity of loading, quality of maintenance as well as obsolescence for other reasons, such as productivity limitations (lifting height/capacity/reliability) and cost of maintenance.

The new concept responds to the present and future needs of the industry by increased lifespan and reliability, combined with sizeable reduction in operational and maintenance cost.

Particular challenge to the new concept lies in capacity limitations of existing runways combined with increased height and live-load requirements to augment productivity and to shorten construction time in the dock.

The concept takes every conceivable measure in order to maintain the existing loading of the runways, thus avoiding costly reinforcements of the civil works to the maximum possible extent.

Resulting sizeable reduction in mass is equally an asset in earthquake locations.

Further and particular strength of the concept lies in the fact that it is based on extensive experience gathered during numerous projects of refurbishment or enhancement of operational life of the existing, 1st generation cranes.

The key issue is that those activities as well as development activities of the 2nd generation are inseparably linked; the first providing the technical and operational support for the second.

In conclusion, it can be said that the above project timely fills the vacuum that potentially exists between demand for an updated equipment and supply that, on all counts, presently does not exist in such form.

Due to its market and application, the project is of global character and size.

Whatever economic "climate" may prevail in the coming years the fact is that maritime transport will remain the cheapest form of moving goods from one place to another; hence that ships will continue to be built and that heavy crane equipment for their construction - now approx. 30 years old - will increasingly cry for replacement by a new generation developed and built for requirements of the next decades.

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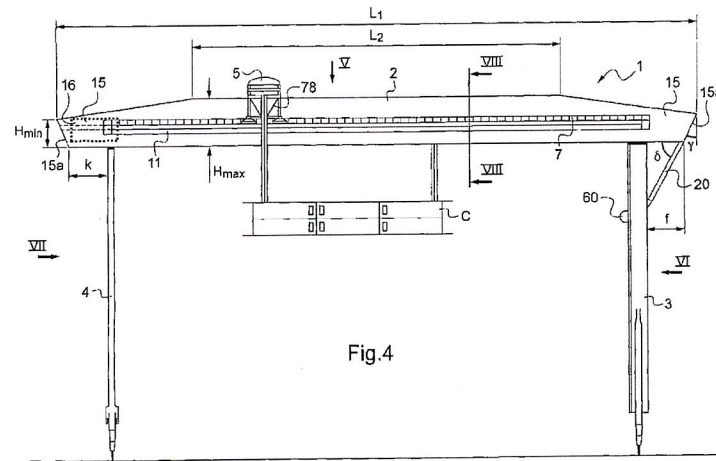


Fig.4

(57) Abstract : The present invention relates to a giant gantry (1) comprising: two beams (2) which bear running tracks (7); two legs (3,4) which support the beams (2); at least one large carriage (5) and at least one small carriage which are designed to move along the running tracks (7), the large carriage (5) and the small carriage being configured such that they can cross one another when travelling over the beams (2), in which gantry (1) each beam (2) has an outer section of which the height (H) varies when moving along at least part of a running track (7).

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