



ROBERT BIRD + PARTNERS

INTERNATIONAL CONSULTING ENGINEERS

Hammerhead Crane at Garden Island Naval Base Sydney



Hammerhead Crane

- Built 1946 – 1951
- Last operated 1996
- Riveted steel construction over 1600T
- 64m high



Hammerhead Crane

History

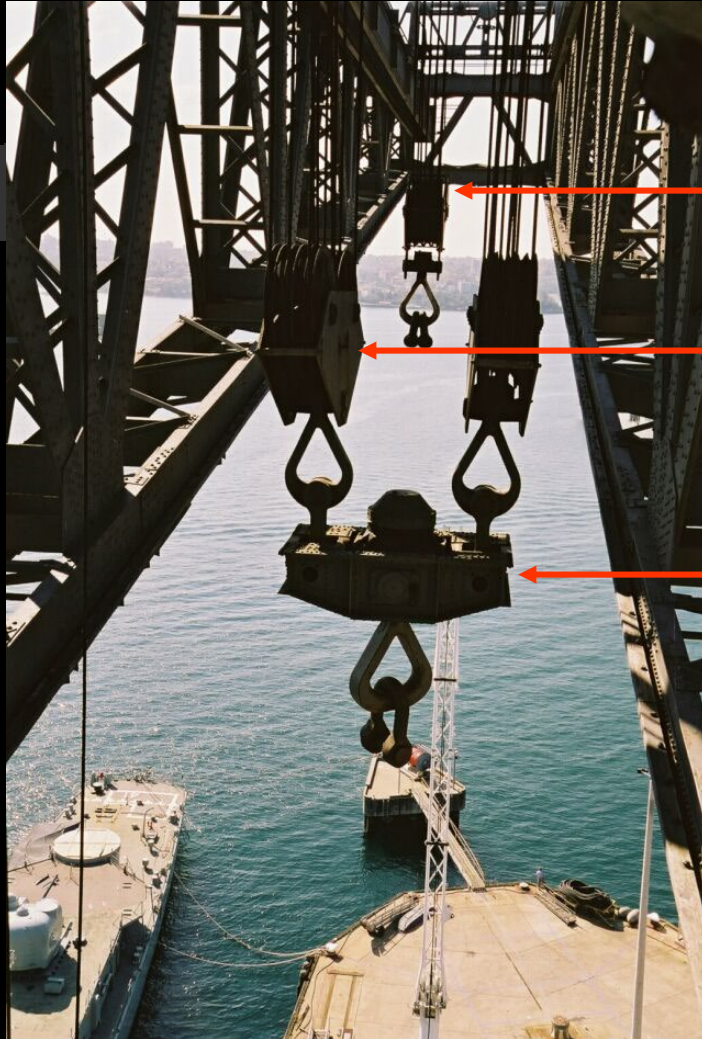
- One of six 250t giant Titan hammerhead cranes built world wide
- Replaced 250t Singapore crane destroyed in 1942
- Last used to service guided missile launch systems



Jib and slew ring

Original Lifting Capacity

Main Hooks



40t on the auxiliary hoist
or

125t on either of the main
hoists.

The main hoists could be
coupled for a combined lift
of 250t.

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Giant Titan Cranes

This is the 250t giant
Titan hammerhead crane
built in Portsmouth in
1912.

Note the strong similarity
to.....



Portsmouth Titan

Crown Copyright
RCAHMS 555126

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Giant Titan Cranes

.....the Sydney
hammerhead crane built
45 years later.



Hammerhead Crane

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The Slew Ring



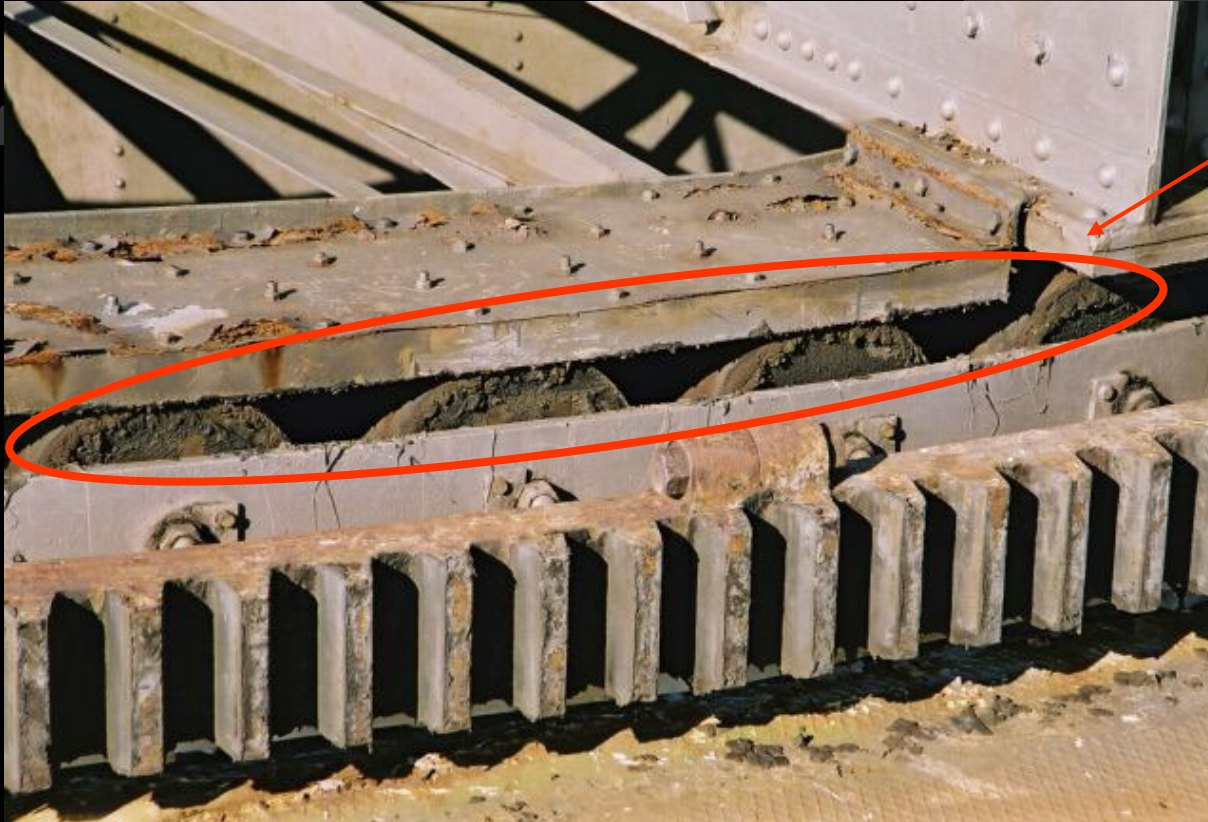
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Slew Ring



The jib rotated on a 16m diameter slew ring. The rotation was driven by two slew drives.

Slew Ring



The slew ring was supported by 96 solid steel rollers.

Counter weight box



Counterweight
box

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Counterweight



The counterweight box held 3,954 cast iron blocks – 275t in total.

Mechanics



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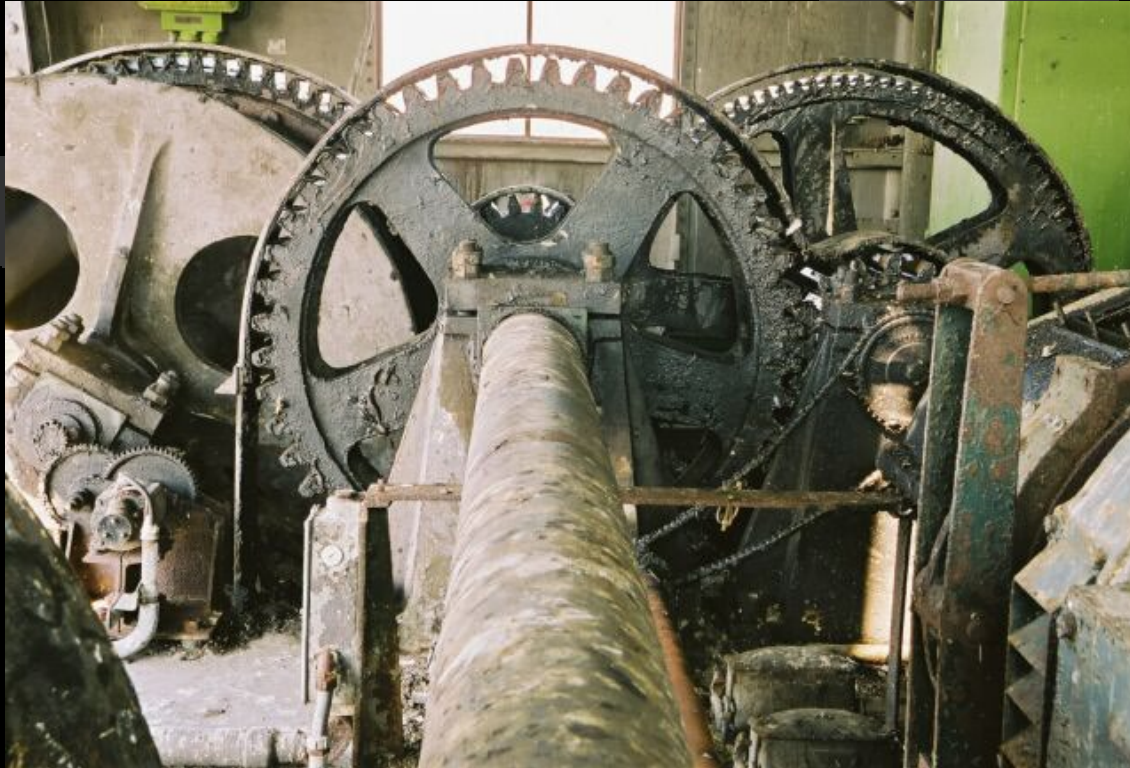
Mechanical Equipment



Main Motor Room

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Mechanical Equipment



Main Motor Room Detail

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Electrical Equipment



Contactor Panel



Crane and Sydney in 2003

Hammerhead Crane at Garden Island Naval Base - Sydney



View from crane, 2003

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