

The crack of axle linkage casing at the overhead crane in the building of spent fuel common pool, Fukushima Daiichi Nuclear Power Station (survey result)

< Reference >
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Tokyo electric Power Company

【The cause that led to damage】

At the time of the earthquake, it is conjectured that the wheel slipped to the cross direction on the rail, because the wheel which connected with the gear coupling contacts on the rail.

When the wheel stopped moving at the top of the rail, the cover of the coupling hit the gear and it was cracked by the impulsive load.

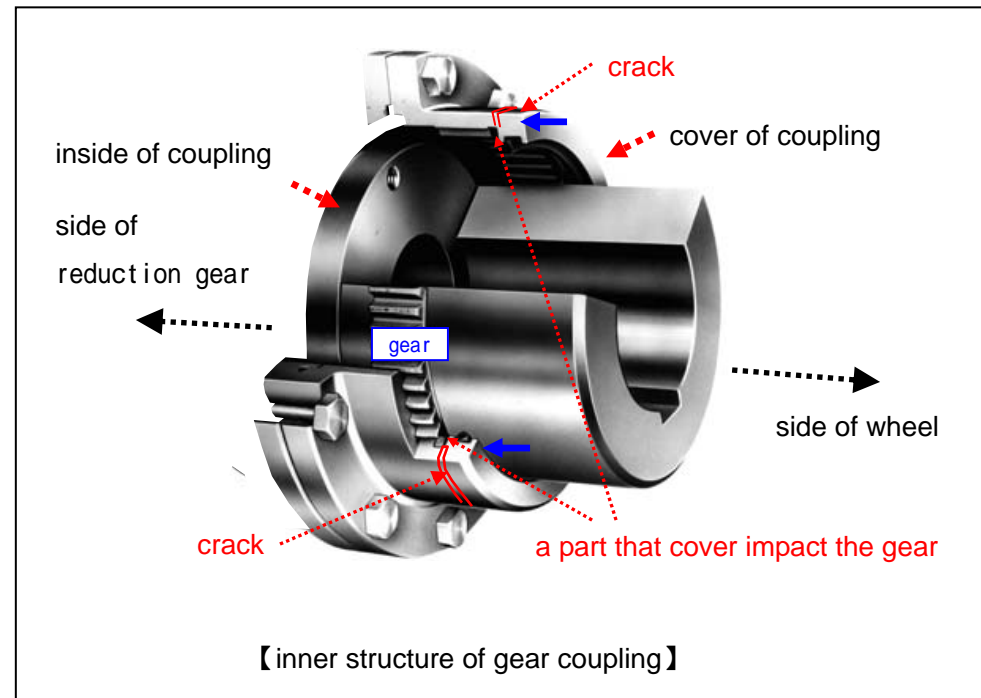
【The effect of a function】

There are no possibilities that the crane will fall down even if the cover of coupling is broken and the fuel will fall down even if the crane is carrying the fuel, because the gear coupling is not the part for supporting the crane's own weight

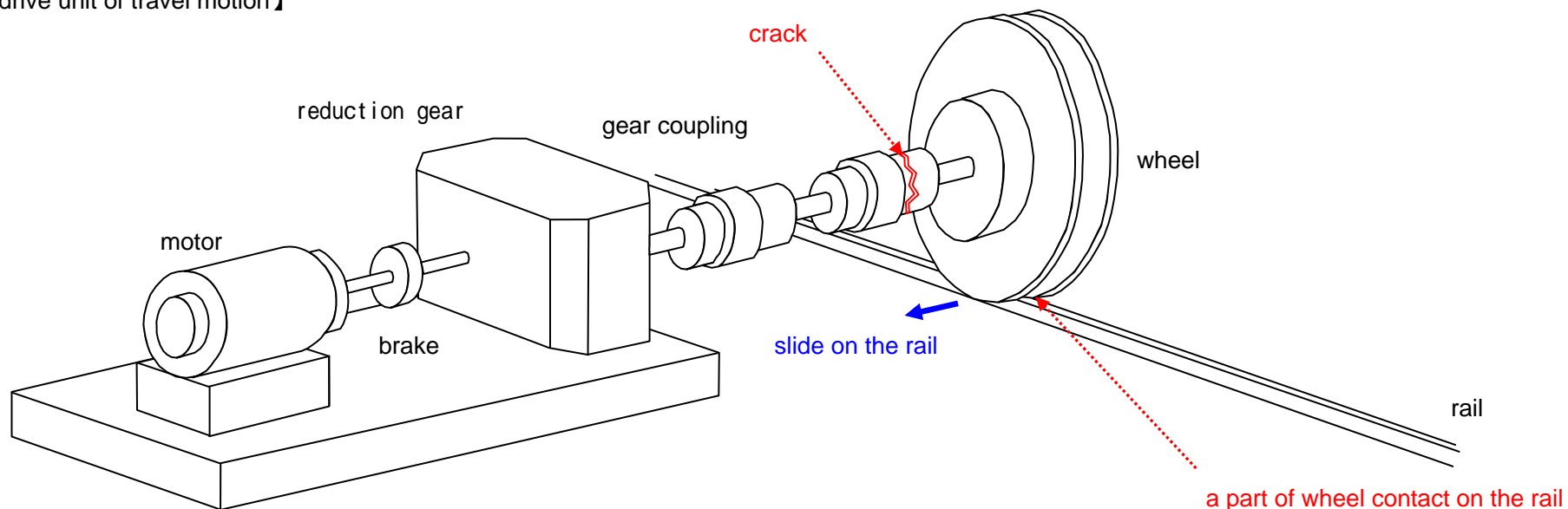
And we confirmed that there were no problems for the drive unit of travel motion by the inspection and for driving by the driving test.

【The future correspondence】

We are ordering new gear coupling and will exchange it on arrival.



【drive unit of travel motion】



The condition of fracture surface at the damaged gear coupling

【The photo of damaged part】



The part of the most remarkable damaged mark hit by the gear