

G30. What percentage of fixings are needed to be present and secured in a crane supporting structure joint assembly?

Generally, guides and standards for crane-supporting steel structures do not specify a universal fixed percentage of fixings that must be present and secured in a joint assembly. Instead, they emphasize that **all fixings specified in the design must be installed and properly secured** to ensure structural integrity and compliance with fatigue and load-bearing requirements.

However, in practice and according to general engineering standards:

- **100% of the designed fixings** (bolts, welds, anchors, etc.) in a crane-supporting structure joint assembly should be present and properly secured.
- Any missing or loose fixings can compromise the joint's ability to withstand dynamic loads, fatigue stresses, and safety margins. Therefore, any missing, loose or damaged fixings may indicate a defect that must be investigated and corrected before the crane is returned to service.

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