



KNIGHT GLOBAL

| RAIL INSPECTION CHECKLIST | | | | | | DATE: | |
|------------------------------------|----------|---------------|--------|-------------------|----|-------------|----|
| Work Cell Identification/Location: | | | | | | | |
| Rail-Type/Size: | Aluminum | | | 2" | 4" | 6" | 8" |
| What type of hangers? | | | | How many hangers? | | | |
| Bridge? | Yes / No | Single / Dual | Notes: | | | | |
| What type of load? | Direct | Cantilevered | Notes: | | | | |
| Application: | | | | | | Cycle Time: | |

| Item to be Checked | Date Checked | Checked by | Notes/Discrepancies/Comments |
|--|--------------|------------|------------------------------|
| GENERAL | | | |
| Ensure all safety devices e.g., safety wire, safety cables, clips, pins, lock-nuts, etc. are properly installed. | | | |
| Safety cables installed at all hanger locations per rail section, ¼ in (.25 mm) cable with four (4) clips per cable. Cable clip saddles must be on "live" cable. | | | |
| Check all rail splices. Bolts should only be tightened "snugly"; over-tightening may cause bolts to strip out of splice plate. | | | |
| Ensure that each rail splice bracket is installed on top of rail at splice area with safety bolt holes drilled and bolts installed. | | | |
| For all types of rail, ensure that hanger / splice guidelines are followed. | | | |
| Visually check all fasteners for indications of over-torquing, especially on hanger pivot points and any other points where movement is required. | | | |
| Ensure hanger clamp alignment is perpendicular to beam and that bolts are not over torqued. | | | |
| Verify that hanger span is within guidelines for system capacity rating. | | | |
| Where applicable, check floor support base mounting bolts for presence and tightness. | | | |
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| Item to be Checked | Date Checked | Checked by | Notes/Discrepancies/Comments |
|--|--------------|------------|------------------------------|
| Mid-Rail Stop | | | |
| Rubber Bumper – Wear not to exceed .250 in (6.35 mm); safety cable properly attached. | | | |
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| End Caps (polyurethane) | | | |
| Wear not to exceed - 7510 & 6110 =.325 in (8.25 mm); 4110 & 2000 =.125 in (3.175 mm) | | | |
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| Trolley Wheels | | | |
| For all types of rail, ensure that hanger / splice guidelines are followed. | | | |
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| Load Eyes (Crane Eyes), Load Hooks | | | |
| Bent or distorted components; more than 5% wear in hook throat, wear greater than 5% of original diameter on bolts or pins, loose or damaged locking gates, any visible twisting of hook or eye. | | | |
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| Hangers (Rod and Ball type) | | | |
| Wear resulting in $\geq .125$ in (3.175 mm) reduction of ball diameter; $\geq .125$ in (3.175 mm) increase in socket diameter or , $\geq .125$ in (3.175 mm) combined ball and socket wear. | | | |
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| Hangers (Rigid/Semi-Rigid) | | | |
| Visible distortion, cracks; $\geq .250$ in (6.35 mm) increase in bolt hole diameter(s). | | | |
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| Rail | | | |
| Gouges on running surface; twisting of more than $\geq .125$ in (3.175 mm) bend in excess of $\geq .125$ in (3.175 mm) in any span of any plane. | | | |
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| Installation | | | |
| Straightness-Must be straight within $\frac{1}{4}$ in (6.4 mm) in any span length. | | | |
| Splice Gap-Must not exceed $\frac{1}{16}$ in (1.6 mm) at load carrying ange. | | | |
| Runway Elevation-Should not vary $\pm \frac{1}{4}$ in (6.4 mm) in any span length. | | | |
| Runway Parallelism-Must not exceed $\pm \frac{3}{16}$ in (4.8 mm). | | | |
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