



AMERICAN CRANE RAILS

This section includes carbon steel crane rails designed with specific profiles and nominal weights of 104, 105, 135, 171, and 175 pounds per yard, intended for crane runway applications. All listed rail profiles conform to ASTM A-759 standards. The standard Control Cooled crane rails have a Brinell hardness rating between 250 and 280, but for increased wear resistance, rails can be head-hardened to reach a Brinell hardness between 321 and 388.

Crane rails are typically stocked in 39-foot lengths and are pre-drilled to accommodate tight-fitting joint bars (details below). However, longer lengths of 60 or 78 feet are also available, and can be provided with blank ends—without splice holes—for welding applications.

The usual drilling pattern for these five crane rail sizes is 4" x 5" x 6", with hole diameters and elevations shown in the table below. Joint bars are drilled with matching center distances, except for the space between the two middle holes. This specific distance is 7-15/16", which is 1/16" less than the combined 8" span of the two adjacent rail ends. This slight offset is intentional and ensures the rails are held tightly together, creating a "tight joint."

Due to normal tolerances in hole positioning, bolt sizes, and rail ends, small gaps may occasionally be present in tight joints. In some cases, it may also be necessary to ream through both the joint bar and rail to allow the bolts to fit properly.

| Crane Rail Section | Spacing Inches | | | Hole Dia. D | Elev. Inches E |
|--------------------|----------------|---|---|-------------|----------------|
| | A | B | C | | |
| 104 lb. | 4 | 5 | 6 | 1-1/16 | 2-7/16 |
| 105 lb. | 4 | 5 | 6 | 15/16 | 2-13/64 |
| 135 lb. | 4 | 5 | 6 | 1-3/16 | 2-15/32 |
| 171 lb. | 4 | 5 | 6 | 1-3/16 | 2-5/8 |
| 175 lb. | 4 | 5 | 6 | 1-3/16 | 2-21/32 |

