Class II Includes small four-wheel truck diesels, geared and other small steam locomotives with short end overhangs typical of old-time, logging and branch lines and equivalent rolling stock.

Class I Includes longer steam locomotives typically with two-wheel trailing trucks, larger four and six-wheel truck diesels and equivalent rolling stock.

Class Ia Includes the largest steam locomotives with four-wheel trailing trucks, articulated locomotives, those with rigid wheelbases in excess of 20 feet, full length passenger cars and other long rolling stock.

Layouts constructed to one of these classes should accept models of its own and smaller classes, but larger models can expect clearance problems on a layout built to a smaller classification. See STANDARD S-7 and RP-11.

### TRACK CENTERS in CURVES

<table>
<thead>
<tr>
<th>Curvature in Degrees</th>
<th>O SCALE</th>
<th>S SCALE</th>
<th>OO SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Radius-Prototype</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>M(*)</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Radius-inches</td>
<td>287</td>
<td>144</td>
<td>96</td>
</tr>
<tr>
<td>Centers</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Class II</td>
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<td>3 -</td>
</tr>
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<td>4</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Class I</td>
<td>3 -</td>
<td>3 -</td>
<td>3 -</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Class Ia</td>
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<tr>
<td></td>
<td>4</td>
<td>4</td>
<td>2</td>
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</tbody>
</table>

### Notes
- (*)M = 2A (from S-7) = Preferred Minimum Track Center Distance for easy handling, coupling, yards, etc.
<table>
<thead>
<tr>
<th>Degrees</th>
<th>M</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
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<tr>
<td>Tang.</td>
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<td>574</td>
<td>383</td>
<td>288</td>
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<td>146</td>
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</tr>
</tbody>
</table>

| HO SCALE: | |
| Radius-inches | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Centers     | 1 | 13 | 13 | 13 | 13 | 7 | 15 | 1 | 1 | 3 | 1 |
| Class II    | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 16 | 32 | 8 | 16 |
| Class I     | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 16 | 16 | 16 |
| Class Ia    | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 16 | 16 | 16 | 32 | 8 | 16 | 16 | 16 | 16 |

| HOn3: | |
| Radius-inches | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Centers     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Class II    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 16 | 16 | 16 |
| Class I     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 16 | 16 | 32 | 8 | 16 | 32 | 16 | 32 | 16 | 32 |
| Class Ia    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 16 | 16 | 16 | 16 | 8 | 16 | 4 | 16 | 8 | 16 |

| TT SCALE: | |
| Radius-inches | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Centers     | 1 | 13 | 13 | 13 | 13 | 7 | 15 | 1 | 1 | 3 | 1 |
| Class II    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 16 | 16 | 16 |
| Class I     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 16 | 16 | 16 |
| Class Ia    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 16 | 16 | 16 |

| TTn3: | |
| Centers     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Class II    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 1 | 16 | 16 | 32 | 8 | 16 | 32 | 16 | 32 | 16 | 32 |
| Class I     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 2 | 1 | 16 | 16 | 16 | 16 | 8 | 16 | 4 | 16 | 16 |

| N SCALE: | |
| Radius-inches | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Centers     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Class II    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 16 | 32 | 32 | 32 | 32 | 16 | 32 | 16 | 32 | 16 | 32 |
| Class I     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 16 | 32 | 32 | 32 | 32 | 16 | 32 | 4 | 16 |
| Class Ia    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|             | 16 | 32 | 32 | 32 | 32 | 16 | 32 | 32 | 32 |

NOTES:
1. Radius is measured at track centerline - midway between rails - of the inner of multiple tracks.
2. For a radius intermediate of those listed use the next larger radius shown in the table.
3. Dual gage track shall use standard gage radii, centers and clearances.
4. Narrow gage locomotives and other equipment built on standard gage frames, such as K types, require standard gage Track Centers.
5. Increased Track Centers and clearances for curves shall be eased (see D3 series DATA SHEETS) for a distance along the track consistent with the class equipment used.
6. Inside Clearance shall be half the Track Center Distance listed up to, but not to exceed, M/2 (A from S-7).
7. Outside Clearance shall be half the Track Center Distance listed up to M/2 (A from S-7); for Track Centers Greater than M, Outside Clearance shall be M/2 plus the amount Track Center Distance exceeds M (2A from S-7).
8. Construction or operation of equipment on curves sharper than those listed for its class are neither prohibited nor recommended.