

**Conrail Vendor Radiography Sampling Requirements**

- 1-Initial Qualification includes radiography of the castings, and sectioning if required, until one casting meets the levels shown on this plan.
- 2-After the Initial Qualification, the 5th casting poured(not including the the initial qualifying casting) is to be radiographed. If that casting meets the levels shown on this plan, then 1 out of every 20 casting poured is to be radiographed.
- 3-If the 5th casting poured fails to meet the Conrail levels, then the Initial Qualification phase resumes.
- 4-If at any time the 1 out of 20 casting fails to meet the Conrail levels, then the Initial Qualification phase resumes.
- 5-All castings that are radiographed and fail to meet the levels shown on this plan will not be accepted by Conrail. All castings poured prior to the 5th or prior to the 1 out of 20 radiographed will be accepted.

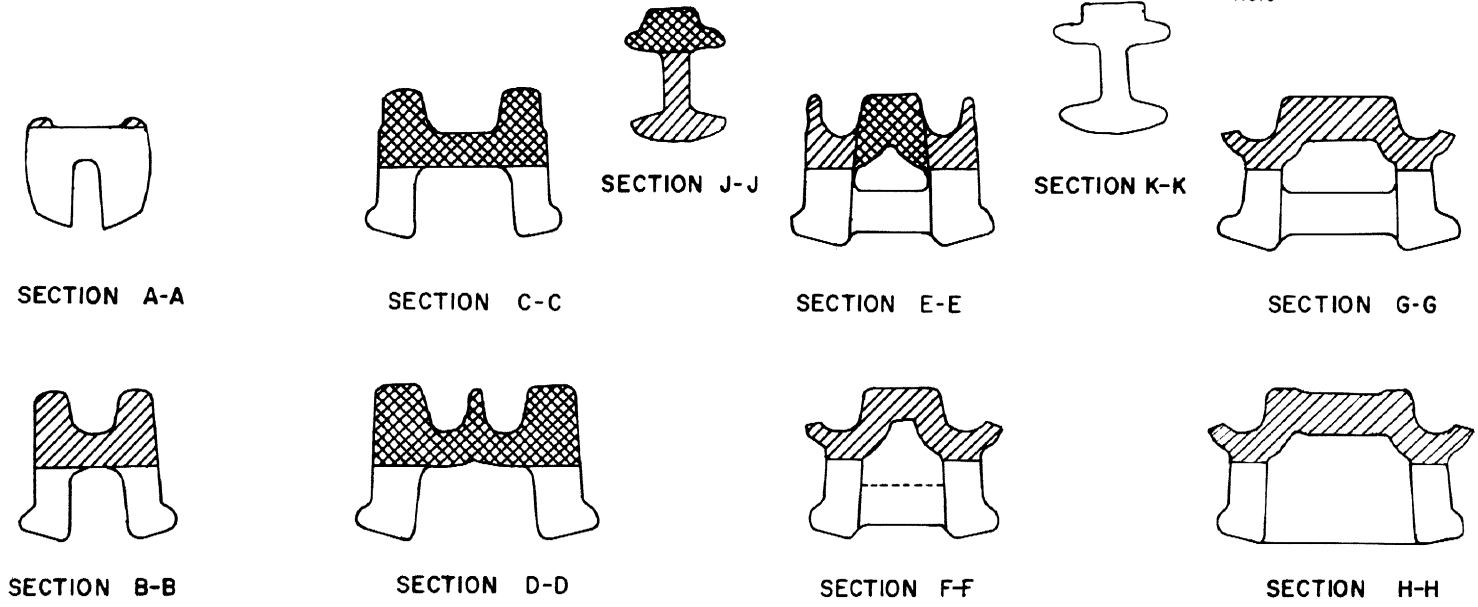
**NOTES**

Castings must meet the following levels per ASTM Standards E186, E446, E280 and E94 (Radiographic Testing):

- Must be Level 1 or 2
- Must be Level 1, 2 or 3
- Must be Level 1, 2, 3, 4 or 5

ASTM Levels apply to the following defects or discontinuities:  
 - ASTM Category 'A' - Gas Porosity  
 - ASTM Category 'B' - Sand and Slag Inclusions  
 - ASTM Category 'C' - Shrinkage

Castings to be of heavy wall construction per AREA Plan No. 621-86



**CONRAIL 74165-A**  
STANDARD  
**MANGANESE CASTINGS**  
INTERNAL SOUNDNESS LEVELS  
SEPTEMBER, 1994  
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