

Hot rolling and rolling defects

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1. Quiz - Key

1. What is the reason for getting a crown on the rolled strips? What is the remedy for this defect?

Crowning happens due to roll bending and elastic deformation of the rolls. Cambering of rolls is done in order to avoid this defect.

2. What are the effects of front tension in rolling?

Front tension shifts the neutral point towards the entry. It also helps reduce the rolling load.

3. Why are wavy edges formed during rolling of strips?

Wavy edges are caused by roll bending.

4. How does residual stress occur in rolled parts?

Residual stress is caused in rolling as a result of compressive deformation of the strip or sheet. Large diameter rolls cause residual tensile stress on surface and compressive stress in the interior.