

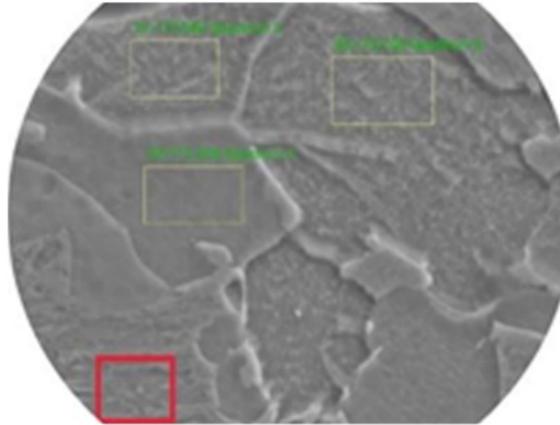
# Diagnosing Material Behavior

Learn how our Material Support & Solutions team solved this customer material issue.



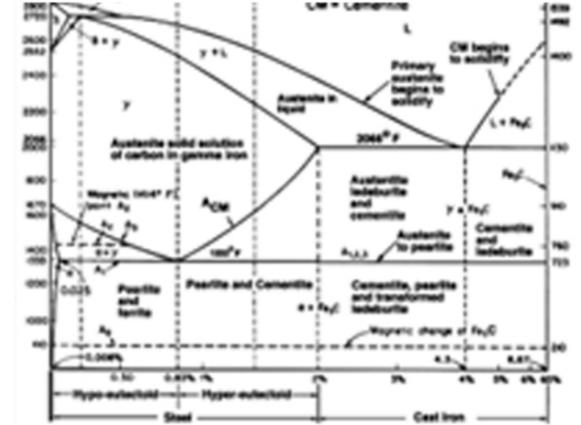
## THE PROBLEM

A long time manufacturing customer began experiencing unexpected part failures in a demanding new application. Components made from a steel grade that had performed reliably for over a decade were now fracturing in the field, resulting in downtime, increased costs, and customer concerns. Both teams needed to determine what changed.



## THE ANALYSIS

Our Technical Service Laboratory performed a detailed metallurgical investigation. Using scanning electron microscopy, optical microscopy, and hardness testing, the team identified a microstructural cause within the steel that had not dissolved during the heat treatment process further downstream.



## THE SOLUTION

In partnership with the supplier, Worthington refined hot strip mill processing conditions to improve the steel microstructural uniformity. The revised material was validated through laboratory testing and confirmed in full scale production trials. This allowed for restored product performance and reduced delays in processing.

## — THE ACTION

When steel is not performing to expectations, contact the Material Support and Solution team at Worthington to get the steel you need.