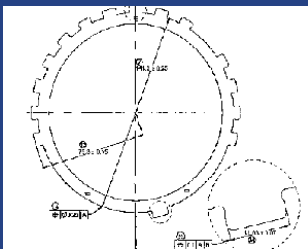




# WORTHINGTON INDUSTRIES

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

## Approving Alternate Grade



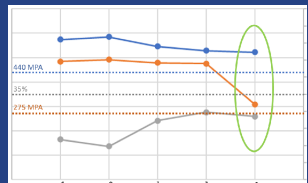
### THE PROBLEM:

A customer was experiencing a mill supply shortage on hot roll steel. The customer purchased hot roll HSLA on the spot market, slit the material, and tried to supply to their own customer, but they could not fine-blank the brake flange part, due to the material being higher strength than they were accustomed to processing.



### THE ANALYSIS:

Worthington's Material Support and Solutions team obtained samples of the hot roll HSLA product, and tested baseline properties. Salt pot anneal simulations were performed at various times and temperatures.



### THE SOLUTION:

A time/temperature combination was determined that lowered the strength to typical levels, and their customer was able to stamp the parts without issues.

### THE ACTION:

*When you have material that is not working for you,  
contact the Material Support & Solution team at  
Worthington.*

**CALL US AT 1-800-944-2255**

WORTHINGTON INDUSTRIES, 200 WEST OLD WILSON BRIDGE ROAD  
COLUMBUS, OH 43085