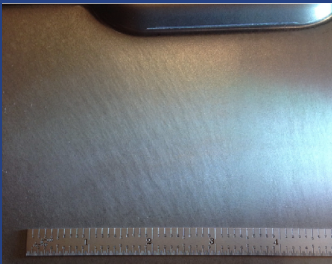




WORTHINGTON INDUSTRIES

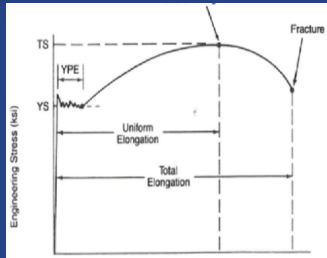
Learn how our Material Support & Solutions team solved this customer material issue:

Improving Surface Imperfection



THE PROBLEM:

The customer was experiencing occurrences of surface ripples on drawn components. The problem was sporadic across different lots and could not be detected until after forming.



THE ANALYSIS:

The ripples were a result of Luders lines (stretcher strains), which are a result of discontinuous yielding. Defective material was analyzed and compared with successful material. Processing paths were the same but, defective material showed higher levels of yield point elongation (YPE).



THE SOLUTION:

A modified/restricted chemistry was implemented to increase robustness of the material against Luders lines. Prior to producing sheets, additional mechanical testing was used to determine presence of YPE, eliminating the issue.

THE ACTION:

When encountering surface imperfections, contact the Material Support & Solution team at Worthington.

CALL US AT 1-800-944-2255

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