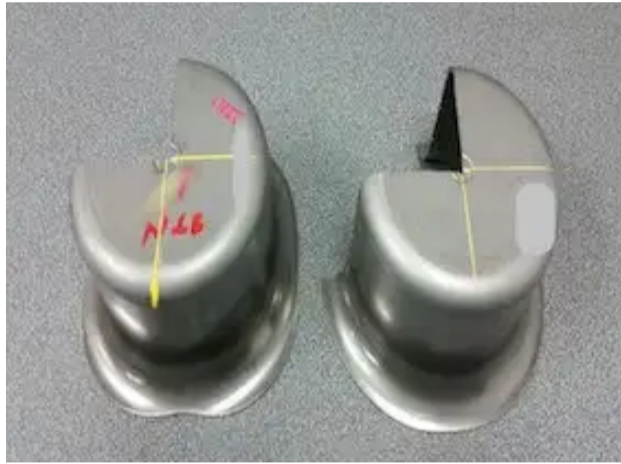


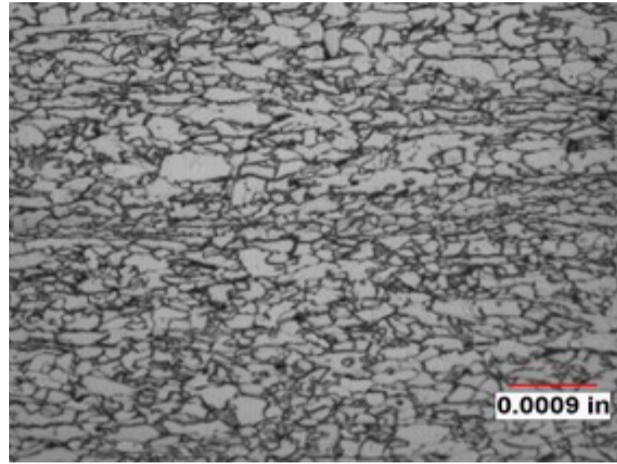
Forming Challenge

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



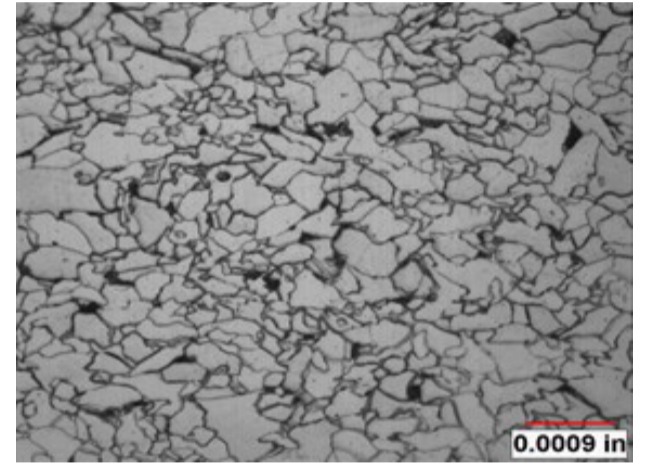
THE PROBLEM

The customer noticed a non-concentric draw occurring on a drawn cup component. This is commonly referred to as “earring”, and it happens because steel is generally not conducive to the perfectly even draw that a circular component requires.



THE ANALYSIS

One solution for earring is to use more material to produce the part. This allows for non-uniform stretching without producing short draw heights. Manufacturers want to avoid this option because it produces more scrap. Our metallurgists went to work to find a better alternative.



THE SOLUTION

After a micro-structural analysis and review of the steel's chemistry, our metallurgists found a solution. By ordering a different alloy, and processing requirements from the hot mill - they could achieve a more uniform microstructure in the steel - minimizing earring.

— THE ACTION

When you want to minimize earring and produce parts with improved dimensions or reduce scrap, for any drawn cup that has earring tendencies on rim of drawn edges, contact the Material Support & Solutions team at Worthington.