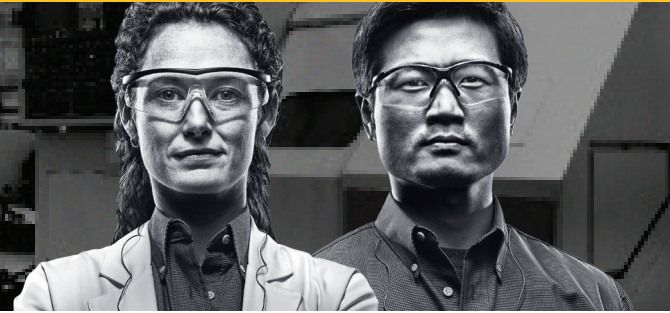


CASE STUDY



DRAWING AND FORMING

QUAKERDRAW® 73 XP

CHALLENGES

A French manufacturer of gas bottles for the global consumer market was using a 2-stage drawing process to manufacture standard gas bottles, and a 3-stage drawing process for production of Acetylene bottles. The manufacturer wanted to:

- » Reduce its scrap rate
- » Improve drawing quality
- » Eliminate alkaline additive additions to maintain biostability of the drawing emulsion

To help improve their operations, Quaker suggested the manufacturer switch to QUAKERDRAW® 73 XP.

THE SOLUTION

Quaker introduced QUAKERDRAW® 73 XP in one drawing line. After seven months the manufacturer experienced improved lubrication, resulting in:

- » Improved surface finish
- » Fewer scratches

Quaker was able to show – on an annualized basis – a reduction in:

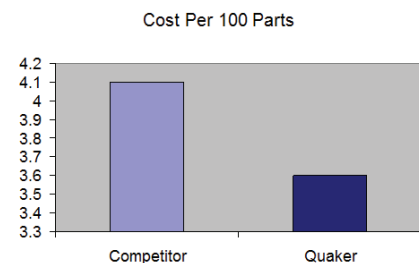
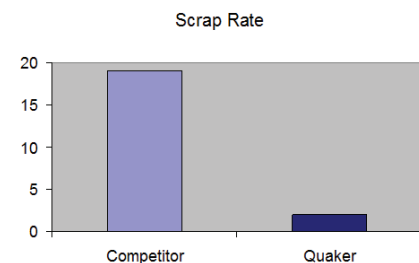
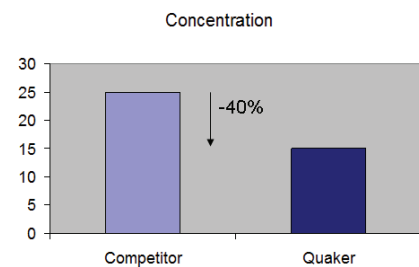
- » Scrap rate from 19% to 2%
- » Concentration of the drawing fluid from 25% to 15% for Acetylene bottles

THE PRODUCT

QUAKERDRAW® 73 XP is specially designed for heavy drawing operations. It is a chlorine-free fluid that is stable, easy to maintain and with residues that are easy to clean. The product can be used in circulating systems (transfer press) or sprayed directly onto a part. It can be used from 5% to 20% concentration (typically 10% in soft water), or as a neat fluid for extremely demanding operations.

In addition, this product offers:

- » Environmental friendliness (Formaldehyde-free and Boron-free)
- » Good biostability
- » Effective lubrication and strong anti-wear properties (also for stainless steel)
- » Replacement of Chlorinated products



CASE STUDY

DRAWING AND FORMING

QUAKERDRAW® 73 XP

PROCESS AND EQUIPMENT

Part	Acetylene gas bottles
Material	Steel, B53 P315 NB coated with HFE film
Sheet Thickness	3,35 mm
Disc Diameter	875 mm
Pressure	Stage 1: 200-400 tons Stage 2: 200-400 tons Stage 3: 100-200 tons
Water	Osmosed
Specific Operation	Deep drawing

THE EXPERTISE

Metalworking lubricants represent a very minor part of the costs in a metalworking process, typically less than 1%. This case illustrates the importance of correct fluid selection. The impact of the fluid can be a multiple of its costs, making the price of a metalworking fluid insignificant. That is why Quaker focuses on developing fluids with the highest performance without compromise, fluids that sharpen your competitive edge.