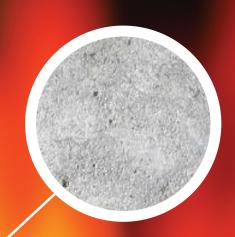
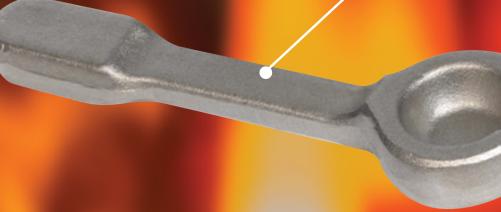
## **WHY FORGINGS ARE BEST**



from Recrystallization and Grain Refinement...

- Reproducible response to heat treatment
- Minimum variation in machinability
- Consistent levels of finish
- Stable dimensional characteristics
- Maximum strength and toughness









BAR STOCK

Grain Flow Broken by Machining



No Grain Flow

## DIRECTIONAL STRENGTH

from Controlled Deformation at Elevated Temperatures...

- Directional "grain flow" = directional properties
- Higher strength-to-weight ratio
- Better ductility
- Resistance to impact and fatigue



QC Forge applies rapid Infrared heating to aluminum forgings, creating enhanced physical properties, such as improved fatigue life, fine grain aluminum microstructure, and better response to heat treatment. QC Forge uses IR heating technology to reduce energy consumption and lower production costs. U.S. Patent 7,544,256B2