

# Wilfley

## Material Data Sheet

## Hastelloy CW-2M

Wilfley pumps and parts are available in Hastelloy CW-2M.

Hastelloy alloy CW-2M is a nickel-base alloy that contains significant amounts of molybdenum and chromium. Hastelloy CW-2M has exceptional resistance to strong oxidizing and reducing agents.

Wilfley Hastelloy CW-2M is specially processed to improve the microstructure such that carbides are removed. Arrow "A" in photo 1 points to grain boundaries and islands of complex and harmful type  $M_6C$  carbides. Arrow "B" in photo 2 shows the location shadows where once the carbides were present.

The Wilfley Hastelloy CW-2M with improved microstructure has an elongation in excess of 60% while the corrosion resistance is approximately 70% better than the equivalent standard Hastelloy.

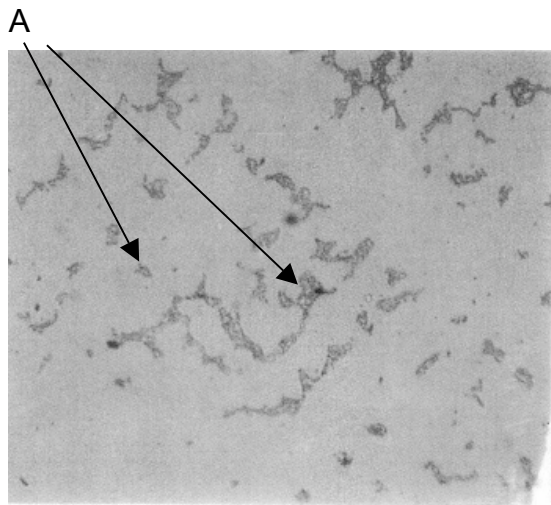


Photo 1

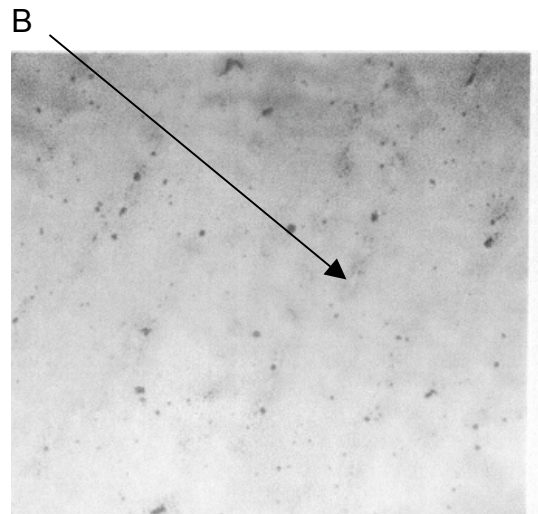


Photo 2

## Mechanical Properties

Specification AST	Hardness Range HBN (typical)	Tensile Strength	Yield Strength	Elongation
ASTM A494	140-170	72,000 psi	Min 40,000	20% min
Wilfley Hastelloy CW-2M	140-170	72,000 psi	Min 40,000	60% min