

# COPPER AND COPPER ALLOYS PLATING

## PROCESSES

### NOVALYTE NC-CU/NC-CU-M

A low-metal process based on a non-toxic, biodegradable organic complexing agent, for plating copper from an alkaline cyanide-free electrolyte. The two-part additive system produces a semi-bright to bright deposit, which is suitable as a strike on steel surfaces or as a base for semi-bright or bright nickel deposits. The deposit also is useful on steel components as a mask for selective carburizing.

### NOVALYTE BR

Is similar in chemistry to Novalyte NC-CU except that the electrolyte contains both zinc and copper salts to produce brass (zinc-copper alloy) deposits. The two-part additive system produces semi-bright to bright deposits, and the fine-grained quality can be maintained in this alkaline non-cyanide process. The alloy proportion can be readily varied to maximize the application.

### NOVALYTE 707

A liquid addition agent for use in air agitated copper cyanide plating solution. The addition agent is so formulated to function as a single additive brightening system. Will produce bright, uniform deposits from cathode rod agitated solutions. The deposits are smooth, ductile, and free of any alloying metallic brightening constituents since the additive is all-organic in chemical nature.

### NOVALYTE 747

A liquid addition agent for use in air agitated cyanide copper plating solutions. Promotes high anode efficiency and imparts good tolerance to the usual contaminants normally associated with bright cyanide copper plating.

### ALDOLYTE 715-W

A liquid wetting agent for use in air agitated copper cyanide plating solutions to reduce surface tension and increase the tolerance to organic contamination where constant filtration through an activated carbon pack is not feasible.

### ALDOLYTE 716-W

A liquid addition agent for use in copper plating solutions where high detergency type surfactant is desired. The addition agent is of the anionic surfactant type.

### ALDOLYTE ACA

A liquid addition agent formulated for use in copper cyanide plating solutions to assist and enhance the proper corrosion of the anode. Compatible with most types of copper cyanide electrolytes.

### **ALDOLYTE CRA**

A liquid addition agent for use in copper cyanide plating solutions for controlling the detrimental effects of hexavalent chromium contamination. Compatible with most types of copper cyanide electrolytes.

### **ALDOLYTE BRIGHT ACID COPPER DEPOSITS**

This three-part system produces bright and ductile copper deposits from an acidic electrolyte. The process has excellent leveling characteristics that make it ideal as a base layer for various nickel-chromium cycles on steel, zinc-based die-castings, and plastics. The process has excellent throwing power for bright deposits in low current density areas.