

## FEDERAL SPECIFICATION

## CHROMIUM PLATING (ELECTRODEPOSITED)

This amendment, which forms a part of QQ-C-320B dated 17 June 1974, was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

Page 1:

Paragraph 2.1, Under "Federal Specification" delete "QQ-S-624, Steel Bar, Alloy, Hot Rolled and Cold Finished (General Purpose)."

Page 2:

Paragraph 2.1, Under "Military Specifications" add "MIL-S-5000, Steel, Chrome-Nickel-Molybdenum, (E4340), Bars and Reforging Stock."

Page 4:

Paragraph 3.2.6, delete paragraph and substitute the following: "All coated steel parts having an ultimate tensile strength of 160 ksi and higher (or Rockwell hardness C36 and higher) shall be baked at  $375^{\circ} \pm 25^{\circ}\text{F}$  ( $191^{\circ} \pm 14\text{ C}$ ), within four hours after plating, in accordance with the following times:

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 Minimum Baking Times
 

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<u>Tensile Strength</u> ksi	<u>Time (At Temperature)</u> Hours
160 - 180	3
181 - 220	8
221 and above	12       "

Paragraph 3.3.2.1, delete and substitute the following: "3.3.2.1 Peening. All class 2 plated parts which are designed for unlimited life under dynamic loads, shall be peened in accordance with MIL-S-13165 or MIL-R-81841 prior to plating. Unless otherwise specified in the applicable drawings, the peening shall be accomplished on all surfaces for which the plating is required and on all immediately adjacent surfaces when they contain notches, fillets or other abrupt changes of section size where stress will be concentrated. Plated parts which are subjected to static loads or designed for limited life under dynamic loads or combinations thereof, need not be peened prior to plating, unless specified in the contract, order, or applicable drawing."

AMSC N/A

AREA MFFP

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Page 5:

Delete paragraphs 3.3.2.2, 3.3.2.3, 3.3.2.4 and 3.3.2.5.

Page 8:

Paragraph 4.3.4, line 6, delete "QQ-S-624" and substitute "MIL-S-5000."

Page 9:

Paragraph 4.4.2, Table I, footnote 1/, lines 4 and 5, delete and substitute the following: "steel such as AISI or SAE number 4340 conforming to MIL-S-5000 shall be used."

Page 10:

Paragraph 4.4.2.2, line 6, delete "MIL-STD-1213" and substitute "MIL-STD-1312."

Page 11:

Paragraph 4.4.3.5, line 5, delete "240,000 psi (1655 MPa)" and substitute "180,000 psi (1241 MPa)."

Page 12:

Paragraph 4.5.2, add the following: "Class 2 plating shall demonstrate good adhesion by its capability to withstand the necessary grinding operations for final dimensions."

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirement of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

MILITARY INTERESTS:

Custodian:

Army - MR  
Navy - AS  
Air Force - 20

CIVIL AGENCY COORDINATING ACTIVITIES:

COMMERCE - NBS  
GSA - FSS

Review Activities:

Air Force - 82, 99  
Defense Logistics Agency - IS

PREPARING ACTIVITY:

NAVY - AS  
DoD Project No. MFFP-0385

User Activities:

Army - GL