

INCH-POUNDMIL-H-6875H
AMENDMENT 1
16 July 1993MILITARY SPECIFICATION
HEAT TREATMENT OF STEEL, PROCESS FOR

This amendment forms a part of MIL-H-6875H, dated 1 March 1989, and is approved for use by all Departments and Agencies of the Department of Defense.

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3.1.1.1: For "Nitrogen", under the "Class D" column, delete "No" and substitute "X 10", and add a new footnote:

"10/ The use of a nitrogen atmosphere shall be limited to heat treating temperatures of 1400°F and below. A nitrogen atmosphere may be used for heat treatment above 1400°F provided a minimum of 0.020 inches of metal is subsequently removed from all surfaces of heat treated material."

3.1.1.1: For "Vacuum", under the "Class D" column, add "11" next to the "X", and add a new footnote:

"11/ Nitrogen is not permitted as a partial pressure above 1400°F. Nitrogen may be used as a backfill quench for vacuum heat treatments performed at or below 1925°F."

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Footnote 12/: Delete and substitute:

"Cooling in air or other gases is optional for small parts up to, and including, 0.250 inches in thickness. For 440C, cool to -90°F or lower immediately after quenching and before tempering and soak for 2 hours minimum; the delay between quenching and sub-zero cooling shall not exceed 1 hour."

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Footnote 19/: Delete and substitute:

"Cool immediately after quenching and before tempering; delay shall not exceed 1 hour. Cool to -90°F or lower, and soak for 1 hour minimum.

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TABLE ID:

Delete the "1700" solution treatment temperature for "Custom 450" and substitute "1900".

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Footnote 4/: Add: "The tolerance on this calculated soak time shall be +10 to -0 minutes."

Footnote 16/: Delete: "...4 hours...", and substitute "...4 to 6 hours...".

Custodians:

Army - MR
Navy - AS
Air Force - 11

Preparing activity:

Navy - AS

(Project No. 95GP-0370)

Review activities:

Army - AR, AV, EA, MI
Navy - OS
Air Force - 84, 99
DLA - IS

User activities:

Army - AT