



INCH-POUND

PIA-H-6875
26 November 1997

Renamed from
MIL-H-6875H
AMENDMENT 1
16 July 1993

HEAT TREATMENT OF STEEL, PROCESS FOR

The department of Defense has reviewed and determined to be valid for use in acquisition MIL-H-6875H, dated 1 March 1989. This was done 16-July-1993. As the initial PIA standard PIA 6875 is based on MILITARY SPECIFICATION, this Notice is being included for the initial issue by PIA.

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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