

(R) Metric Wrenches: 6 & 12 Point Flare Nut, Non-distorting

RATIONALE

The update of MA4360 is to incorporate improvements compiled from customer feedback. The improvements include size corrections and the acceptance of alternate coatings (used in lieu of nickel chromium plating).

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1. SCOPE

This SAE Metric Aerospace Standard (MA) covers metric double end flare nut wrenches that are designed with the following requirements:

- a. Non-distorting usage.
- b. Possessing the strength, clearances, and internal wrenching design to be used on hydraulic tube fittings that conform to the requirements of SAE J514.
- c. Transmitting torque to tube fittings without bearing on the apex of fitting wrenching points.

Inclusion of dimensional data in this document is not intended to imply that all of the products described herein are stock production sizes. Consumers are requested to consult with manufacturers concerning lists of stock production sizes.

1.1 Purpose

These tools are used for tightening and loosening hydraulic flare nut (tube) fittings.

2. APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

AMS4118	Aluminum Alloy, Rolled or Cold Finished Bars, Rods, and Wire, 4.0Cu - 0.70Mn - 0.60Mg - 0.50Si (2017; -T4, -T451), Solution Heat Treated
AS478	Identification Marking Methods
AS4984	Coating Requirements for Aerospace Hand Tools
J514	Hydraulic Tube Fittings

2.2 ASME Publications

Available from American Society of Mechanical Engineers, 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007-2900, Tel: 973-882-1170, www.asme.org.

B46.1	Surface Texture, Surface Roughness, Waviness and Lay
B107.17	Gages and Mandrels for Wrench Openings, Reference