



AEROSPACE STANDARD	AS6173™	REV. B
	Issued 2012-10 Revised 2018-12 Stabilized 2024-10 Superseding AS6173A	
Cutting Tools, Wire, Electrical, General Specification for		

RATIONALE

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Documents

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1. SCOPE

1.1 Purpose

This standard covers design requirements, performance requirements, and methods of procurement for tools and associated accessories used to cut aerospace vehicle electrical wire and cable. Aerospace vehicle electrical wire has stranded conductors with protective plating and specialized insulation. Poor quality wire cutting can compromise the performance of wiring.

1.2 Classification

Wire cutting tools covered by this standard are of the following types:

Type I - Tools for cutting individual wires

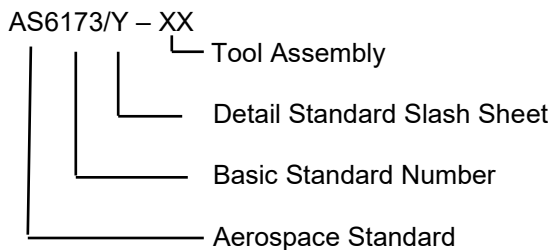
Type II - Tools for cutting wiring bundles/jacketed cables

Type III - Powered tools for cutting individual wires

Type IV - Powered tools for cutting wire bundles/jacketed cables

1.3 Part Number Structure

Unless otherwise specified in the detail standard slash sheet, the part number structure for the tool shall be:



2. REFERENCES

2.1 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.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AIR1351	Manufacturers' Identification of Aerospace Electrical and Electronic Wiring Devices and Accessories
AS6173/1	Cutting Tool (Miniature) Electrical, Wire Cutting, Hand Actuated, Type I, Wire Sizes 26 through 16
AS6173/2	Cutting Tool, Electrical, Wire Cutting with Gripping Teeth, Hand Actuated, Type I, Wire Sizes 26 through 10
AS6173/3	Cutting Tool, Electrical, Wire Cutting with Curved Jaws, Hand Actuated, Type I, Wire Sizes 26 through 1/0

2.1.2 U.S. Government Publications

Copies of these documents are available online at <http://quicksearch.dla.mil>.

MIL-STD-202	Department of Defense, Test Methods for Electronic and Electrical Component Parts
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2.2 Definitions

2.2.1 COMPONENT PREPARING ACTIVITY

The component preparing activity is an activity that controls a component standard or drawing that references a wire cutter tool required to assemble a wire or cable to the component specified.

2.2.2 DIAGONAL CUTTERS

Manually actuated mechanical wire cutter for round wire using compression type cut blade design. Compression wire cutters, commonly referred to as diagonal wire cutters or side cutters, use the compression force of opposing cutting edges and cut the wire by indenting and forcing the metal of the wire out of their way.

2.2.3 MANUFACTURER

A manufacturer is an original component manufacturer that has design and production control of the processes used to produce the final component in accordance with the standard.

2.2.4 PRODUCTION LOT

A production lot is a defined quantity of finished wire cutters of identical configuration, fabricated from same raw material, produced as a continuous run, and presented for inspection at the same time.

2.2.5 PURCHASER

A purchaser is an activity that can issue a purchase order or contract.