

<p>AMETEK AEROSPACE PRODUCTS INC. WILMINGTON, MA 01887 CAGE CODE: 97424 Formerly GE Instrument Products Oper</p>	<p><u>MATERIALS-PROCESSES-FINISHES</u> <u>INTERNAL SPECIFICATION</u> <u>COVER SHEET</u></p>
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(APPROVED SOURCE)

SPECIFICATION NUMBER: B50WB028

DATE FIRST ISSUED: -

Rev. S1 April 27, 1973

Rev. S2 January 2, 1991

TITLE: Fluorocarbon Plastic Insulated Alumel Thermocouple Wire

ORIGINAL SIGNED BY:

PREPARED BY:
DESIGN ENGINEERING STDS
NAME _____ DATE _____ UNIT _____

DESIGN ASSURANCE
& STANDARDS
NAME _____ DATE _____

APPROVED BY:
DESIGN ENGINEERING
NAME _____ DATE _____ UNIT _____

DESIGN ASSURANCE
& STANDARDS
NAME _____ DATE _____

Sheet 1 of 5

8588S/1009S

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AEROSPACE PRODUCTS, INC.
WILMINGTON, MA 01887
CAGE CODE: 97424
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MATERIALS-PROCESSES-FINISHES

INTERNAL SPECIFICATION

B50WB028

REVISIONS

LTR	DESCRIPTION	DATE ISSUED	APPROVED
S1		04/27/73	
S2	RDA6009 Added current design activity. Renumbered all pages.	01/02/91	<i>[Signature]</i>

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MATERIALS-PROCESSES-FINISHES

INTERNAL SPECIFICATION

B50WB028-S2

CONTRACT NUMBERS

F33657-86-D-0177

AMETEK
AEROSPACE PRODUCTS INC.
WILMINGTON, MA 01887

B50WB028-S2

CAGE CODE: 97424
FORMERLY GE INSTRUMENT PRODUCTS OPERATION

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SPECIFICATION & PROPERTIES
FLUOROCARBON PLASTIC INSULATED ALUMEL THERMOCOUPLE WIRE

January 2, 1991

AAPI Material B50WB028 identifies fluorocarbon plastic insulated alumel single conductor thermocouple wire, as follows:

<u>AAPI designation</u>	<u>Description</u>
B50WB028A	Solid

MATERIAL REQUIREMENTS:

Conductor - Shall be a nickel base alloy thermocouple wire, commonly known as Alumel⁽¹⁾, conforming to the latest specification requirements of AAPI Material B50WB003B.

Insulation - Shall be a fluorocarbon plastic compounded from a copolymer of tetrafluoroethylene and hexafluoropropylene, commonly known as Teflon FEP 100⁽²⁾.

(1) Hoskins Mfg. Co., Detroit, Michigan

(2) E.I. duPont de Nemours & Co., Wilmington, Delaware

PROPERTIES:

Electric continuity - Conductor shall have electrical continuity throughout its spool length. Both ends of a spool length of wire shall be brought out of the spool to a length of five feet for test purposes.

Thermal emf - The thermal emf of the bare wire shall not be changed by the application of the insulation.

MANUFACTURE:

Splicing - Splicing shall be kept to an absolute minimum. When splicing is required during the insulation of the wire, the ends of the conductor shall be butt welded.

Repairs or joints - Where repairs or joints are made in the insulation, the work shall be done in such a manner that the repaired part of the joint and all parts affected in the process shall be as strong and durable electrically and mechanically as the remainder of the insulation, and shall not exceed the limitations on thickness.

Surface - The surface of the finished wire shall be smooth and free from tackiness.

Stripping - Insulation shall strip readily and cleanly from the conductor.

Color - Insulation shall be red in accordance with ISA Recommended Color Code.

DIMENSIONS:

Size of wire shall be as specified on purchase order.

PACKING AND MARKING:

Material shall be suitably packed to prevent loss or damage during shipment.

Each spool, package, or other container shall be legibly marked with the purchase order number, the manufacturer's name or trade name, and the AAPI designation.

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B50WB028-S2

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FORMERLY GE INSTRUMENT PRODUCTS OPERATION

Sheet 5

DATA FOR ORDERING
FLUOROCARBON PLASTIC INSULATED ALUMEL THERMOCOUPLE WIRE January 2, 1991

AAPI Material B50WB028 identifies fluorocarbon plastic (Teflon FEP 100) insulated alumel single conductor thermocouple wire, as follows:

<u>AAPI designation</u>	<u>Description</u>
B50WB028A	Solid

Engineering Standards has furnished supplier with copies of specification B50WB028

Orders for this material should specify:

Material name - Fluorocarbon plastic insulated alumel thermocouple wire
Designation - AAPI Material B50WB028A
Specification - B50WB028
Quantity and size

The approved source of supply for AAPI Material B50WB028A is:

<u>Supplier</u>	<u>Supplier's designation</u>
Thermo Electric Co. Saddle Brook, New Jersey	T(ex)-*-CTN

*Insert desired AWG wire size; e.g., T(ex)-24-CTN for AWG #24.