

Valgene Raloff

From: Davirro, Michael A. <Michael_Davirro@lincolnelectric.com>
Sent: Wednesday, October 18, 2017 6:24 AM
To: Valgene Raloff
Subject: Specification Change Notice (17900) - E4362 rev C
Attachments: E4362.pdf

To Our Supplier,

Please reply to confirm receipt of the attached document(s).

The Lincoln Electric Company has created/updated the Purchase Specification(s) and/or Manufacture Print(s) referenced below. As a Supplier to Lincoln Electric, copies of these new/updated Specifications and/or Prints are being provided to your company with this correspondence.

The Lincoln Electric Company requires every Supplier to review the Purchase Specification(s) and/or Manufacture Print(s) referenced on each Purchase Order. It is the responsibility of the Supplier to confirm that current Specifications and/or Prints are used for manufacturing and supply to the current Specification and/or Print revision levels specified on the Purchase Orders. In addition, some Purchase Orders specify the Approved Manufacturer's information including the Manufacturer's Name and Part Number. It is the responsibility of the Supplier to confirm that manufacturing and supply is in compliance with this Approved Manufacturer information as specified on the Purchase Orders.

If at any time, a Supplier has exceptions to the Purchase Specification(s) and/or Manufacture Print(s) contained in this correspondence or referenced on Purchase Orders, the Supplier must notify The Lincoln Electric Company at once. In addition, any exceptions to the Approved Manufacturer information must be provided to Lincoln Electric at once. All notifications for exceptions to this information must be provided to the Senior Buyer or Sourcing Specialist responsible for the material or part number at Lincoln Electric.

<u>Document No.</u>	<u>Revision</u>	<u>Approved Mfr. Name</u>	<u>Approved Mfr. P/N</u>
E4362	C	ELECTRON BEAM TECHNOLOGIES, INC.	132-360446+4X-P&L

Christopher Brodnick
Senior Buyer/Sourcing Specialist

APPROVED OCT 18 2017

Sent on behalf of Senior Buyer/Sourcing Specialist by:

Michael Davirro | Supply Management | The Lincoln Electric Company
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RECEIVED ELECTRON BEAM TECH. INC. 10-18-2017
COMPLIES WITH IFUC *WC05CB-D, LINCOLN ELECTRIC TORREON MX E4362,
ELECTRON BEAM TECH, INC 132-360446+4X-P&L, LINCOLN ELECTRIC
USA E4362 REV C DATED 10-13-2017.

PURCHASE SPECIFICATION

CHANGE DETAIL: Page 1 Paragraph 2 revised , Figure 1 added
 ENGINEERING CONTROLLED MANUFACTURER: Yes

SPECIFICATIONS OF MAGNUM PRO CORED CABLE

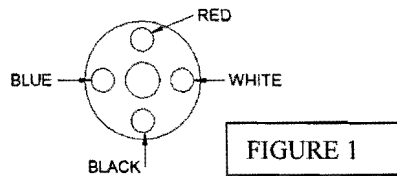
APPROVED OCT 18 2017 *MP*

1. Function

Completed Cable is to be suitable for use as a wire feeding conductor cable for semi-automatic GMA welding processes.

2. Conductors and Core

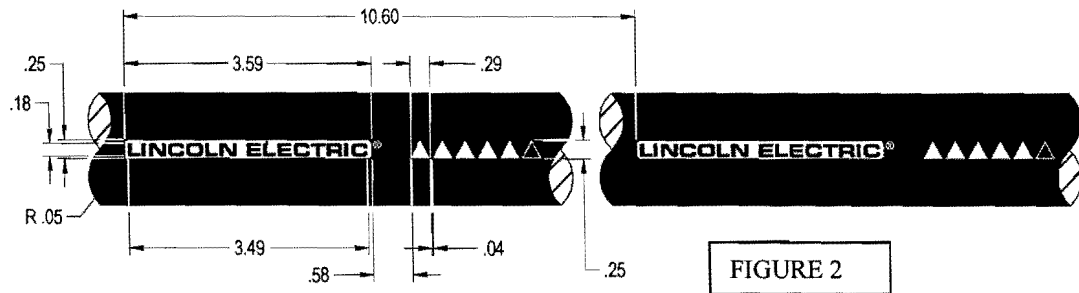
The copper conductor shall consist of 3328 strands of uncoated fully annealed #34 bright copper wire. Stranding is to be 16 X 208. Four #19 control wires insulated with a .015 ±.003 wall thickness of radiation cross-linked polyethylene are to be included in the stranding. The first control lead shall have a Blue jacket, the second a red jacket, the third a white jacket, and the fourth a black. Orientation of the control leads around the cable is to be blue-red-white-black. The four control leads are to be evenly oriented around the core (90° between control leads). The 16 major bunches and the insulated control leads are to be cabled around a center core with a right hand lay using a 8.00 ±.50 pitch. Other stranding may be acceptable subject to approval by the Lincoln Electric Company. The stranding and pitch must give good flexibility and fatigue resistance but minimize stretch under tension for proper wire feeding. The center core is to be a .353/.367 inside diameter X .450/.470 outside diameter elastomer tube with a 55 ±5 shore "D" hardness. See Figure 1



3. Outer Jacket

The jacket shall consist of one layer of properly cured radiation cross-linked thermoset elastomer, .063 inches thick that has a shore "A" hardness of 73/83 and an outside diameter of .830 ±.015 inches. The jacket must not stick to the copper strands and skinning must be easy. The jacket cable should lay straight when unreeled, have suitable flexibility, abrasion resistance and oil resistance. The copper conductors must not be contaminated and remain clean so good electrical connections can be made to the copper conductors. The jacket contributes to proper wire feeding.

The outer jacket is to be printed in white every 10.60 inches as shown below. In figure 2



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SUBJECT: Specifications of Magnum Pro 550 Amp Cored Cable				DOCUMENT NUMBER: E4362	DOCUMENT REVISION: C
DRAWN BY: RLG	ENGINEER: JLK	MATERIAL DISPOSITION: NA			
APPROVED: DAD	APPROVAL DATE: 10/13/2017	PROJECT NUMBER: CRM54226	Page 1 of 2		

EN107 3-2002

PURCHASE SPECIFICATION

CHANGE DETAIL: Page 1 Paragraph 2 revised , Figure 1 added
 ENGINEERING CONTROLLED MANUFACTURER: Yes

The outer jacket shall withstand 2000 volts, 60 Hz., AC ground test potential applied to conductor and outside of jacket for 15 seconds without breakdown. The control leads shall withstand 1500 volts, 60 Hz., ground test potential applied to control leads and copper conductor for 1 second.

APPROVED OCT 18 2017

Mechanical properties of Jacket

	ASTM Test Method	Units	Value
Hardness	D-2240	Shore A	78
Tensile Strength	D-412	PSI	2100
Ultimate Elong.	D-412	%	440
100% Modulus	D-412	PSI	540
Tear Strength	D-624	PSI	229
Abrasion	D-1630	NBS Index, %	60
Oxygen Index	D-286	%	26.5
Heat Resistance (168 Hrs., 250 Deg. F)	D-573		
Retained Tensile		%	90
Retained Elongation		%	82

4. Cable can be supplied in random continuous lengths in 40" x 48" x 17" tri-wall palletized containers that hold approximately 1250 feet of cable. No more than 4 pieces per 1250 ft. of cable.
5. Vendor is to label each container with Lincoln's specification number and cable length.

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