



NATIONAL PETROCHEMICAL COMPANY
STANDARDS

MATERIAL STANDARD
FOR
INSTRUMENT CABLES

NPCS-MS-IN-29

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1 GENERAL

1.1 SCOPE

1.1.1 This standard covers the minimum requirements for the design, materials, nameplate marking, testing and shipping of instrument cables.

1.1.2 The related standards referred to herein and mentioned below shall be of the latest editions prior to the date of the purchaser's enquiry.

- IEC 332/1 Part 1, Text on a Single Vertical Insulated Wire or Cable.
- ANSI MC 96.1 Temperature Measurement Thermocouples.
- ASTM Test Oil No.2.

1.1.3 In the event of any conflict between this standard,, data sheets, codes, etc., vendor should refer the matter to the purchaser for clarifications and only after obtaining the same should proceed with the manufacture of the items in question.

1.1.4 The material and other characteristics, indicated on the data sheets does not absolve the vendor of the responsibility for proper selection of materials with respect to operating conditions.

1.2 BIDS

1.2.1 Vendor's quotation shall include a detailed specification sheets for each type of cable, wherein should be provided all the details regarding type, construction materials, etc., and details of characteristics.

1.2.2 All the units for various items in the vendor's specification sheets shall be the same as those in purchaser's data sheets.

1.2.3 All the material specifications for various parts in the vendor's specification sheets shall be to the same standards as those followed in purchaser's data sheets, e.g. ASTM, BS, etc.



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- 1.2.4 Vendor shall attach a list of deviations from the purchaser's data sheets and general specifications, if there are any. Also vendor should provide reasons for these deviations wherever possible.
- 1.2.5 Vendor shall enclose catalogues given detailed technical specifications and other **information** for each type of cables covered in the bid.
- 1.2.6 Vendor's quotations, catalogues, drawings, operating and maintenance manuals, etc., shall be in English.
- 1.2.7 Vendor shall quote for any special tools needed for maintenance/installation works.
- 1.2.8 Cables shall be flame resistant according to IEC 332/1.
- 1.3 DRAWINGS AND DATA**
- 1.3.1 Detailed drawings, data, catalogues and manuals required from the vendor are indicated by the purchaser in vendor data requirement sheets. The required number of reproducibles and prints should be despatched to the address mentioned, adhering to the time limits indicated.
- 1.3.2 After placement of purchase order, vendor shall submit final documents for each type of cables which shall specially include the following details:
- a) Shipping weight and dimensions.
 - b) Termination and installation instructions.
 - c) Handling and transport instructions.
 - d) Shop test reports and confirmation of cable diameters and cable length per reel.
 - e) Storage instructions and reel schedule.
 - f) Packing list.
- 1.3.3 Vendor shall furnish with his quotation statement that if necessary material quantities can be adjusted without change on price and/or delivery date.