

Pre-Qualification Requirement for Multi-Pair Instrumentation Cable

(For Open Tenders Only)

- 1) All machineries and facilities that are required for the complete manufacture of cables, such as wire drawing, stranding, bunching, sheathing (extrusion/wrapping) and armouring processes shall be available in-house.
- 2) All measuring instruments and testing facilities required to carry out the necessary tests that are to be conducted in process and on finished cables shall be available in-house.
- 3) None of the stages/processes involved in the manufacturing of the cable, shall be off loaded or out-sourced.
- 4) Vendor should have facilities to carry out acceptance, routine and type tests as per Quality plan, either in-house or at NABL accredited labs. Vendor shall submit the sample test reports applicable as per Quality Plan.
- 5) Vendor should have supplied similar design & varieties of Multi-Pair Instrumentation cables to power plant / industrial installations in India or abroad with satisfactory performance for minimum 2 years.
- 6) Datasheet [Guaranteed Technical Parameters] of the applicable varieties of recently executed cable orders shall be furnished for reference.
- 7) Vendor to submit copy of largest purchase order in terms of Quantity/Price executed by them in terms of quantity & value, in the last three years.
- 8) The Bidder / Sub Vendor should have manufactured and supplied prior to the date of Techno-commercial bid opening the following:
At least 100 km of Multi-Pair Armoured Instrumentation cables in one single contract.

- End of Document -

Sl	Details	Proposal	Remarks
1	PQR requirement	It is proposed to include the Pre-qualification requirement (PQR) in the NIT for qualifying the responding vendors against the Tender	Vendors not meeting the PQR conditions, their offer will not be considered & the same will be indicated in the NIT

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2	Technical suitability requirement	Acceptance of offers shall be subject to the availability of customer approval as on the date of Price Bid Opening"	Vendors not approved by customer prior to Price bid opening date will be rejected & the same will be indicated in the NIT.
3	Payment terms	1. For Site - Payment term is 100% direct payment after 60 days from the date of dispatch against site acknowledgement. 2. For new suppliers not registered with BHEL, Trichy for the product, Payment shall be made 60 days after receipt and acceptance of materials 3. MSE vendors will be paid as per MSMED Act 2006.	
4	LD Terms	"0.5% of the total order value per week of the delay or part thereof subject to a maximum of 10% of the total order value." Any loading on LD shall be to the extent to which it is not agreed by the bidder. Acceptance of LD on undelivered portion will be loaded at the rate of 10% (max).	As per approval note ref: MM//RM/CORP GUIDELINES dt. 28.11.2013
5	Package condition	Proposed to evaluate the tender as a single package basis (as per indent) & on total cost to BHEL, including all applicable commercial loadings	
6	Delivery terms	FOR Panki project site basis	
7	Delivery period	16 weeks from Manufacturing / document approval	
8	Loading factors	Loading factors are to be taken into account for the techno-commercial deviations in arriving net cost to BHEL and the loading factors are to be furnished in enquiry as per approval note ref: MM//RM/CORP GUIDELINES dt. 28.11.2013.	
9	Reverse action	"BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among all the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking".	

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10	Terms and conditions	As per attached Annexure A Note: Both “MSED Act 2006 & Public Procurement (Preference to Make In India), Order 2017” guidelines will be followed for this tender. In case of clash between these two guidelines, it is proposed to give preference to “Public Procurement (Preference to Make In India), Order 2017” order.
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PURCHASE /MM/BOI
SUBDELIVERY- ENQUIRY-DEVIATION

PAGE

OF

SCHEDULE OF DEVIATION TO SUB DELIVERY ENQUIRY No

1702000263

DESCRIPTION	Instrumentation cable PANKI PROJECT	
SPECIFICATION		
QUALITY PLAN	DRG NO	
DOCUMENT REFERENCE	BHEL ENQ CALLED FOR	FIRMS ALTERNATE OFFER
1. Supply of instrumentation cable shall be as per Data sheet No 2. DS:TCI:145-F-PANKI REV 00 3. DS:TCI:145-G-PANKI REV 00 4. Quality Plan: QA:CI:STD:QP:0000-999-QOI-S-035 5. CI PANKI INST CABLE TT		

CERTIFIED THAT OTHER THAN THE ABOVE DEVIATIONS, WE ARE ACCEPTING ALL THE OTHER SPECIFICATIONS AND REQUIREMENTS IN FULL TO YOUR ENQUIRY.

STATION:

DATE:

SIGNATURE OF FIRMS REPRESENTATIVE

FIRM SEAL

NOTE 1. DEVIATIONS SHOULD BE TAKEN ONLY IN THE EXTREME CASE

2 .IF NECESSARY USE ADDITIONAL SHEETS WITH CONTROLLED NUMBER



Bharat Heavy Electricals Limited

HIGH PRESSURE BOILER PLANT, TIRUCHIRAPPALLI 620 014.

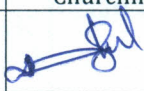
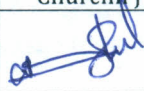
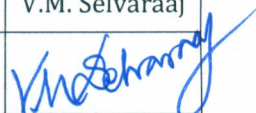
CONTROLS AND INSTRUMENTATION/FB

DATA SHEET FOR

MULTIPAIR, OVERALL SHIELDED, ARMOURED, INSTRUMENTATION CABLE (TYPE-G)

Datasheet No.: DS:TCI:145-G/PANKI, Rev. 00

Revision History

Rev. No.	Date	Description	Prepared	Reviewed	Approved
			Blessing Jany Churchil J	Blessing Jany Churchil J	V.M. Selvaraaaj
00	04-06-2019	General Revision			

Technical Data sheet for Multipair, Overall shielded, Armoured,
Instrumentation Cable, Type-G
Data sheet No. : DS:TCI:145-G/PANKI, Rev. 00

Sl. No.	Parameter	Value/Requirement	
1	Applicable Standards	IS-1554, IS-5831, IS-8130, IS-10418, IS-10810, VDE-0815, IEC-332, IEC-754, IS-3975, ASTM-D-2843, ASTM-D-2863 & BS-5308	
2	Site Conditions	Dusty, Salty, corrosive & Heavily polluted	
3	Voltage grade	V	1100
4	Temperature Rating & Short circuit withstand Rating	°C	85 160
5	Construction of cable	As per Constructional diagram enclosed with this Data sheet	
6	Conductor		
a	No. Of Pairs	2, 4, 8, 12, 16	
b	Area of cross section	Sq. mm	0.5
c	No. of Strands / Strand Dia. (for finished cable)	No./ mm	7/0.307 (Stranded & Non-compacted)
d	Material	Annealed, Tinned, Copper	
e	Grade / Standard	High Conductivity, Electrolytic grade Copper to IS-8130	
7	Insulation		
a	Material	HR PVC	
b	Type and Standard	Type-C, as per IS-5831	
c	Thickness (Nominal)	mm	0.6 mm for 0.5 sq.mm. cable
d	Method of application	Extruded	
e	Pair Identification	As per Data sheet Clause No. 32	
f	Volume Resistivity	Ω cm	3.5 x 10 ¹⁴ @ 27 °C & 3.5 x 10 ¹¹ @ 85 °C
8	Lay for Pairing (Minimum)	Twist/ metre	20
9	Direction of Lay	Right hand - All pairs shall be in the same direction	
10	No. of Pairs for making a bundle	4 pairs - lapped to form a bundle with Mylar tape (Not applicable for 2 pair cable)	

Technical Data sheet for Multipair, Overall shielded, Armoured,
Instrumentation Cable, Type-G
Data sheet No. : DS:TCI:145-G/PANKI, Rev. 00

Sl. No.	Parameter	Value/Requirement	
11	Lay for laid-up Pairs	Twist/ metre	4-6
12	Lay for Laid-up Bundle	Twist/ metre	2-3 (Not applicable for 2 & 4 pair cable)
13	Binding material (See constructional Diagram)		
a	Type of Material	Mylar Tape	
b	Thickness (minimum)	mm	0.028
c	Coverage	%	100
d	Overlap (minimum)	%	25
e	Numbered Mylar tape	Over each bundle - Each 4 pair units (Bundle) shall be helically lapped with numbered binder taped for the purpose of binding & unit identification (Not applicable for 2 & 4 pair cable).	
14	Fillers (wherever applicable)	FRLS, Non hygroscopic material, suitable for the operating temperature of the cable. Fillers shall not stick to insulation and inner sheath. Applicability of Fillers will be decided by the vendor for all the varieties of cables. Position, Shape and Number of fillers will be decided by the vendor.	
15	Overall Shielding		
a	Type of Material	Aluminium Backed Mylar Tape	
b	Thickness (minimum)	micron	75
c	Coverage	%	100
d	Overlap (minimum)	%	25
e	General	The Aluminium mylar tape shall be provided in such a way that the aluminium side of the tape shall get in contact with the drain wire for all varieties of cables.	
16	Drain wire for shielding		
a	Material	Annealed, Tinned Electrolytic Copper	
b	No. of strands / Dia. of strand	No./ mm	7/0.3
c	Area of cross section	sq.mm	0.5
17	Inner Sheath		
a	Material	HR PVC with FRLS properties	

Technical Data sheet for Multipair, Overall shielded, Armoured,
Instrumentation Cable, Type-G
Data sheet No. : DS:TCI:145-G/PANKI, Rev. 00

Sl. No.	Parameter	Value/Requirement	
b	Type and Standard	Type-ST2 as per IS-5831	
c	Thickness (minimum)	mm	As per IS-1554
d	Method of application	Extruded	
e	Colour	BLACK	
18	Rip Cord	Non-metallic Rip cord shall be provided under inner sheath	
19	Armouring		
a	Material	Galvanized Steel	
b	Standard	As per IS-3975 & IS-1554	
c	Direction of lay	Left Hand	
d	Shape and dimension	Round Wire or Flat strip as per IS-1554	
20	Outer Sheath		
a	Material	HR PVC With FRLS Properties	
b	Type and Standard	Type-ST2 as per IS-5831	
c	Method of application	Extruded	
d	Thickness (minimum)	As per IS-1554	
e	Colour	BLUE	
f	Special Requirement	Outer sheath material shall be resistant to water, UV radiation, fungus, termite & rodent attack.	
g	Cable Marking on Outer sheath	UPRVUNL, Manufacturer's name or trademark, 1100 V, Year of manufacture, HRPVC, Number of Pairs & Conductor size, Type of cable, FRLS" embossed @ 625 mm interval. Embossing shall be legible and indelible	
h	Sequential marking on Outer sheath	Every 1 Metre for Progressive Length by printing.	
21	Tolerance on Outer diameter	mm	± 2
22	Tolerance on Outer diameter for the entire length	mm	1
23	Ovality	mm	1
24	Bending Radius (minimum)	12 times the Outer diameter	
25	Standard Packing Length	metre	1000
26	Tolerance on standard packing length	%	± 5

Technical Data sheet for Multipair, Overall shielded, Armoured,
Instrumentation Cable, Type-G
Data sheet No. : DS:TCI:145-G/PANKI, Rev. 00

Sl. No.	Parameter	Value/Requirement	
27	Non-standard Length	Last length shall be supplied in a single length	
28	Electrical Parameters at 20° C		
a	Conductor DC Resistance (max.)	Ω/km	37.43
b	Short circuit rating of conductor for 1 second	KA	0.052
c	Characteristic Impedance @ 0.8 KHz	Ω	370
d	Insulation Resistance (min.)	MΩ/km	100
e	Mutual Capacitance (max.)	nF/km	100
f	Coupling Capacitance	pF/Km	200
g	Attenuation (max.) @ 0.8 KHz (approx.)	dB/km	1.1
h	Attenuation (max.) @ 10 KHz (approx.)	dB/km	2.9
i	Cross talk (min.) @ 0.8 KHz	db	70
j	Test Voltage-Between Conductor-Conductor	KV/minute	2.0
k	Test Voltage-Between Conductor-Shield	KV/minute	2.0
29	FRLS Properties		
a	Oxygen Index @ ambient temp. As per ASTM-D-2863	%	Not Less than 29
b	Temperature Index @ oxygen index 21 as per ASTM-D-2863	° C	Not Less than 250
c	Smoke density rating as per ASTM-D-2843	%	Shall not be more than 60
d	Acid gas generation As per IEC 60754-Part 1	%	Shall not be more than 20% by weight
e	Flammability Tests as per IEEE-383, IEC-332-3, Category-B and SS-4241475, Clause-F3		Shall pass
30	Quality Plan	0000-999-QOI-S-035, Rev. 01	
31	Packing Details	Cables shall be supplied in Non-returnable wooden drums of heavy construction. Wooden cable drum shall be treated by immersing in copper-nitrate solution. Wooden drums shall comply with IS-10418. The surface of the	

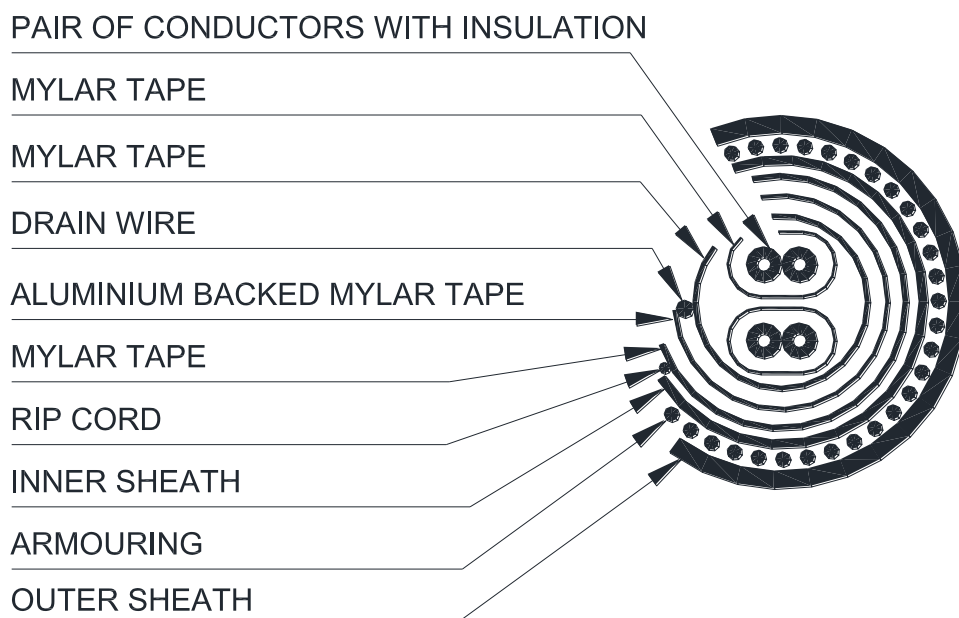
Sl. No.	Parameter	Value/Requirement																				
		drum and the outer most cable layer shall be covered with waterproof cover. Both the ends of the cables shall be properly sealed with heat shrinkable PVC/Rubber caps secured by 'U' nails so as to eliminate ingress of water during transportation, storage and erection. All ferrous parts used shall be treated with suitable rust preventive finish or coating to avoid rusting during transit or storage. Each drum shall carry UPRVUNL, Manufacturer's name or trademark, Type of cable, Voltage grade, Year of manufacture, Type of insulation, Number of pairs & size of conductor, cable code, "FRLS", Length of cable on drum/No. of drum of the same variety, Approximate gross mass, ISI mark in printed form. A tag containing same information shall be attached to the both ends of the cable. An arrow and suitable accompanying wording shall be marked on one end of the reel indicating the direction of rotation in which it should be rolled.																				
32	<u>Colour coding and Numerical order of cores → As per VDE-0815</u>																					
	The twisted pair of conductors are identified by 8 colours																					
	<table><tr><th>Pair</th><th>Colour</th></tr><tr><td>1</td><td>Blue & Red</td></tr><tr><td>2</td><td>Grey & Yellow</td></tr><tr><td>3</td><td>Green & Brown</td></tr><tr><td>4</td><td>White & Black</td></tr></table>	Pair	Colour	1	Blue & Red	2	Grey & Yellow	3	Green & Brown	4	White & Black											
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	1	Blue & Red																				
2	Grey & Yellow																					
3	Green & Brown																					
4	White & Black																					
The 4 pairs of conductors with the above colours are called as one bundle. The same colour appears in different Bundles for 8 Pair (2 bundles), 12 Pair (3 bundles), 16 Pair (4 bundles) cable etc.																						
The Numerical order of the cores in the bundles are identified by coloured Rings (ranging from 1 to 4) provided on the insulation @ 50 mm interval. This clause is not applicable for 2 pair and 4 pair cables.																						
	<table><tr><td>Cable</td><td colspan="4">8 Pair, 12 Pair, 16 Pair</td></tr><tr><td>Bundle Number</td><td>1st Bundle</td><td>2nd Bundle</td><td>3rd Bundle</td><td>4th Bundle</td></tr><tr><td>Number of Rings</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>Colour of Ring</td><td colspan="4">Pink</td></tr></table>	Cable	8 Pair, 12 Pair, 16 Pair				Bundle Number	1 st Bundle	2 nd Bundle	3 rd Bundle	4 th Bundle	Number of Rings	1	2	3	4	Colour of Ring	Pink				
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INSTRUCTION TO VENDORS

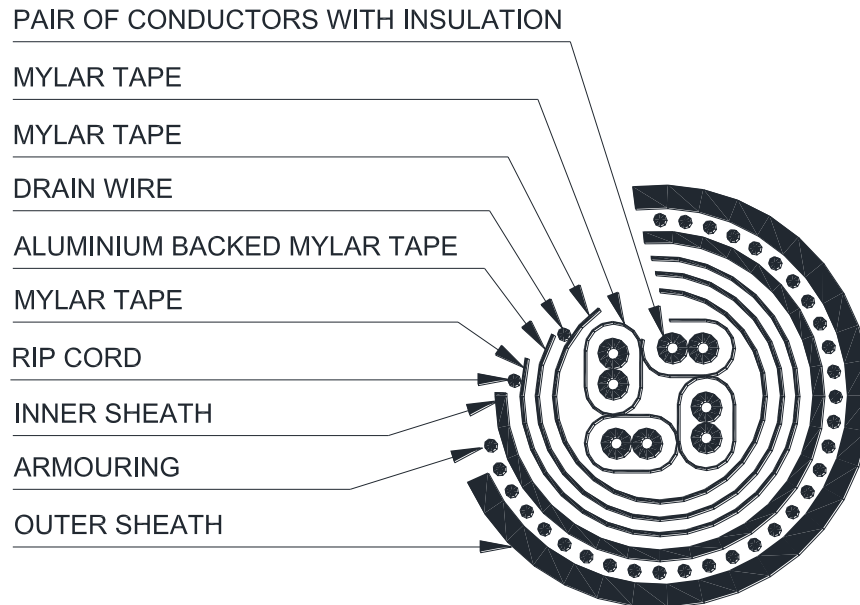
Over all Quantity Tolerance	(+) 0 / (-) 2 %
Guarantee	A Guarantee Certificate for 18 months of trouble-free operation/performance from the date of shipment or 12 months from the date of commissioning whichever is earlier shall be furnished.
General	All the parameters shall comply with the respective IS, wherever applicable.
Confirmation to be given by the vendor.	1. Sub-Delivery Enquiry Deviation format shall be filled with "No Deviation", indicating the Data sheet and Quality Plan reference and shall be furnished along with the offer. 2. Technical deviation/non-conformance indicated elsewhere in the offer will not be considered. 3. In the absence of Sub-Delivery Enquiry Deviation format, the vendor's offer will not be evaluated.

CONSTRUCTIONAL DIAGRAM

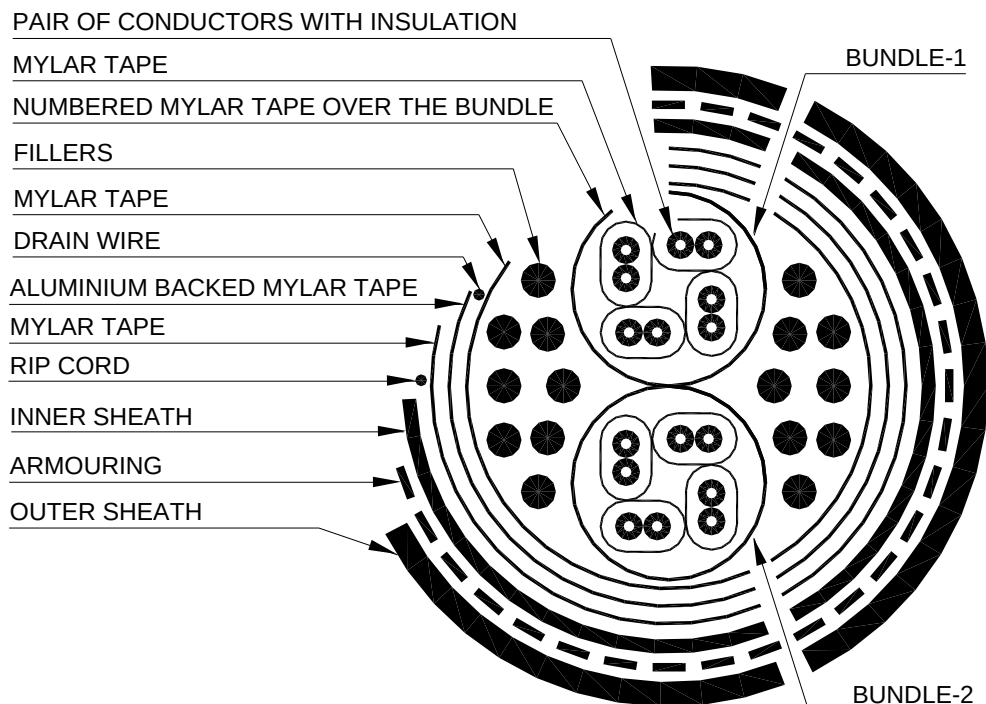
**TYPICAL CONSTRUCTIONAL DIAGRAM OF A
2 PAIR OVER ALL SHIELDED CABLE**



TYPICAL CONSTRUCTIONAL DIAGRAM OF A
4 PAIR OVER ALL SHIELDED CABLE



CONSTRUCTIONAL DIAGRAM OF A
8 PAIR OVER ALL SHIELDED CABLE



Note for all the varieties of cables:-

For 12 Pair and 16 Pair cables, there will be 3 and 4 such bundles respectively. All other constructional features will be identical to that of an 8 pair cable.

TOLERANCE ON OUTER DIAMETER

Definition :-

This is the allowable Limits on the diameter of the actual cable from the Data sheet value/Design value.

The Data sheet indicates ± 2 mm. This means that if the Data sheet value/Design value of the cable diameter is 'X' mm, then all the actual cable diameter measured over the entire length/quantity shall fall within the Upper Limit 'X+2' mm and the Lower Limit 'X-2' mm. However, the following clauses must also be satisfied.

Example :-

Let the Data sheet value/Design value of the cable diameter be 14 mm (X)

Then, the measurements of the actual cable diameter taken over the entire length shall fall between the limits 16 mm (X + 2) and 12 mm (X - 2).

TOLERANCE ON OUTER DIAMETER FOR THE ENTIRE LENGTH

Definition :-

This is the maximum allowable difference between the Highest actual cable diameter and the Lowest actual cable diameter measured over a drum length.

The Data sheet indicates 1 mm. This means that if the Highest actual cable diameter is say, 'D1' mm, and the Lowest actual cable diameter is 'D2' mm, then, 'D1-D2' shall be maximum 1 mm and 'D1' and 'D2' shall also fall within the Upper and Lower limits as above.

Example :-

Let the Highest actual cable diameter measured be 16 mm (D1)

Let the Lowest actual cable diameter measured be 15 mm (D2)

Then, Tolerance for the entire length is 16 mm (D1) - 15 mm (D2) = 1 mm

Comment :-

As the Highest actual cable diameter and Lowest actual cable diameter falls within the Upper and Lower Limits as above, and the difference between them is 1 mm maximum, the diameter values are acceptable.

OVALITY

Definition :-

This is the maximum allowable difference between the measurements of the actual cable diameter in 'x' and 'y' directions in any particular section.

The Data sheet indicates 1 mm. This means that if the actual cable diameters measured are say, 'D3' mm, and 'D4' mm, in 'x' and 'y' directions respectively in one particular section. Then, the difference between 'D3' and 'D4' shall be maximum 1 mm. Also 'D3' and 'D4' shall fall within the Upper and Lower limits as above.

Example :-

Let the actual cable diameter in 'x' direction in one section be 16 mm (D3)

Let the actual cable diameter in 'y' direction in the same section be 15 mm (D4)

Then, Ovality is 16 mm (D3) - 15 mm (D4) = 1 mm

Comment :-

As the actual cable diameters measured in 'x' and 'y' directions of the same section falls within the Upper and Lower limits as above, and the difference between them is 1 mm maximum, the diameter values are acceptable.

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SUB SYSTEM : Shielded
Instrument/ TC extension/
Compensating PVC FRLS
Cable/High Temperature
Instrumentation Cable

STANDARD QUALITY PLAN

As Per latest Standards VDE 0815, VDE 0207 part 4.5.6, VDE 0816, VDE 0472, Sen
4241475, ANSI NCS 96.1, ASTM D 2863, IEC 754-1, IS 3975, IS-8784 and IS 10810

QP No.: 0000-999-Q01-S-035
Revision: 01
Date: 24.09.2018
Page: 2 OF 5

Reviewed By:
Chanchal
K K Ojha

Approved By

S K Lal
Shrivastava
Alok

Agency

Remarks

Sl	Component & No	Characteristics	Class	Type of check	Quantum of check M C N	Reference Document	Acceptance Norms	Formal of record	10 M C N	11 Remarks
1	2	3	4	5	6	7	8	9	D*	
E	Wooden Drums	a) Dimension	Minor	Measure ment	Sample	-	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	V
		b) Ant termite treatment	Minor	Chem ical	As per Mfr sid	-	As per Mfr sid NTPC Tech Specification /Approved Datasheet	COC	P V	V
		c) Marking	Minor	Visual	As per Mfr sid	-	NTPC Tech Specification /Approved Datasheet		P V	V
F	Steel Drum (if applicable)	a) Dimension	Minor	measure ment	Sample	-	As per Mfr sid	IMR/ TC	P -	-
		b) Surface Finish	Minor	visual	-	-	As per Mfr sid	IMR/ TC	P -	-
		c) Marking	Minor	visual	As per Mfr sid	-	NTPC Tech Specification /Approved Datasheet		P V	V

II. INPROCESS INSPECTION

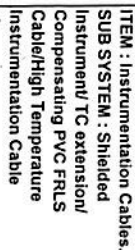
A	Wire Drawing & Annealing	a) Size	Maj	Dimn.	1 Sample at Start and 1 Sample at End	-	Approved Datasheet	Approved Datasheet	IMR/ TC	P -	-
		b) Surface finish	Maj	Visu.	100%	-	Surface shall be smooth	Surface shall be smooth	IMR/ TC	P -	-
		c) % of Elongation	Maj	Mech	1 Sample/ Lot	-	IS 10810	IS 10810	IMR/ TC	P -	-
B	Trinning (Only for Drain wire)	a) Size	Maj	Dimn.	1 Sample/ Lot	-	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	-
		b) Percentage of Elongation	Maj	Mech.	1 Sample/ Lot	1 Sample/ Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P V	V
		a) Surface finish	Maj	Visu.	100%	-	Surface shall be smooth & free from scratches	Surface shall be smooth & free from scratches	IMR/ TC	P -	-
C	Insulation	b) Core Diameter	Maj	Measu.	1 Sample/ Lot	-	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	-
		c) Radial Thickness(Min & Max)	Maj	Measu.	1 Sample/ Lot	-	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	-
		d) Spark Test	Maj	Elec.	100%	100%	IS 10810(With 3KV ac)	No Spark failure is allowed	IMR/ TC	P V	V
		e) Volume Resistivity/ Insulation Resistance	Maj	Elec.	1 Sample/ Lot	1 Sample/ Lot	VDE -0207/ Approved Datasheet	VDE -0207/ Approved Datasheet	IMR/ TC	P V	V
		f) Colour, Marking/ Identification	Maj	Visual	100%	100%	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P V	-
		g) TS & %Elongation	Maj	Mech.	1 Sample/ Lot	-	IS 10810	IS 10810	IMR/ TC	P -	-
D	Twisting	a) Lay length and Direction	Maj	Measu. & Visual	1 Sample at Start and 1 Sample at End	-	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	-
		b) Size/ Dimension	Maj	Measu.	1 Sample/ Lot	-	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	-
		c) Pair Colour	Maj	Visual	100%	-	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P -	-

LEGEND: * RECORDS IDENTIFIED WITH "TICK" SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.
** M. MANUFACTURER/ SUB-SUPPLIER, C. SUPPLIER NOMINATED INSPECTION AGENCY, NIE: NTPC/EMPLOYER, P. PERFORM, W. WITNESS AND V. VERIFICATION
APPROPRIATE CHP: NTPC SHALL IDENTIFY IN COLUMN "V" AS "W" \$-IRRESPECTIVE OF SIZE AND TYPE

ADS - APPROVED DATA SHEET, SPEC - CONTRACT SPECIFICATION, TC - TEST CERTIFICATE, COC - CERTIFICATE OF COMPLIANCE
IMR - INWARD MATERIAL REGISTER, FIR - FINAL INSPECTION REPORT

FORMAT NO.: QS-01-QA1-P-07/A/E/3

ENGINEERING DIV./QA&I



As Per latest Standards VDE 0815,VDE 0207 part 4,5,6,VDE 0816,VDE 0472,Sen
4241475,ANSI MC 96.1,ASTMD 2863,IEC 754-1,IS 3975,IS-8784 and IS 10810

Reviewed By:
Chanchal
Verma

Approved By: S.S.

Alok
Srivastava
S K Seal

[illegible]



STANDARD QUALITY PLAN

QP No.: 0000-999-QOI-S-035

Reviewed By:

Approved By:

SUB SYSTEM : Shielded
Instrument/ TC extension/
Compensating PVC FRLS
Cable/High Temperature
Instrumentation CableAs Per latest Standards VDE 0815,VDE 0207 part 4.5.6,VDE 0816,VDE 0472,Sen
4241475,ANSI MC 96.1, ASTM D 2863, IEC 754-1,IS 3975, IS-8784 and IS 10810Revision:01
Date:24.09.2018
Page:4 OF 5Reviewed By:
Agency:
M C N

Sl	Component & No	Characteristics	Class	Type of check	Quantum of check M	C.N	Reference Document	Acceptance Norms	Format of record	Agency M C N	Remarks
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1	2	3	4	5	6	7	8	9	10	11
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IV ACCEPTANCE TEST

A	Constructional Details & Dimensions of complete cable	a) Constructional Details(CONDUCTOR,DRAIN WIRE,SHIELDING ETC.)	Maj.	Visual	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		b) Shield Al-mylar thickness	Maj.	Measu.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		c) Insulation thickness	Maj.	Measu.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		d) Inner/ Outer sheath thickness (as applicable)	Maj.	Measu.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	before and after ageing for insulation.
		e) Diameter over outer sheath	Maj.	Measu.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		f) Outer sheath - Colour, Marking/ Embossing & End sealing.	Maj.	Visual	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		g) Length checking.	Maj.	Measu.	1 No. of each size & type per Lot	1 No. of each size & type per Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		h) Core - Band marking/ Numbering, Colour.	Maj.	Visual	1 No. of each size & type per Lot	1 No. of each size & type per Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		i) Overall Coverage/overlap of shield & Continuity of drain wire.	Maj.	Visual	1 No. of each size & type per Lot	1 No. of each size & type per Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	Continuity shall be checked as per Manufacturer practice.
		j) Visual & Surface Finish	Maj.	Visual	1 No. of each size & type per Lot	1 No. of each size & type per Lot	Smooth, free from visual defects #	Smooth, free from visual defects #	FIR	P	W	W	# Like Porosity, Burnt particles, Pimples
B	Insulation	a) Volume Resistivity (At room and Elevated Temperature)	Maj.	Elec.	1 No / Complete lot offered \$	1 No / Complete lot offered \$	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		b) IR Test	Cri.	Elec.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		c) TS & %Elongation test of Insulation (Before & After aging)	Maj.	Mech	1 No / Complete lot offered \$	1 No / Complete lot offered \$	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		d) Thermal Stability	Maj.	Chem.	1 No. of each size & type per Lot	1 No. of each size & type per Lot	VDE 207 Part -4/5	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
C	Sheath	a) TS & %Elongation test of Sheath (Before & After aging)	Maj.	Mech	1 No / Complete lot offered \$	1 No / Complete lot offered \$	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		b) Thermal Stability	Maj.	Chem.	1 No. of each size & type per Lot	1 No. of each size & type per Lot	VDE 207 Part -4/5	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	
		c) FRLS Test for outer sheath for Oxygen Index, T(Temperature Index), SDR(Smoke Density Rating) & HCL Emission.	Maj.	Chem	1 No / Complete lot offered \$	1 No / Complete lot offered \$	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W	

FORMAT NO.: QS-01-QAI-P-07A/F3

ENGINEERING DIV./QA&I



ITEM : Instrumentation Cables.
SUB SYSTEM : Shielded
Instrument/ TC extension/
Compensating PVC FRLS
Cable/High Temperature
Instrumentation Cable

STANDARD QUALITY PLAN

As Per latest Standards VDE 0815,VDE 0207 part 4,5,6,VDE 0816,VDE 0472,Sen
4241475,ANSI INC 96.1, ASTM D 2863, IEC 754-1,IS 3975, IS-8784 and IS 10810

To be filled by NTPC
QP No.: 0000-999-QOI-S-035
Revision:01
Date:24.09.2018
Page:5 Of 5

Reviewed By:
Chanchal Verma
Approved By:
K.K. Ojha
S K Lal
Agency:
Remarks:

Sl. No.	Component & No. Operations	Characteristics	Class	Type of check	Quantum of check	Reference	Acceptance	Format of record	Agency	Remarks		
1	2	3	4	5	M	C.N	7	8	9	10	11	
		a) Surface finish	C/I	Visual	Samples as per IS 1554/8784	Samples as per IS 1554/8784	Smooth, free from visual defects like rusting etc.	Smooth, free from visual defects like rusting etc.	IMR/ TC	P	W	W
		b) Direction of Lay & Coverage	C/I	Visual	Samples as per IS 1554/8784	Samples as per IS 1554/8784	Smooth, free from visual defects like rusting etc.	Smooth, free from visual defects like rusting etc.	IMR/ TC	P	W	W
		c) Size of Wire/ Strip	C/I	Measu	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P	W	W
		d) Diameter over Armouring	C/I	Measu	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P	W	W
		e) Resistance Test	C/I	Elec.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P	W	W
		f) Wrapping Test	C/I	Mech	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P	W	W
		g) Tensile Test	C/I	Mech	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P	W	W
		h) Elongation Test	C/I	Mech	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	IMR/ TC	P	W	W
		a) Electrical Parameters (Mutual capacitance, Cross talk, Attenuation, Characteristic Impedance as applicable)	Maj.	Elec.	1 No. of each size & type per Lot	1 No. of each size & type per Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		b) Swedesh chimney test (overall cable)	Maj.	Chem	1 No / Complete lot offered \$	1 No / Complete lot offered \$	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		c) Armouring Dimension & Zn coating (If applicable)	Maj.	Measu.	1 No / Complete lot offered \$	1 No / Complete lot offered \$	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		d) Cond resistance (Cable & Drain wire)	C/I	Elec.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		e) Flammability test	C/I	Elec.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		f) HV Test	C/I	Elec.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		g) IR test	C/I	Elec.	Samples as per IS 1554/8784	Samples as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		h) Thermal EMF test (For compensating cable only)	Maj.	Elec.	Sample as per IS 1554/8784	Sample as per IS 1554/8784	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		i) Persulphate Test (For Drain wire only)	Maj.	Chem.	1 No. of each size & type per Lot	1 No. of each size & type per Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	FIR	P	W	W
		a) Stenciling, sealing, completeness & Verification with offered list	Maj.	Visual	100%	1 No. of each size & type per Lot	NTPC Tech Specification /Approved Datasheet	NTPC Tech Specification /Approved Datasheet	P	W	W	
		b) Identification	Maj.	Visual	100%	100%	Sealing shall be visible	Sealing shall be visible	P	W	W	
LEGEND : * RECORDS IDENTIFIED WITH TICK SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.												
** M. MANUFACTURER, SUB-SUPPLIER, C. SUPPLIER, NOMINATED INSPECTION AGENCY, NE. NTPC/EMPLOYER, P. PERFORM, W. WITNESS AND V. VERIFICATION												
APPROPRIATE CHP- NTPC SHALL IDENTIFY IN COLUMN "V" AS "W" \$-IRRESPECTIVE OF SIZE AND TYPE												
ADS - APPROVED DATA SHEET, SPEC - CONTRACT SPECIFICATION, TC - TEST CERTIFICATE, COC - CERTIFICATE OF COMPLIANCE												
IMR - INWARD MATERIAL, REGISTER, FIR - FINAL INSPECTION REPORT												
NOTE 1 : Where witnessing and verification of records is done only by main contractor (Column "C"), NTPC Inspection Engineer may do a surveillance Verification/ Witness! ng as per his discretion.												
NOTE 2 : NTPC Inspection Engineer to check, approval date, revision no of reference documents at the time of inspection.												
FORMAT NO.: Q5401-QA1-P-07/1/13												
ENGINEERING DIV. (QA&I)												

LEGEND : * RECORDS IDENTIFIED WITH "TICK" SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.

** M. MANUFACTURER/ SUB-SUPPLIER. C. SUPPLIER/ Nominated Inspection Agency. N/E. NTPC EMPLOYER. P. PERFORM. W. WITNESS AND V. VERIFICATION

APPROPRIATE CHP: NTPC SHALL IDENTIFY IN COLUMN "N" AS "V"

\$-IRRESPECTIVE OF SIZE AND TYPE

ADS - APPROVED DATA SHEET. SPEC. - CONTRACT SPECIFICATION. TC. - TEST CERTIFICATE. COC - CERTIFICATE OF COMPLIANCE

IMR - INWARD MATERIAL REGISTER. FIR - FINAL INSPECTION REPORT

NOTE 1 : Where witnessing and verification of records is done only by main contractor (Column "C"), NTPC Inspection Engineer may do a surveillance Verification/ Witnessing as per his discretion.

NOTE 2 : NTPC Inspection Engineer to check approval date/revision no of reference documents at the time of inspection.

FORMAT NO.: QS-01-QAI-P-07A/V3

ENGINEERING DIV./QAI

No. P-45021/2/2017-PP (BE-II)
Government of India
Ministry of Commerce and Industry
Department of Industrial Policy and Promotion
(Public Procurement Section)

Dated 28th May, 2018
Udyog Bhawan, New Delhi

To
All Central Ministries/Departments/CPSUs/All concerned

ORDER

Subject: Public Procurement (Preference to Make in India), Order 2017 – Revision; regarding.

Department of Industrial Policy and Promotion, in partial modification of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017, hereby issues the revised ‘Public Procurement (Preference to Make in India), Order 2017’ with immediate effect:-

Whereas it is the policy of the Government of India to encourage ‘Make in India’ and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued :

1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
2. **Definitions:** For the purposes of this Order:

‘Local content’ means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

‘Local supplier’ means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries / Departments in pursuance of this order.

‘L1’ means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

‘margin of purchase preference’ means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

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'Nodal Ministry' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include *'turnkey works'*.

3. Requirement of Purchase Preference : Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder”

- a. “In procurement of goods, services or works in respect of which the Nodal Ministry has communicated that there is sufficient local capacity and local competition, and where the estimated value of procurement is Rs. 50 lakhs or less, only local suppliers shall be eligible. If the estimated value of procurement of such goods or services or works is more than Rs. 50 lakhs, the provisions of sub-paragraph b or c, as the case may be, shall apply”;
- b. “In the procurements of goods or works which are not covered by paragraph 3a and which are divisible in nature, the following procedure shall be followed”;
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract for full quantity will be awarded to L1.
 - ii. If L1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the local suppliers, will be invited to match the L1 price for the remaining 50% quantity subject to the local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such local supplier subject to matching the L1 price. In case such lowest eligible local supplier fails to match the L1 price or accepts less than the offered quantity, the next higher local supplier within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L1 bidder.
- c. “In procurements of goods or works not covered by sub-paragraph 3a and which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed”:-
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract will be awarded to L1.

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- ii. If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.
 - iii. In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.
4. **Exemption of small purchases:** Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.
5. **Minimum local content:** The minimum local content shall ordinarily be 50%. The Nodal Ministry may prescribe a higher or lower percentage in respect of any particular item and may also prescribe the manner of calculation of local content.
6. **Margin of Purchase Preference:** The margin of purchase preference shall be 20% .
7. **Requirement for specification in advance:** The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.
8. **Government E-marketplace:** In respect of procurement through the Government E-marketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.
9. **Verification of local content:**
- a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
 - b. In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
 - c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

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- d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.
- e. Nodal Ministries and procuring entities may prescribe fees for such complaints.
- f. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9h below.
- h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:
 - i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;
 - ii. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
 - iii. in respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted.

10. Specifications in Tenders and other procurement solicitations:

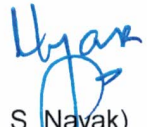
- a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.
- b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of local suppliers who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
- c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.
- d. If a Nodal Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/ or other items relating to that Nodal Ministry. A copy of every instruction or decision taken in this regard shall be sent to the Chairman of the Standing Committee.

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- e. For the purpose of sub-paragraph 10 d above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more than 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India.”
11. **Assessment of supply base by Nodal Ministries:** The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.
12. **Increase in minimum local content:** The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.
13. **Manufacture under license/ technology collaboration agreements with phased indigenization:** While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.
14. **Powers to grant exemption and to reduce minimum local content:** Ministries /Departments of Government of India and the Boards of Directors of Government companies or autonomous bodies may, by written order,
- a. reduce the minimum local content below the prescribed level;
 - b. reduce the margin of purchase preference below 20% ;
 - c. exempt any particular item or procuring or supplying entities or class or classes of items or procuring or supplying entities from the operation of this Order or any part of the Order.
- A copy of every such order shall be marked to the Member-Convenor of the Standing Committee constituted under this Order.
15. **Directions to Government companies:** In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
16. **Standing Committee:** A standing committee is hereby constituted with the following membership:
- Secretary, Department of Industrial Policy and Promotion—Chairman
 - Secretary, Commerce—Member
 - Secretary, Ministry of Electronics and Information Technology—Member
 - Joint Secretary (Public Procurement), Department of Expenditure—Member
 - Joint Secretary (DIPP)—Member-Convenor

The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

17. **Functions of the Standing Committee:** The Standing Committee shall meet as often as necessary but not less than once in six months. The Committee
- shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
 - shall annually assess and periodically monitor compliance with this Order
 - shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
 - may require furnishing of details or returns regarding compliance with this Order and related matters
 - may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
 - may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization
 - may consider any other issue relating to this Order which may arise.
18. **Removal of difficulties:** Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.
19. **Ministries having existing policies:** Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.
20. **Transitional provision:** This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.


(B. S. Nayak)
Under Secretary to Government of India
Ph. 23061257

CERTIFICATE

Hence forth in all tenders, kindly attach self-certification on your letter head as below content.

Enquiry No. & date –
Material -

We certify that “ the item offered here meets the minimum local content i.e. 50% as mentioned in Make in India circular ref: No. P-45021/2/2017 –PP (BE-II) dt. 28.05.2018 and the location at which the local value addition is made is as below –

(Works address -----)

Certificate by Chartered Accountant on letter head

This is to Certify that M/s
(hereinafter referred to as 'company') having its registered office at
is registered under MSMED Act 2006,
(Entrepreneur Memorandum No (Part—II) dtd:
Category: (micro/small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the latest audited financial year as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5, 2006;
Rs. Lacs
2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:
Rs. Lacs

(Strike off whichever is not applicable)

The above investment of Rs. Lacs is within permissible limit of Rs. Lacs for Micro / Small **(Strike off which is not applicable)** Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/ Small) **(Strike off which is not applicable)** and the date of graduation of such enterprise from its original category is
(dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date

(Signature)

Name -

Membership number -

Seal of Chartered Accountant