

Enquiry items along with quantities:

It. No.	Size & Item description	Technical requirement	Quantity in kg
1	75 mm dia X 2500 mm – 6000 mm LG	Bright steel round bars (cold drawn) to specification AA10209 rev04. Straightness within 1.5mm/meter. All other details as per spec. AA10209 rev04.	7700
TOTAL			7700 kg

Quantity variation as per below:

Item-1, Supplies quantity are to be restricted between 7700 kg & 6300 kg.

Pre-qualification criteria:

S. No.	Description of pre-qualification requirement	Vendor Response	
		Complied (YES/NO)	Supporting Documents required to accept compliance
1	Manufacture of steel round bar / their authorized representative.		Self Declaration/ certificate on company letterhead for being manufacturer, else authorization letter with validity (for authorized representative). Firm name and address, email, contact no. etc. from whom bars intended to be supply to be furnished.
2	Vendors should have experience of manufacturing & supplying STEEL ROUND BAR during last 7 years (ending last day of month previous to the one in which NIT is published)		Purchase order, Mill Test certificate. In case of authorized dealer relevant documents of there OEM is also considered.
3	Company shall be certified with ISO 9001 or equivalent.		Valid certificate to be submitted. In case of authorized dealer, Valid ISO certificate of OEM is required.

Note-

- BHEL has right to verify information / confirmation furnished, by asking additional documents, proofs etc.
- All the above point wise pre-qualification requirement are to be necessarily accepted by the bidders for their offers to be considered failing which offers shall be rejected.

MAKE IN INDIA format (to be filled by OeMs of the participating bidders)

BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL

MATERIAL MANAGEMENT – STEEL DIVISION

For this Procurement, Government of India Public Procurement (Preference to Make in India), Order 2017 with its amendments and subsequent Orders issued by the respective nodal ministries shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT.

*As per the Provisions of this order, please submit **a self-certification complying with the conditions below on company letterhead duly signed by competent authority.***

I, hereby declare on behalf of M/s. that we are participating in the Enquiry No. floated by BHEL, Bhopal (MP), India and shall comply with following:

1. Public Procurement (Preference to Make in India), Order 2017 *with its amendments* and subsequent Orders issued by the respective nodal ministries shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT.

(a) A supplier will be treated as “**Class-I Local Suppliers**”, if the items quoted by bidder have local content equal to or more than 50%.

(b) ‘**Local Content**’ means the amount of value added in India, which shall be total value of item quoted (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, **in percent**.

2. I hereby declare that our firm qualifies as “**Class-I Local Suppliers**”.

a. The Local Content in the items quoted under this Enquiry is Percent

b. Details of location(s) in India where this value addition shall be done, is/are as follows:

- (a)
- (b)
- (c)

(.....)

For M/s.

(Seal & Sign)



CORPORATE PURCHASING SPECIFICATION

AA10209

Rev No. 04

PAGE 1 of 3

BRIGHT STEEL BARS, COLD DRAWN

1 GENERAL:

This specification governs the quality of Bright Steel Bars, Cold Drawn.

2 APPLICATION:

Used in the manufacture of threaded and machined components for general engineering purposes.

3 CONDITION OF DELIVERY:

3.1 Cold drawn, Bright.

3.2 Bars shall be supplied in straight lengths with ends square and true and free from twists and bends.

3.3 The bars shall be given a clear temporary rust preventive (TRP) coating to avoid corrosion during transit & storage. Black TRP coating is not acceptable. Clear TRP used shall be free from pungent smell.

The following clear TRP's are suggested:

- i) Servo RP 150 - M/s Indian Oil Corporation.
- ii) HE - 1612 - M/s. BHEL, Bhopal.
- iii) Rustilo DW - 901 - M/s. Indrol Lubricants and Specialties Ltd.
- iv) Rustpro special - M/s. Tide Water Oil Co.
- v) Any other clear TRP conforming to IS:1154

4 COMPLIANCE WITH NATIONAL STANDARDS:

The material shall comply with the requirements of:

IS: 9550 – 2001 : Bright Steel Bars

5 Dimensions and Tolerances:

5.1 Sizes:

Bars shall be supplied to the dimensions specified on BHEL order.

5.2 Tolerances:

5.2.1 Round, Hexagonal, Square and Flat Bars:

Unless otherwise specified, tolerances on dimensions shall be as follows:

For cold drawn round bars h10 to table 2 of IS:9550

For hexagonal and square drawn bars upto and including 80mm h11 and for dimensions above 80mm h12 of table 1 & 2 of IS:9550.

For drawn flats in accordance with table 3 and 4 of IS: 9550

Revisions:

CI 25.16.18 of MOM of MRC-S&GPS

APPROVED:

INTERPLANT MATERIAL RATIONALISATION
COMMITTEE – MRC(S&GPS)

Rev No.04

Amd No.

Reaffirmed

Prepared
HEP, Bhopal

Issued
Corp.R&D

Dt. of 1st Issue
September 1976

Dt:15-12-2002

Dt:

Year:2019



5.2.2 Out of Roundness:

Out of roundness, that is to say the difference between the largest and, the smallest diameters measured over the same cross section in a round bar, shall not exceed one half of the permissible total variation on diameter.

In a square or hexagonal bar, the difference in two dimensions at any cross section (each dimension being the distance between opposite faces in case of square bar and across flats distance in case of hexagonal bar) shall not exceed one half of the permissible total variation specified on size.

5.2.3 Straightness:

Unless otherwise agreed to, the permissible deviation shall not exceed 1.5mm per metre on any running length.

5.3 Length:

Bars shall be supplied in lengths of not less than 2.5 metres.

6 MANUFACTURE:

Steel shall be manufactured by the open-hearth, electric, basic oxygen or combination of these processes. Material shall be manufactured from killed Steel.

Sufficient discard shall be made from each ingot to ensure freedom from piping, harmful segregation and internal and surface defects.

7 FREEDOM FOR DEFECTS:

All finished steel bars, shall be sound, straight and free from visible surface defects. They shall be bright and clean.

Bars shall be free from twists and bends.

8 CHEMICAL COMPOSITION:

The melt analysis of the material and the permissible variation in the composition of the material from the melt analysis shall be as follows:

Element	Melt analysis, percent,		Permissible variation, percent, max
	min	max	
Carbon	0.35	0.45	± 0.02
Silicon	0.05	0.35	± 0.03
Manganese	0.60	0.90	± 0.04
Sulphur	-	0.055	+ 0.005
Phosphorous	-	0.055	+ 0.005

9 TEST SAMPLES:

9.1 Tensile Test:

Bars from the same cast and of the same size shall be grouped in batches. One tensile test piece shall be cut from a selected bar each batch.

For bars of sizes upto and including 27mm, the test pieces, shall be machined concentrically from the bars selected for test. Alternatively, the full cross-section of the bars may be tested.

For bars of sizes over 27mm and upto and including 65mm, the longitudinal axes of the test pieces shall be not less than 14mm from the surface of the bars selected for the test.

For bars of sizes over 65mm, the longitudinal axes of the test pieces shall coincide with a position midway between the center and the surface of the bars selected for test.

Tensile test pieces shall have a gauge length equal to $5.65\sqrt{So}$.



CORPORATE PURCHASING SPECIFICATION

AA10209

Rev No. 04

PAGE 3 of 3

10 MECHANICAL PROPERTIES:

When tested in accordance with IS: 1608, the test pieces shall show the following properties:

Size,mm		Tensile strength,	Yield strength	Elongation on
Over	upto & incld	N/mm ² minimum	N/mm ² minimum	5.65√So gauge length %, minimum
-	20	665	510	8
20	40	630	470	8
40	63	590	460	10
63	-	570	430	11

11 TEST CERTIFICATES:

Three copies of test certificates shall be supplied, unless otherwise stated on the order.

In addition, to the above, the supplier shall ensure to enclose one copy of the test certificate along with their despatch documents to facilitate quick clearance of the material.

The test certificate shall bear the following information:

AA10209: Rev. No. 04
BHEL order No,

Supplier's Reference:

Name
Identification No.
Melt No.

Results of Tests:

Results of chemical analysis and mechanical tests.

12 PACKING AND MARKING:

The material shall be suitably packed in bundles, hessian wrapped, to prevent sagging, corrosion and damage during transit. A suitable clear temporary rust preventive shall be applied on all the bars. Each bar over 50mm shall be stamped at one end with "AA10209" Bars 50mm and below shall be bundled together and tied with wire at 3 to 4 places along the length of the bar.

A metal label shall be securely attached to each bundle and shall bear the following information:

AA10209: BRIGHT STEEL BARS, COLD DRAWN.

BHEL Order No.

Consignment/Identification No.

Size and Weight.

Supplier's Name

13 REFERRED STANDARDS (Latest publications including amendments):

1) IS:1154

2) IS:1608

3) IS:9550

STANDARD QUALITY ASSURANCE PLAN FOR STEEL BAR MATERIAL

QAP NO. : Dated :-
 SPECIFICATION : AA 10209 Rev. 04 (Bright Steel Bar- cold drawn)
 SUPPLY CONDITION : cold drawn

1	2	3	4	5	6	7	8	9	10	11	12	
SL. NO.	STAGE	CHARACTERSTIC	METHOD	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	P	V	W	REMARKS	
1	Raw Material	Chemical	Chemical test	1 Sample / Heat	AA 10209 Rev. 04 & IS :9550(latest)	AA 10209 Rev. 04 & IS :9550(latest)	Mill Test Certificate	1	2	-	-	
3	Final Stage	Stamping on test bar for mechanical Testing	Hard Stamp by TPIA	-do-	-do-	-do-	Stage Inspection Report	1	-	2	Test Piece duly stamped by TPIA	
		Mechanical Properties	i) Tensile Test	As Specified in Spec.AA10209,rev04	-do-	-do-	-do-	Supplier's Test Certificate	1	-	2	In case of traders witness by TPIA to be conducted at NABL approved Lab.
			ii) Yield strength	-do-	-do-	-do-	-do-	Supplier's Test Certificate	1	-	2	
			iii) % Elongation	-do-	-do-	-do-	-do-	Supplier's Test Certificate	1	-	2	
		Chemical Composition	Chemical test	1 sample / Heat	-do-	-do-	Supplier's Test Certificate	1	-	2		
		Visual Examination	Visual	100%	-do-	Bars shall be free fom surface defects, bends & twists	Supplier's Dimensional Report	1	-	2		
		Dimension & Tolerance	Measurement	100%	As per cl.5.2.1 of spec. AA10209 REV04	As per cl.5.2.1 of spec. AA10209 REV04	-do-	1	-	2	-	
4	Dispatch	Identification Marking	Hard Stamping	100%	As per cl.12 of spec. AA10209 REV04	As per cl.12 of spec. AA10209 REV04	1. Heat No. 2. P.O. No. 3. Spec No. 4. Size 5. Supplier's Name	1	-	2	Identification & marking shall be done on face of each bar & TPIA hard stamp to be done on both face of each bar.	
5	Document submission duly certified by TPIA	1) Mill test certificate (Mechanical & Chemical) 2) Supplier Test certificate (Mechanical & Chemical) 3) Dimensional Inspection report.										

Note : Final Testing of Material will be done at BHEL Bhopal works before clearance of SRV.

1 = Manufacturer / Trader
 2 = BHEL / BHEL's TPIA

P = Perform
 V = Verification
 W = Witness

SUPPLIER-QC representative (Sign Seal)

DECLARATION (To be given by Bidder)

GeM Bid No......

Item Desc:

With reference to above reference bid, we M/s..... (Bidder's Name)
confirm/declare the following.

1. Quoted Make-.....
2. We are OEM or Reseller -
3. Valid OEM Authorization certificate with OEM's Contact Details attached (In case of reseller) - Yes / NA
4. We confirm Nil deviation from NIT.

Note:

1. OEM details such as name, designation, address, e-mail Id and Phone number required to be furnished along with the technical bid. (also refer ATC clause).
2. Commercial Deviation/deviation in delivery shown separately or found hidden in the offer, will not be taken cognizance of.

(Vendor's Seal & Sign)