

RESTRICTED

ANNEX A TO

BOF TENDER NO 23.27.0000.167.185.3256105.22.23

DATED 19 JANUARY 2023

SPECIFICATION

Ser	Name of Items and Specification	A/U	QTY
1.	<p>Brass Rod - Ø 12 CuZn 39 Pb 3.43 JUS C.D3.120 Size: (3Mx12mm) Dia: 12mm, Length: 3M CuZn 39 Pb3.43 (CW 614N)</p> <p><u>Chemical composition:</u> Fe= 0.30% (Max), Al=0.05% (Max), Cu=57-59% (Max), Ni=0.30% (Max), Pb=2.5–3.5% (Max), Sn=0.30% (Max), Zn= rest, Others=0.20% (Max),</p> <p><u>Properties:</u> Density = 8.47 g/cm³ Melting point = 875°C Thermal expansion = 20.9 x10⁻⁶/K Modulus Elasticity = 97 GPa Thermal conductivity = 123 W/m.K Electrical Resistance = 0.062 x10⁻⁶ Ω.m</p> <p><u>Other Standards</u> DIN = 2.0401</p> <p><u>Characteristic</u> CW614N is typically supplied as round, flat, square and hexagon bar. The corrosion resistance of CW614N is fair to excellent. Solution treatment or annealing can be done by rapid cooling after heating to 430-600°C. The machinability of alloy CW614N is excellent. It has a machinability rating of 100 and is the standard against which the machinability of other alloys is measured. Shelf life : 15 years.</p>	Kg	22,000
2.	<p>Tin Sn 99.9 (EN 610) Size: 200000 x 30 x 0.4) mm Thickness: 0.4 mm Width: 30.00 mm Length: 200000 mm</p> <p><u>Chemical composition</u> Sn=99.9 (Min), Fe= 0.005% (Max), Al=0.001% (Max), Cu=0.03% (Max), As=0.03% (Max), Pb=0.01% (Max), Zn=0.001% (Max), Sb=0.04% (Max), Bi=0.01% (Max), Cd=0.001(Max), Others=0.1 %</p> <p><u>Other standards</u> DIN = 2.3501</p> <p><u>Heat treatment</u> Melting temperature: 232°C</p> <p><u>Characteristic Properties</u> Tin is a silvery white, soft, malleable metal that can be highly polished. It resists oxygen and water but dissolves in acids and bases. Exposed surfaces form an oxide film. Shelf life : 15 years.</p>	Kg	34
<p><u>Condition:</u></p> <p>a. Country of Origin : Group A. b. Country of Manufacturer : To be mentioned. c. Name of Principal : To be mentioned. d. Name of Manufacturer : To be mentioned. e. Port of Shipment : Country of Manufacturer. f. Offer Validity : 180 days from tender opening date.</p>			

- g. **Pre-Shipment Inspection (For Brass Rod Only):**
- i. 3 (Three) members {2 (Two) members from BOF & 1 (One) member from IA&E} for a period of 4 (Four) workings days (Excluding journey period).
 - ii. Supplier must submit detail plan of PSI (Modus Operandi).
 - iii. Supplier must also mention PSI cost to be borne by them at their end.
 - iv. If PSI is not carried out by the buyer due to any pandemic situation, then the Quality Assurance Certificate (QAC) original hard copy signed by the appropriate authority of the Quality Control Department of the manufacturer as per Annex J will have to be submitted at BOF end for obtaining Shipment Clearance.

Terms & Conditions

Supplier must mention their compliance on the following mentioned points :

1. A principal/manufacture can submit **only one offer through one local agent** for any individual item. Offers through multiple local agents by same principal/manufacture will be **treated as rejected**.
2. To ensure unhindered LC handling the principal must provide a certificate to confirm that their LC operating bank has RMA (Relationship Management Agreement) with the local scheduled Bank of Bangladesh.
3. Supplier must **clearly mention** (in the technical offer) that as principal/manufacture they poses necessary **export permit** from the concern ministry **or chamber of commerce** of their country. They must also submit a certificate in this regard as per the attached specimen format at Annex H.
4. Before signing the contract, foreign currency Performance Guarantee @ 10% of total LC value is to be submitted by the Principal in favour of Commandant, Bangladesh Ordnance Factories, Gazipur Cantonment, Gazipur through any scheduled Bank located in Bangladesh (As per the format at Annex G).
5. A separate **certificate should be provided** by the principal **originally signed** (Computerized or digitally edited signature will not be accepted) stating that they are aware of the requirement of the PG and if the contract is awarded they will be bound to provide the PG as per the format at Annex F, **otherwise administrative action will be taken against the principal and local agent**.
6. The stores should be supplied to BOF at **supplier's cost**.
7. If the supplier fails to deliver the stores within the stipulated period, the followings will be applicable:
 - a. Cancel the contract and/or,
 - b. Decision at the discretion of BOF.
8. Inspectorate is the authority in all matters pertaining to Inspection. Any verdict by the inspectors regarding rejection, acceptance, and /or deviation of machine involving price reduction will be treated as final and will not be subject to arbitration.
9. The Supplier must submit the following **attested documents** with the schedule :
 - a. **Trade License**
 - b. **Tin Certificate**
 - c. **Up to date VAT Registration certificate.**

TERMS, CONDITIONS AND SPECIAL REQUIREMENTS OF BRASS ROD

1. **General Requirements.**

- a. The store must be brand new, free from all defects and should be suitable for use. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- b. The store must be suitable for use in tropical climate. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- c. The year of manufacture of the stores should be current year I, e contracted calendar year. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- d. The store should be safe in storage, transportation etc. and should not cause any health hazard. Certificate should be provided by manufacturer along with the offer and store.
- e. Guarantee certificate for supply of store as per offer to be provided by the manufacturer along with the offer and stores.
- f. Warranty and shelf life certificate by the manufacturer as mentioned below should be furnished along with the offer and stores:
- (1) **Warranty Certificate.** The supplied stores will be brand new, free from all defects (i.e. rust, crack, dents etc), good surface finish and that in the event of any shortage, defects being found after inspection the stores should be replaced by the supplier at their own cost within 06 (six) months as the case arises. The warranty period of the stores will be 12 (twelve) months from the date of issue of "Inspection Note" by Inspectorate of Armaments and Explosive. After inspection unserviceable stores must be changed and again to be replaced by good stores.
- (2) **Shelf life Certificate.** The shelf life of the store will be 15 (fifteen) years from the date of manufacture. If the stores are found defective within the shelf life the store must be replaced by the supplier at their own cost (CFR basis) within 06 (six) months as the case arises.
- g. The store should be preferably be of 1 (one) lot but not more than two lots.
- h. All marking and other details should be distinct in English language.
- j. All certificates and letter of authorization should be original in English language.
- k. Quality control and inspection certificate by the manufacturer must be provided along with the stores.
- l. IA&E will issue final inspection report within one month after receipt the stores at consignee's end provided the visual inspection, chemical and mechanical test. If the test result is satisfactory and the case of clarification/replacement, if any is settled as per visual inspection, chemical and mechanical test reports are completed within the time (one month). **Part inspection Note will not be issued.**

- m. **Tender sample**: Tender sample of Brass Rod 6 (six) feet will be submitted with the offer for necessary visual inspection, Chemical, Mechanical and functional test.
- n. Before bulk supply Brass Rod 6 (six) feet advance sample should be submitted to IA&E for necessary visual inspection, Chemical, Mechanical and functional test.
2. **Technical Specification**. The stores should be supplied as per specification mentioned in the Tender.
3. **Catalogue/Brochure**. Original catalogue/brochure having technical information in English language should be provided by the manufacturer along with the offer. Laminated/computer printed catalogue/brochure is not acceptable.
4. **Packing**.
- a. As per international packing procedure of the factory standard.
- b. A Packing List/Note showing lot details and number of box against each lot should be furnished in each box.
- c. The stores are to be securely packed with sea worthy packing and clearly marked for safe transit by Air/Sea/Road/Rail. The packing and marking will be done by the supplier in such a manner that the stores will not be affected by sea water, rain water, damp weather during transportation.
- d. Packing material to be such that it will not be affected by insects or any other harmful material during storage up to the shelf life. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
5. **Marking on the Packing Box**.
- a. Following marking to be stenciled on the top of the box/package:
- (1) Consignee - Commandant, Bangladesh Ordnance Factories, Gazipur Cantonment, Gazipur, Bangladesh.
 - (2) Contract number and date
 - (3) Package number : 1/100, 2/100 and so on.
- b. Following marking to be stenciled on the front side of the box/package:
- (1) Number of stores package.
 - (2) Full nomenclature of the stores.
 - (3) Lot number, year of manufacture and factory code.
 - (4) Dimension of the package/box.
 - (5) Net weight of the package/box.
 - (6) Gross weight of the package/box.
 - (7) Country of Origin.
6. **Pre-Shipment Inspection (PSI)**.
- a. Pre-shipment inspection (PSI) will be carried out jointly by BOF and Inspectorate of Armaments & Explosive (IA&E) at the discretion of BOF authority. The team may be comprised of 3 (three) members {2 (Two) members from BOF & 1 (One) member from IA&E} for a period of 4 days excluding journey period. The cost incurred by BOF PSI members will be borne by BOF and cost of IA&E PSI member will be borne by Bangladesh Army. The supplier should inform about the date of pre-shipment inspection (PSI) at least 8 (Eight) weeks to 15 (Fifteen) weeks (in respect of time required for obtaining visa of respective country) prior to the exact date of carrying out of PSI.

- b. All types of movement/transportation (air/sea/road/rail) and medical (if require) of the team within the manufacturer's/suppliers country, reception and arrangement for entry in to the country/concerned area for the Pre-shipment inspection also to be arranged by the supplier's without any extra cost.
- c. The pre-shipment inspection will be carried out at manufacturer's factory premises/plant. Pre-shipment inspection should include visual inspection/checking of laboratory/chemical/ functional test of the stores, inspection of production line of same type of stores. PSI team will check all the parameters of the item as per technical requirements of the contract. All necessary equipment should be provided by the supplier. Obtained result should be attached with PSI report.
- d. PSI team will accept the stores provisionally, if the stores are found as per contractual requirement. PSI report will be vetted by both the vetting committee of BOF and IA&E.
- e. If any deficiency/discrepancy found during vetting of PSI report, then deficiency/discrepancy items will be filled up or rectified by the supplier and will forward completion certificate to BOF. Then shipment clearance will be given by BOF.
- f. If any deficiency/discrepancy is not found in the PSI report and the stores are satisfactory then after shipment 80% payment will be paid and remaining 20% payment will be paid after satisfactory post shipment inspection.
- g. If the PSI is not carried out due to any reason then the quality assurance certificate of "Quality Assurance Department." of the manufacturer will be considered as PSI report. In this case 100% payment will be held up. The post shipment inspection will be carried out jointly by the inspection team of IA&E and BOF. Thereafter, whole payment will be paid after satisfactory post-shipment inspection report. If the stores are rejected during Post-shipment inspection , the stores will be replaced by the supplier at their own cost.
7. **Post-Shipment Inspection.** The stores on being received at the consignee`s end will be inspected by Inspectorate of Armaments & Explosive (IA&E) or authorize representative. The inspection team will carry out visual inspection of 100 % of the stores, chemical/laboratory test and functional test. During inspection any article found to be contrary and not in accordance with the contract will be proceed as per clause 1.f (1 & 2) above. At the time of inspection the supplier or his local representative and representative of consignee shall remain present. Daily inspection report will be signed by all representative. After complete of 100% visual inspection of the stores functional test of the stores should be carried out. IA&E will issue final inspection report after received of stores at consignee`s end provided the visual inspection, chemical/laboratory test and functional test is satisfactory and the case of clarification/replacement of stores (if any) is settles as per visual inspection, chemical/laboratory test and functional test report are completed.
8. **Authority Holding Sealed Particulars.** Chief Inspector, Inspectorate of Armament and Explosive, Gazipur Cantonment.
9. **Inspecting Authority.** Chief Inspector, Inspectorate of Armaments and Explosive, Gazipur Cantonment or his authorized representative.
10. **Part-Shipment Inspection.** Part-shipment inspection is not allowed.
11. **Tran-shipment.** Tran-shipment is not allowed.
12. **Inspection Certificate.** Final inspection certificate from the manufacturer should be provided along with the stores by the supplier.
13. **Country of Origin.** Group A.

ANNEX C TO
BOF TENDER NO 23.27.0000.167.185.3256105.22.23
DATED 19 JANUARY 2023

TERMS, CONDITIONS AND SPECIAL REQUIREMENTS OF BRASS ROD

1. **General Requirements.**

- a. The stores must be brand new and free from all defects and should be suitable for use. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- b. The stores must be suitable for use in tropical climate. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- c. The year of manufacture of the stores should be current year i.e contracted calendar year. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- d. The stores should be safe in storage, transportation etc and should not cause any health hazard. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
- e. Guarantee Certificate for supply of store as per offer to be provided by the manufacturer along with the offer and stores.
- f. Warranty and Shelf Life Certificate by the manufacturer as mentioned below should be furnished along with the offer and stores.

(1) **Warranty Certificate.** The supplied stores will be brand new, free from all defects and that in the event of any shortage, defects being found after inspection the stores should be replaced by the supplier at their own cost within 06 (six) months of the case arises. The warranty period of the store will be 12 (twelve) months from the date of issue of "Inspection Note" by IA&E. After inspection, unserviceable store must be changed and again to be replaced by good stores.

(2) **Shelf Life Certificate.** The Shelf Life of the stores will be as per Tender. If the stores are found defective within the shelf life, the stores must be replaced by the supplier at their own cost (CFR basis) within 6 (six) months as the case arises.

- g. The stores should be preferably of 1 (one) lot but not more than 2 (two) lots.
- h. All markings and other details should be in English Language.
- j. All certificates and letters of authorization should be original in English Language.
- k. Quality Control and Inspection Certificate by the manufacturer must be provided along with the stores.
- l. IA&E will issue final Inspection Report within one month after receipt the store at Consignee's end provided the Visual Inspection and chemical test result is satisfactory and the case of clarification/replacement, if any is settled as per Visual Inspection, chemical and functional test report are completed within the time (1 Month). **Part Inspection Note will not be issued.**

2. **Technical Specification.** The stores should be supplied as per specification mentioned in the Tender.

3. **Catalogue/Brochure.** Original Catalogue/Brochure having technical information in English Language should be provided by the manufacturer along with the offer. Laminated/Computer Printed Catalogue/Brochure is not acceptable.

4. **Packing.**
- a. As per international packing procedure of the factory standard.
 - b. A Packing List/Note showing lot details and number of box against each lot should be furnished in each box.
 - c. The stores are to be securely packed with sea worthy packing and clearly marked for safe transit by air/sea/road/rail. The packing and marking will be done by the supplier in such a manner that the stores will not be affected by sea water, rust, rain water, damp weather during transportation.
 - d. Packing Material to be such that it will not be affected by insects of any other harmful material during storage up to the shelf life. Certificate should be provided to this effect by the manufacturer along with the offer and stores.
5. **Marking on the Packing Box.**
- a. Following marking to be stenciled on the top of the box/package :
 - (1) Consignee : Commandant, Bangladesh Ordnance Factories, Gazipur Cantonment, Bangladesh.
 - (2) Contract number & dt:
 - (3) Package number : 1/100, 2/100 and so on.
 - b. Following marking to be stenciled on the front side of the box/package :
 - (1) Number of stores package.
 - (2) Full nomenclature of the stores.
 - (3) Lot number, year of manufacture, and factory code.
 - (4) Dimension of the box/package.
 - (5) Net weight of the box/package.
 - (6) Gross weight of the box/package.
 - (7) Country of Origin.
6. **Inspection Certificate.** Final inspection certificate from the manufacturer should be provided along with store by the supplier and should be mentioned in the tender.
7. **Post-shipment Inspection.** The stores on being received at the consignee's end will be inspected by inspectorate of Armaments & Explosive (IA&E) or authorize representative. The inspection team will carry out visual inspection of 100% of the stores, chemical/laboratory test and functional test. During inspection any article found to be contrary and not in accordance with the contract will be proceed as per clause 1.f(1) above. At the time of inspection, the supplier or his local representative and representative of consignee shall remain present. Daily inspection report will be signed by all representatives. After completion of the 100% visual inspection, chemical/laboratory test and functional test is satisfactory and the case of clarification/replacement of stores (if any) is settled then I/Note will be issued.
8. **Authority Holding Sealed Particulars.** Chief Inspector, Inspectorate of Armament and Explosive, Gazipur Cantonment.
9. **Inspecting Authority.** Chief Inspector, Inspectorate of Armaments and Explosive, Gazipur Cantonment or his authorized representative.
10. **Part-shipment Inspection.** Part-shipment inspection is not allowed.
11. **Tran-shipment.** Tran-shipment is not allowed.
12. **Inspection Certificate.** Final inspection certificate from the manufacturer should be provided along with the stores by the supplier.
13. **Country of Origin.** Group A.