

DETAILS SPECIFICATION

Ser	Nomenclature	Unit	Qty	FOB	Freight	CFR
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) Chemical composition: Fe= 0.30% (Max), Al=0.05% (Max), Cu=57-59%, Ni=0.30% (Max), Pb=2.5-3.5%, Sn=0.30% (Max), Zn= Rest, Others=0.20% (Max), Properties: 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 Other standards DIN = 2.0401 Characteristic 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.</p> <p><u>Shelf Life</u> 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 Chemical composition 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), Sn=99.9% (Min), Cd=0.001% (Max), Others=0.1 % (Total) Other standards DIN = 2.3501 Heat treatment Melting temperature: 232°C Characteristic properties Tin is a silvery-white, soft, malleable metal that can be highly polished. It resists oxygen and water but dissolves in acid and bases. Exposed surfaces form an oxide film.</p> <p><u>Shelf Life</u> 15 years</p>	Kg	68			

Condition:

1. **Country of Origin** : **Any Country.**
2. **Country of Manufacture** : **Any Country.**
3. **Name of Manufacture** : **To be mentioned.**
4. **Port of Shipment** : **Manufacturer's Country (To be mentioned).**
5. **Part-shipment** : **Not allowed.**
6. **Trans-shipment** : **Not allowed.**
7. **Tender Sample** : **Tender sample of Brass Rod 06 (Six) feet and Tin Sn 500 (Five Hundred) gram should be submitted with the offer for necessary Visual inspection, Chemical, Mechanical and functional test.**

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 principle/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 Banks 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 any other authority of their country. They must also submit a certificate in this regards as per the attached specimen format at Annex H.

4. **Payment and PG Submission**
For Foreign Currency

- i. 80% and 20% payment system.
- ii. Before signing the contract, 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 F).
- iii. 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 G.

For Local Currency

- i. 100% payment will be made upon final acceptance of the Stores.
 - ii. 05% PS (Performance Security) as pay-order has to deposit in local currency before signing the contract.
5. The stores should be supplied to BOF at **supplier's cost**.
 6. On arrival of the stores at BOF, the supplier must complete installation, commissioning, trial run & trial production within 01(one) month (from the date of entry at BOF). Otherwise, penalty will be imposed at the rate of 2% but not less than 1% and will not exceed 10% of the total CFR/LC vale (As applicable).
 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.**

GENERAL REQUIREMENTS AND OTHER TERMS AND CONDITIONS OF BRASS ROD (QTY - 22,000 KG)

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 04(Four) 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 04(Four) months as the case arises.

g. The store should be preferably be of 01 (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 congee'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 06 (six) feet should be submitted with the offer for necessary visual inspection, Chemical, Mechanical and functional test.

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

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 : 01/100, 02/100 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. **Quality Assurance Certificate (QAC).** 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) 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. **Post-Shipment Inspection Requirement.** Visual inspection of 100 % of the stores, chemical /laboratory test and functional test should be carried out by the Post-Shipment Inspection team during Post-Shipment Inspection. Necessary Quality of stores for Chemical/laboratory test should be supplied by the supplier along with the stores at free of cost during Post-Shipment Inspection.

9. **Authority Holding Sealed Particulars.** Chief Inspector, Inspectorate of Armament and Explosive, Gazipur Cantonment.

10. **Inspecting Authority.** Chief Inspector, Inspectorate of Armaments and Explosive, Gazipur Cantonment or his authorized representative.

11. **Part-Shipment Inspection.** Part-shipment inspection is not allowed.

12. **Tran-shipment.** Tran-shipment is not allowed.

13. **Inspection Certificate.** Final inspection certificate from the manufacturer should be provided along with the stores by the supplier.

14. **Country of Origin.** Any Country.

GENERAL REQUIREMENTS AND OTHER TERMS AND CONDITIONS OF

TIN SN 99.9 (EN 610), QTY - 68 KG)

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 01 (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 congee'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 the store 500 (five hundred) gram should be submitted with the offer for necessary visual inspection, Chemical, Mechanical and functional test.

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

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 : 01/100, 02/100 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. **Quality Assurance Certificate (QAC).** 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) 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. **Post-Shipment Inspection Requirement.** Visual inspection of 100 % of the stores, chemical /laboratory test and functional test should be carried out by the Post-Shipment Inspection team during Post-Shipment Inspection. Necessary Quality of stores for Chemical/laboratory test should be supplied by the supplier along with the stores at free of cost during Post-Shipment Inspection.

9. **Authority Holding Sealed Particulars.** Chief Inspector, Inspectorate of Armament and Explosive, Gazipur Cantonment.

10. **Inspecting Authority.** Chief Inspector, Inspectorate of Armaments and Explosive, Gazipur Cantonment or his authorized representative.

11. **Part-Shipment Inspection.** Part-shipment inspection is not allowed.

12. **Tran-shipment.** Tran-shipment is not allowed.

13. **Inspection Certificate.** Final inspection certificate from the manufacturer should be provided along with the stores by the supplier.

14. **Country of Origin.** Any Country.