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23.27.0000.282.4112316.24.25

25 August 2024

REGARDING SUBMISSION OF EXPRESSION OF INTEREST (EOI) FOR 7 PROJECTS IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Bangladesh Ordnance Factories (BOF) has decided to establish 7 production line to enhance the defence production capability of BOF. If your company is interested about these 7 projects of BOF, please submit Expression of Interest (EOI) with details information as per mentioned annexures (A to G). Within the given parameters of 7 projects you will find all necessary information to conduct a proper assessment of BOF's requirement.

2. You are requested to submit hard copy or soft copy of EOI to BOF at e-mail address (bof@army.mil.bd, man.r&d.plg@bof.gov.bd) by 30 September 2024.



MD. MONJUR ALAHI
Lieutenant Colonel
For Commandant

Enclosed Annexures:

- | | |
|---|------------------|
| A. Establishment of Percussion Cap and Detonator Cup Production Line for Grenade Hand HE | - 01 (One) page. |
| B. Establishment of Fuze Production Line (Mortar and 105-155 mm Ammunition) | - 01 (One) page. |
| C. Establishment of Primer Production Line (105-155 mm Ammunition) | - 01 (One) page. |
| D. Establishment of Propellant Production Line | - 01 (One) page. |
| E. Establishment of 40 mm Automatic Grenade Launcher (AGL) and Sami Automatic Grenade Launcher (SAGL) Grenade Production Line | - 01 (One) page. |
| F. Establishment of 40 mm Rocket (All Types Including HEAT) for 40 mm RL Type 69/69-1 Production Line | - 01 (One) page. |
| G. Production Line of Ammunition of 12.7 mm AAMG and 14.5 mm MG | - 01 (One) page. |

Distribution :

External :

Action :

Perspective Vendors

Internal :

Information :

Production Branch

(Attention: Director Production)

Planning and Maintenance Branch

(Attention : Deputy Director Planning)

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ANNEXURE A TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

ESTABLISHMENT OF PERCUSSION CAP AND DETONATOR CUP PRODUCTION LINE FOR GRENADE HAND HE BD-20 IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. The production line should be capable of manufacturing, filling and assembly of High Explosive (HE) type Percussion Cap (PC) and Detonator Cup (DC) for Grenade Hand HE BD-20.
2. The Percussion Cap and Detonator Cup (attached drawing) should be compatible with BOF produced Base Corpus with Delay Element.
3. The capacity of production line should be 0.5 million per year.
4. Likely area required for the Production line, Safety area around Production line, Raw Material storing area, Safety area required around 'Raw Material storing area', Finished Production Material Placing Area, Safety area required around 'Finished Production Material Placing Area' and Nature of Construction.
5. Likely time for establishment including installation, trial run, training.
6. Process flow diagram for production, filling and assembly of percussion cap (including anvil) and detonator cup with transfer of technology (TOT).
7. List of machines, equipment and raw materials (metallic, explosive or pyro technique) for each line.
8. Total manpower requirement.
9. Unit production cost of Percussion Cap and Detonator Cup (HE) separately.
10. Cost of raw material for producing 0.5 million Percussion Cap and Detonator Cup (HE).
11. Overall cost of the project (considering cost of TOT, machines, equipment, lab equipment, tools, spares, ancillary items, factory building construction, local & foreign training etc).
12. Sources and supply chain of raw materials (including explosives and chemicals), accessories & tools.
13. Availability of raw material.
14. Warranty period.
15. Country of origin and shipment (USA, Russia, UK, France, Turkey, China, Spain, Serbia)
16. Safety requirement and protection level of the production line.
17. Information regarding waste material treatment plant (if necessary).
18. Any other suggestion/opinion.

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ANNEXURE B TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

INVITATION ON EXPRESSION OF INTEREST (EOI) FOR ESTABLISHMENT OF FUZE PRODUCTION LINE (MOR and 105-155 mm AMMO) IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Detail technical specification of Fuze production line (Mor and 105-155 mm Ammo) machineries, equipment's, tools-cutter, die-punches, jigs-fixtures etc.
2. Production capability of the proposed production line per year.
3. Likely time for establishment including installation, trial run, training (from opening LC).
4. Likely area required for the production line and nature of construction (detail breakdown).
5. Safety measure of production line (if any).
6. Sources, specification and supply chain of raw materials, accessories, tools.
7. Fast moving spare parts to be provided with material as per specification and drawing.
8. Warranty period.
9. After sales service (duration of service support to be mentioned)
10. Approximate cost (in a separate envelop).
11. Details of transfer of technology (TOT) including cost.
12. Payment terms (in details).
13. Country of origin and shipment (China, Pakistan, Serbia, Turkey, USA, France, Czech Republic).
14. Detail work flow production process of the production line.
15. Manpower requirement for the production line.
16. Working day and hour per week.
17. Experience of setting up similar production line in other countries.
18. Utility service requirement.
19. Requirement of evaluation visit.
20. Time required to establish the production line.
21. Number of machine and equipment required.
22. Any other Suggestion/ opinion.

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ANNEXURE C TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

INVITATION ON EXPRESSION OF INTEREST (EOI) FOR ESTABLISHMENT OF PRIMER PRODUCTION LINE (105-155 mm AMMO) IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Detail technical specification of Primer production line (105-155 mm Ammo) machineries, equipment's, tools-cutter, die-punches, jigs-fixtures etc.
2. Production capability of the proposed production line per year.
3. Likely time for establishment including installation, trial run, training (from opening LC).
4. Likely area required for the production line and nature of construction (detail breakdown).
5. Safety measure of production line (if any).
6. Sources, specification and supply chain of raw materials, accessories, tools.
7. Fast moving spare parts to be provided with material as per specification and drawing.
8. Warranty period.
9. After sales service (duration of service support to be mentioned).
10. Approximate cost (in a separate envelop).
11. Details of transfer of technology (TOT) including cost.
12. Payment terms (in details).
13. Country of origin and shipment (China, Pakistan, Serbia, Turkey, USA, France, Czech Republic).
14. Detail work flow production process of the production line.
15. Manpower requirement for the production line.
16. Working day and hour per week.
17. Experience of setting up similar production line in other countries.
18. Utility service requirement.
19. Requirement of evaluation visit.
20. Time required to establish the production line.
21. Number of machine and equipment required.
22. Any other Suggestion/ opinion.

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ANNEXURE D TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

INVITATION ON EXPRESSION OF INTEREST (EOI) FOR ESTABLISHMENT OF PROPELLANT PRODUCTION LINE THROUGH TRANSFER OF TECHNOLOGY (TOT) IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Detail technical specification of single and double base propellant for small arms and high calibre ammunition with associated machineries, equipments, tools-cutter, die-punches, jigs-fixtures and necessary laboratory test procedure and facilities to ascertain the quality of raw material and products with TOT.
2. Production capability of the proposed proposal per year.
3. Likely time for establishment including installation, trial run, training (from opening LC).
4. Likely area required for the production line and nature of construction (detail breakdown).
5. Safety measures of production line (if any).
6. Sources, specification and supply chain of raw materials, accessories, tools.
7. Fast moving spare parts to be provided with material specification and drawing.
8. Warranty period.
9. After sales service (duration of service support to be mentioned).
10. Approximate cost (in a separate envelop).
11. Details of TOT including cost.
12. Payment terms (in details).
13. Country of origin and shipment (China, Pakistan, Serbia, Turkey, Belgium).
14. Detail work flow of production process.
15. Manpower requirement.
16. Working day and hour per week.
17. Experience of setting up similar production line in other countries.
18. Utility service requirement.
19. Requirement of evaluation visit by BOF to manufacturing country.
20. Any other suggestion/opinion.
21. Handing over the project will be after successful trial production.
22. Responsibility of buyer and supplier to be mentioned.

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ANNEXURE E TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

INVITATION ON EXPRESSION OF INTEREST (EOI) FOR ESTABLISHMENT OF 40 MM AUTOMATIC GRENADE LAUNCHER (AGL) GRENADE PRODUCTION LINE (ALL TYPES) AND SAMI-AUTOMATIC GRENADE LAUNCHER (SAGL) GRENADE PRODUCTION LINE (ALL TYPES) IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Detail technical specification of product, machineries, equipment, accessories, tools-cutters, die-punches, jig-fixtures, raw materials etc.
2. Sources and Supply Chain of machineries, equipment, accessories, tools-cutters, die-punches, jig-fixtures, raw materials etc.
3. Country of origin of product, machineries, equipment, accessories, tools-cutters, die-punches, jig-fixtures, raw materials etc. (South Africa, South Korea, Russia, Singapore, China, Pakistan, Serbia, Bulgaria, Czech Republic, France, Turkiye, USA)
4. Country of shipment. (South Africa, South Korea, Russia, Singapore, China, Pakistan, Serbia, Bulgaria, Czech Republic, France, Turkiye, and USA)
5. Production capacity of the plant. Expected quantity 2,00,000.00 (2 lac) per year.
6. Likely area required for Production Line and construction site. Give layout in details.
7. Likely time for installation, commissioning, trial run and training (Time starts from date of signing the contract).
8. Routine, preventive and special maintenance plan of machineries, equipment and others.
9. Software details of machineries and production process. All softwares should have option of after sales online service support and free password support.
10. List of fast-moving spare parts for 2 years and 5 years.
11. Layout of work flow or process of the production line.
12. Mention protection/safety level of the Production Line. Protection/safety level should be international standard of similar kind of production line.
13. Category of manpower requirement in details.
14. Working hours per day and per week.
15. Vendor experience of setting up of similar kind of production line in other countries. Necessary certificates and licenses to be attached.
16. Utility service requirement and power consumption.
17. Duration of after sales service support.
18. Financial proposal for TOT in details in separate envelope
19. Payment terms and conditions in details.
20. Requirement of evaluation visit by vendors.
21. Requirement of evaluation visit by BOF team.
22. Warranty and guarantee terms and conditions.

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23. Any other data, parameters and informations.

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ANNEXURE F TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

INVITATION OF EXPRESSION OF INTEREST (EOI) FOR ESTABLISHMENT OF 40 MM ROCKET (ALL TYPES INCLUDING HEAT) FOR 40 MM RL TYPE 69/69-1 PRODUCTION LINE INCLUDING TRANSFER OF TECHNOLOGY (TOT) IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Detail technical specification of production line, machineries, equipment, tools-cutter, die-punches, jigs-fixtures etc.
2. List of fast-moving spare parts with material specifications and drawings.
3. Detail work flow process of the production line.
4. Country of origin, country of manufacture and country of assembly of machineries, equipment, tools-cutter, die-punches, jigs-fixtures etc.
5. Sources, specifications and supply chain of raw materials, accessories, tools.
6. Production capability of the line/plant per year.
7. Estimated time for establishment including installation, trial run, training (from conclusion of contract).
8. Necessary shipment information.
9. Size of the area required for the production line and nature of construction in square feet (detail breakdown).
10. Requirement of associated utility services (electricity, water and associated facilities).
11. Requirement of safety measures of production line (if any).
12. After sales service (duration of service support to be mentioned).
13. Warranty period of the production line/plant.
14. Approximate cost in USD/EURO with breakdown including the cost of TOT (in a separate envelop).
15. Payment terms (in details).
16. Requirement of manpower to run the line/plant during production (in details)
17. Working day and hour per week.
18. Duration and broad curriculum of training (Both foreign and local)
19. Experience of setting up similar production line in other countries.
20. Requirement of pre-contract evaluation visit by BOF Team.
21. Any other suggestion/ opinion.

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22. Country of origin and shipment (Bulgaria, China, Pakistan, Russia, Serbia, South Korea, Spain, Turkey, USA)

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ANNEXURE G TO

BOF Letter no 23.27.0000.282.4112316.24.25

Date: 25 August 2024

FACTORS FOR EXPRESSION OF INTEREST (EOI)

INVITATION ON EXPRESSION OF INTEREST (EOI) FOR PRODUCTION LINE OF AMMO OF 12.7 MM AAMG AND 14.5 MM MG THROUGH TRANSFER OF TECHNOLOGY (TOT) IN BANGLADESH ORDNANCE FACTORIES (BOF)

1. Detail information of "Production Line of Ammo of 12.7 mm AAMG and 14.5 mm MG" as follows:
 - a. Technical specifications of Ammunitions (Model, Profile, Range, Dispersion Accuracy, Chamber Pressure, Muzzle Velocity, Compatible Arms, any other points.)
 - b. Inspection Criteria.
 - c. Test Method (Internal, Functional, Simulation etc).
 - d. Composition of the production line.
2. Detail technical specification of associated machinery, equipments, tools, shears & cutters, die-punches, jigs-fixtures, gauges etc.
3. Ammunition wise production capability of the proposed line per year.
4. Likely time for establishment including installation, commission, trial run, training, trial & sustained production, test firing (from opening LC).
5. Likely area required for the production line and nature of construction (detail breakdown).
6. Safety measures of production line (if any).
7. Sources, specification and supply chain of raw materials, accessories, tools and other items.
8. Fast moving spare parts with material specification and drawing.
9. Warranty period.
10. After sales service (duration of service support to be mentioned).
11. Approximate cost with gross breakdown (in a separate envelop).
12. Details of Transfer of Technology (TOT) including cost as follows:
 - a. Details plan of technology handover and takeover.
 - b. Stages of implementation.
 - c. Details of production process.
 - d. Details of raw material of individual component (technical specification, inspection procedure, consumption rate, procedure of quality control and lab test etc).
 - e. Training, Installation, Commission, Trial Run, Trial & Sustained Production, Test Firing.
 - f. Any other related technical know-how to complete the production line.
13. Payment terms (in details).
14. Country of origin and shipment (Belgium, China, Czech Republic, Pakistan, Russia, Serbia, Spain, South Korea, Turkiye).
15. Manpower requirement (management, supervisor, technicians, maintenance, etc).
16. Working day and hour per week (BOF follows 06 working days and 43 hours per week, 280 days in a year).
17. Experience of setting up similar production line in other countries.

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18. Utility service requirement.
19. Requirement of evaluation visit by BOF to manufacturing country.
20. Any other suggestion/ opinion.