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| **REGISTERED / IMMEDIATE**Heavy Industries Taxila Project Directorate ARDIC Taxila Cantonment Tel: 051-9315489Fax: 051-9315151No.5647/IT-21/Dev/ARDIC09 Jan 2023 . |

To: M/s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Subject: **Tender Inquiry of Dev of Hydraulic Buffer**

Dear Sir,

1. You are requested to please forward your offer for the following: -

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr** | **Particulars/Specifications of the Stores** | **A/U** | **Qty** | **Remarks** |
| 1. | **Hydraulic Buffer (Left)****Specifications:**Hydraulic Piston Rod Type Shock Absorber**Country of Origin**: Pakistan or equivalent**Detailed BOM is attached as Appendix-**1 | Set | 04 |   |
| 2. | **Hydraulic Buffer (Right)****Specifications:**Hydraulic Piston Rod Type Shock Absorber**Country of Origin**: Pakistan or equivalent**Detailed BOM is attached as Appendix-**2 | Set | 03 |  |

//

(Items Two Only)

1. **Bid Evaluation Method:** 40% weightage will be obtained from technical bid and 60% weightage will be obtained from commercial bid accordingly.
2. **Qualification Criteria**. Performance and Technical Evaluation will be used as qualification criteria with 50% passing marks in each group / main head. Qualified bidders, will evaluated form best bid having 40% weightage from Technical Evaluation and 60% weightage from price Evaluation :-

|  |  |  |  |
| --- | --- | --- | --- |
| **Cat** | **Mks** | **% Weightage** | **Remarks** |
| Technical Evaluation with respect to technical parameters/ specification of project | 100 | 40 | Minimum 50% to qualify in each Group. |
| Price Evaluation | 100 | 60 |

4.**Technical Scrutiny Criteria**

For determining most advantageous firm following marking scheme shall be used by ARDIC:-

|  |  |  |
| --- | --- | --- |
| **Sr** | **Criteria**  | **Marks**  |
| a. | Firm experience > 30 years  | 10 |
| Firm experience > 10 and < 30 years | 8 |
| Firm experience > 1 and < 10 | 6 |
| b. | Similar Part already developed by firm  | 10 |
| c. | Firm manufactures the part completely in house  | 10 |
| Firm partly manufacturing in house and partly from other sources  | 5 |
| Firm completely outsources manufacturing  | Disqualified  |
| d. | Firm agrees to completely follow material technical specification of genuine ample provided  | 20 |
| Firm provides alternate materials / technical specification for manufacturing  | 0 |
| e. | Firm does not ask for advance payment  | 10 |
| Firm asks for milestone based payment  | 5 |
| Firm asks for advance payment  | 0 |
| f. | Firm agrees to get qualification form ITD | 20 |
| Firm does not agree to get qualification form ITD  | Disqualified  |
| g.  |  Firm provides 3D models ad all manufacturing TDPs  | 20 |
|  Firm does not provides 3D models ad all manufacturing TDPs  | 0 |
| h. | Firm must provide the relevant proof of capabilities by referring to this clause  | 20 |
| Firm does not provide the relevant proof of capabilities by referring to this clause  | Disqualified  |

1. All bidders are requested to submit their bid offer letter comprising particulars of the firm as per **Bid submission form attached as Anx ”A”, Bid information form as Anx “B”** duly signed and stamped by authorize representative of the firm.
2. You are requested to provide compliance table of minimum performance parameters mentioned at serial 5 along with your proposal. Any variation or deviation must be mentioned in bold infront of “offers compliance” column. ***The indenter reserves the right to dis-regard / reject your proposal if it is not accompanied with compliance table***.

**Instructions to Bidders**

1. All documents required to evaluate technical proposal must be marked against serial no mentioned in IT and flagged properly for identification. Index sheet to the documents attached in proposal be provided.
2. All financial documents must be audited by authorized third party registered auditor which can be verified at any stage of whole procurement/contracting process.
3. Any false statement may lead to disqualification of bidder and legal action will be taken as per PPRA rules.
4. Rates will be quoted on **FOR Taxila Cantt** basis. Offer best competitive price while submitting your quotation.
5. Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person or persons signing the Bidder.
6. **Single Stage Two Envelope Procedure** will be followed. Part-I and Part-II of quotations will be enclosed in separate sealed envelopes for each tender inquiry. For identification purpose, the words “**TECHNICAL QUOTATION PART-I WITHOUT PRICE”** and **COMMERCIAL QUOTATION (PART-II) WITH PRICE”** shall be written in BLOCK CAPITAL LETTERS on the respective sealed envelopes which will be placed in a large envelope bearing complete details of the tender as under: -
7. Please forward your quotation not later than **22 Feb 2023** at 10:30 hours. The address on the envelope will be indicated as under: -

**BID** **REGISTERED**

**TENDER INQUIRY NO. 5647/IT-21/Dev/ARDIC dated 09 Jan 2023**

**TO BE OPENED ON. 22 Feb 2023**

To: PROCUREMENT OFFICER

ARDIC HIT TAXILA CANTT

FROM M/S\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

IT FOR \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Delivery of Tender:** The tender/bid will be enclosed in a sealed envelope which will be invariably marked with “Bid against Tender Inquiry No. mentioned in a/r IT clause and complete address. The tender if brought by hand, will be handed over to security staff on duty at ARDIC Gate for placing the same in bid box (available at the gate). The bid will not be brought by hand by any firm while visiting the office of Proc officer (ARDIC). Moreover, if required endorsements are found missing, the bid will be liable for rejection.
2. The bid must be dropped in the bid box, within due time mentioned in tender, at ARDIC Gate.**The bid will be opened same day at 1100 hours** in the presence of the available representative of the firms in ARDIC HIT Taxila Cantt. **No bid will be entertained / considered after 1030 hours,** on the aforementioned date.
3. All papers must be signed and stamped and items not quoted / quoted must be mentioned clearly.
4. All clauses/terms mentioned in this inquiry will be considered accepted by the bidding firms, even if no reference to them is given in the respective offers.
5. **Compliance to the Standard Bidding Documents developed by PPRA in pursuance of Sec 27 of PPRA Ordinance,2022 read with rule 23(4) of Public Procurement Rules 2004, S.R.O 370(I)/2022 is mandatory and can be obtained from PPRA website www.ppra.org.pk.**
6. **Postal order for Rs. 500/- (Rupees Five Hundred) as a tender fee, in favor of MD (ARDIC)** HIT Taxila Cantt, will invariably be enclosed with the technical offer, failing which the bid will be ignored.
7. Firms are instructed NOT to send Telex and Fax bids. Such bids/offers would not be accepted.
8. Please confirm receipt of the tender inquiry immediately and also intimate your participation or otherwise in this tender inquiry. In case any firm does not wish to bid, then it should return the tender inquiry documents at the earliest.
9. **HIT reserves its right to cancel the bidding process with reason but without any obligation to justify such a reason.**
10. **The store is required to be delivered at Store Sec ARDIC, Taxila Cantt within 365x days from the date of signing of the contract.**
11. The offered price quoted must be firm, final and inclusive of all taxes, packing, handling charges etc and delivery at HIT Taxila Cantt.
12. **Offers must remain valid for120 days**from the date of opening of the tender.
13. The store will be packed in standard grade, worthy of transportation by the means adopted.
14. This inquiry may not be taken as an indication of subsequent supply order and does not in any way commit HIT to purchase the items offered.
15. Warranty period will be one year from the date of issuance of CRV of the stores.
16. In case of failure to supply the stores within the stipulated periods, liquidated damages (LD) at the rate of 2% but not less than 1% of amount involved per **month and maximum value not more than 10% of contracted store value or a part there-of will be levied.**
17. **Payment Terms**
18. Payments will be made either by CMA (DP), Rawalpindi or CMA (HIT) Taxila Cantt, through cheques against pre-receipted bills (duly affixed with revenue stamps) along with professional tax certificates (attested photocopies) of the suppliers after delivery and acceptance of stores.
19. **Partial payments against partial deliveries will be allowed as per deliverables / milestones finalized at contract stage**.
20. The payment to the registered person is linked with active taxpayer status of the Suppliers as per FBR data base. If any registered supplier is not on active Taxpayer list, his payment will be stopped till he / she files his / her mandatory returns and appears on ATL of FBR.
21. HIT reserves the right to increase / decrease the quantity of items, placed on the tender without any reference to the firm.
22. After receipt of Letter of Acceptance, the supplier shall furnish a 5% **performance bank guarantee in shape of CDR / (PBG as per Anx “C”)** within 14 days, from scheduled bank in Pakistan against the total value of contract excluding taxes/duties. This bank guarantee must remain valid 12 x months after the stores are put in operation. Performance Bank Guarantee / CDR will be released on the completion of warranty period, in case the firm fails to provide a/m performance bank guarantee within the stipulated time period, the contract will be cancelled and bid security will be encashed. Moreover, the contract shall than be awarded to next best evaluated bidder.
23. **All Firms participating in the tender will deposit an amount of Rs *195,000* bid security as per Anx “D” in the shape of CDR / bank guarantee addressing in the name of “Managing Director ARDIC”. The bid security will be provided in original by the firms in Technical Quotation otherwise Technical Quotation will stand rejected. The bid securities will be returned as under:-**
	1. **Unsuccessful Bidders.** Within 15 days of completion / announcement of the bid evaluation result.
	2. **Successful Bidders.** Upon submission of 5% PBG.
24. The net offered price will be inclusive of 17 % GST as imposed by Government of Pakistan. The offers without mentioning of 17% GST will not be considered. The GST will always be mentioned separately to the base price.
25. Defaulted or Blacklisted firms with any Govt / Semi Govtdefence organization cannot participate in the bid.
26. In case of any dispute regarding the terms and conditions and the quality of stores, the decision of the MD (ARDIC) / Chairman HIT will be considered as final and binding on the suppliers/firms.
27. **In case, the contracted firm fails to execute the order within the stipulated time and does not materialize the supply of ordered stores, the supply order/contract would be cancelled at the firm's risk and expense. The firm will be blacklisted / debarred for a period of 3 years. Expenditure incurred on the re-purchase of offered stores will be recovered from the defaulting firm, under existing procedures.**
28. Inspection of the store will be carried out at HIT Taxila Cantt.
29. Samples for consultation / reference will not be provided, however if drawing **is available then the same may be handed over to the best evaluated bidder. Samples are displayed in display room for the convenience of the firms.**
30. Only registered suppliers / persons who are on Active Taxpayer List (ATL) of FBR are eligible to supply goods/services to government departments. Thus the bidders will submit a certificate to this regard along with the technical bid.
31. Country of Origin: All countries except India, Israel and Taiwan.
32. In case of indigenously / locally manufactures item, the firms should have relevant experience and capacity of manufacturing these parts and should be duly qualified by Quality Control department of ARDIC HIT. Capacity for manufacturing of parts will be verified by a team ex ARDIC HIT, through conducting of visits at manufacturing facility of the participating firm or telephonic verification.
33. In the case of FOR imported items, the firms are responsible to provide evidence of the agency agreement/certificate of conformance, principal proforma invoice (in original and without price) and OEM certificates of all the items being quoted against this tender inquiry along with countries of origin. Separate OEM certificate for each / major assembly will be provided by the firms. The firms will clearly indicate that all the parts used in the manufacturing (in case of assembling) are brand new from current production. Confirmation to fulfill technical specifications related to imported items on FOR basis must be highlighted in the technical bid.
34. Confirmation of the validity period of the quote, delivery period and warranty period must be provided by the bidder.
35. Confirmation of all technical parameters specified in the IT or confirmation as per sample must be provided by the bidder.
36. Confirmation of manufacturer, brand and Approval of Advance Sample(where ever asked) as per specifications mentioned in IT. Manufacturer brand of each item must be highlighted in the bid.
37. IT document can be downloaded from PPRA and HIT website [www.hit.gov.pk](http://www.hit.gov.pk/).
38. Technical assistance will be provided by the firm on requirement basis.
39. After successful conclusion of development contract including qualification of the prototype / 1st Article, following “Yes Obligations” for the qualified firms will be applicable for bulk supply / series procurement contract(s) after approval by HITB as under: -
40. Award of “Sole Manufacture Right” for HIT or procurement “Proprietary” status for minimum 3 years, subject to timely development, contract execution performance, quality, cost rationalization and value additions (if any) of development / 1st contract.
41. Extension of “Sole Manufacture Right” for HIT or **procurement “Proprietary” status beyond 3 years’** subject to timely completion, contract execution performance, quality consistency, cost rationalization and value additions (if any) in previous contract(s).
42. Where operationally, financially and technically possible / viable, HIT (developing or procurement agency) may provide estimated required quantities to qualified firm(s) for subsequent needs.
43. Qualified firm will not be allowed to participate in any tender of similar items elsewhere (inland and abroad) without prior permission of HITB.
44. **Firm(s) will submit commercial offer with “Estimated Itemized Cost (EIC)” of the item including following: -**
45. **Material Cost.**
46. **Manufacturing Cost (including tooling, labor, die, overhead charges etc).**
47. **R&D Charges.**
48. **Service Charges (including transportation, tests/trials, profit etc).**
49. **After successful development and qualification of final product, from ITD / HIT nominated inspection board as the case may be,** the firm will submit the “Final Itemized Cost (FIC)” along with supporting documents / verification proofs for subsequent series / bulk procurement contract(s) of the same item(s). FIC will be mutually negotiated / finalized before conclusion of the development contract. Same will remain valid for one year. FIC will be finalized under following heads: -
50. Material Cost
51. Imported material with details (specifications, source, cost).
52. Local material with details (specifications, source, cost).
53. Manufacturing Cost
54. Tooling cost with details.
55. Labor cost with details of man-hours.
56. Die, jigs and fixture cost with details.
57. Overhead charges including cost of utilities etc.
58. Service Charges (including transportation, in-house tests / trials, profit etc).
59. R&D Charges. This will be will be amortized in series / bulk procurement contracts, in case of No Cost No Obligation and No Cost Yes Obligation only. Same must be covered under following heads: -
60. Material characterization.
61. Modelling and simulation.
62. Formulation of drawing and process sheets.
63. Software development.
64. FIC will remain negotiable for series / bulk procurement contract(s) after one year based on inflation rate and overall cost variations etc.

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|  | SAAD (Procurement)(Muhammad Aleem Ahsan) |

**Annexure “A”**

**BID SUBMISSION FORM**

**Name of Bidder**: [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_] **Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Name of Bidding Firm**: [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_]

**BID NUMBER:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I the undersigned, offer to supply the \_\_\_\_\_\_\_\_\_\_\_\_and related services (if required) for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in accordance with your Invitation to Bid No\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

I hereby submit my bid, which includes Technical Bid and Commercial Bid/Price Schedule.

I certified that I/my CEO, his partners and my firm, named --------------------:

have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any Govt or any other organization

have not been blacklisted from any govt or any other organization

have no conflict of interest in accordance with Instruction to Bidders

I declare that all the information and statements made in this bid are true and I accept that any misinterpretation or misrepresentation contained in this bid may lead to my and my firm disqualification from this tender.

I offer to supply the \_\_\_\_\_\_\_\_\_ in conformity with the bidding documents.

My bid shall be valid and remain binding upon me for the period specified in the Bid Data Sheet.

I understand and recognize that you are not bound to accept any bid you receive.

I, the undersigned, certify that I am duly authorized by [\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_] to sign this bid and bind it should HIT accept the bid

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Stamp with official stamp of the bidder]

**Annexure “B”**

**BIDDER INFORMATION FORM**

|  |  |
| --- | --- |
| Name of the Bidder |  |
| Name of the Bidding Firm |  |
| Address  |  |
| Tel Number | LineCell |
| Bidder Registration Status with other Organizations | Permanent Registered with --------Provisional Registered with ----Not Registered |
| Status of Firm | Manufacturer/Stockiest/Importer, etc |
| Bidder Authorized Representative | Name:Cell Number: |
| Contact Person for Firm | Name:Cell Number: |
| Number of Employees with Firm |  |
| Any Certification Held with Firm with Validity Period |  |
| Bidder Email Address, if any |  |
| Fax Number, if any |  |
| OEM of Firm by whom store is manufactured  |  |
| Principal of Firm from whom store will be provided |  |

**Annexure “C”**

**FORM OF PERFORMANCE BANK GUARANTY**

**BANK GUARANTEE FOR PERFORMANCE ON JUDICIAL STAMP PAPER OF Rs. 100/- OR AS SUITABLE TO THE AMOUNT OF BANK GUARANTEE**

(i).Contract no.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dated\_\_\_\_\_\_\_\_\_\_\_22/23

(ii). Name of the Firm\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(iii).Address of Firm/Contractor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(iv).Name of Guarantor\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(v). Address of Guarantor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(vi). Amount of Guarantee Rs. \_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

(in words)

(vii).Date of Expiry of Guarantee\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

To: The President of Islamic Republic of Pakistan through the Controller Military Accounts (HIT).

Sir,

Whereas your good self-have entered into Contract No.\_\_\_\_\_\_\_\_\_\_\_ dated \_\_\_\_\_\_\_\_\_\_ with Messer’s\_\_\_\_\_\_\_ (Full Name and Address) hereinafter referred to as our customer and that one of the conditions of the contract is the submission of unconditional Bank Guarantee by our customer to your good self for a sum of Rs.\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (as applicable) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In compliance with this stipulation of the contract, we hereby agree and undertake as under:-

1. To pay to you unconditionally on demand and/or without any reference to our customer an amount not exceeding the sum of Rs.\_\_\_\_\_\_ (as applicable) \_\_\_\_\_\_\_\_\_\_\_\_as would be mentioned in your written Demand Notice.
2. To keep this Guarantee in force till\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. That the validity of this Bank Guarantee shell be kept on clear year ahead of the original/extended delivery period or the warranty of the Store whichever is later in duration on receipt of information from our customer i.e. M/s\_\_\_\_\_\_\_\_ or from your office. Claim, if any must be duly received by us on or before this day. Our liability under this Bank Guarantee shall cease on the closing of Banking hours on the last date of the validity of this Bank Guarantee. Claim received thereafter shall not be entertained by us whether you suffer a loss or not. On receipt of payment under this Guarantee, this document i.e. Bank Guarantee must be clearly cancelled, discharged and returned to us.
4. That we shall inform your office regarding termination of the validity of this Bank Guarantee one clear month before the actual expiry date of this Guarantee.
5. That with the consent of our customer you my amend/alter any term/clause of the contract or add/delete any term / clause to / from this contract without making any reference to us. We do not reserve any right to receive any such amendment /alternation or addition /deletion provided such like actions do not increase our monetary liability under this Bank Guarantee which shall be limited only to Rs. (\_\_\_\_\_\_\_\_\_\_\_\_)
6. That the Bank Guarantee herein before given shall not be affected by any change in the constitution of the Bank or Customer / Seller or Vendor.
7. That this is an unconditional Bank Guarantee, which shall be en-cashed on sight on presentation without any reference to our Customer/Seller or Vendor.

Guarantor

Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Bank Seal and Signatures)

**Annexure “D”**

**FORM OF BID SECURITY**

To,

MD (ARDIC)

HEAVY INDUSTRIES TAXILA CANTT

Whereas [Name of Supplier] (hereinafter called “the Supplier”) has undertaken, in pursuance of Tender Inquiry \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dated \_\_\_\_\_\_\_\_\_\_\_\_**to** supply of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**(hereinafter called “the Contract”). As per Tender the Supplier shall furnish you with a Bank Guarantee/CDR by a scheduled bank for the sum of Rs200,000.00/- a Security for compliance with the Supplier’s performance obligations in accordance with the Tender, and the same is attached with Technical Bid / Quotation.

And whereas we have agreed to give the supplier a Guarantee:

Therefore, whereby a firm that we are Guarantors and responsible to you, on behalf of the supplier, a total of [Amount to the Guarantee in words and Figures] and we undertake to pay you upon your first written demand declaring supplier to be in default under the or argument, any sum or sums within the limits of [Amount to Guarantee] as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2023.

Signature and Seal of the

Guarantors/ Bank Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**OR**

**(As per Sample of CDR)**

****

**Managing Director (ARDIC)Heavy Industries Taxila**

|  |
| --- |
| **Appendix-1** |
| **Sr No.** | **DESCRIPTION** | **QTY/Set** |
| **Left Hydraulic Buffer Assembly** |
| 1 | HYDRAULIC BUFFER (LEFT) | 1 |
| 2 | WASHER 20-100HV-ZnCr | 6 |
| 3 | WASHER 20-Zn8D | 6 |
| 4 | BOLT M20X1.5X60-10.9-Zn8P | 6 |

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **DESCRIPTION** | **QTY** |
| **HYDRAULIC BUFFER (LEFT) BOM** |
| 1 | NUT | 1 |
| 2 | NUT M24X2-04-Zn8P | 1 |
| 3 | SCREW | 1 |
| 4 | O RING 10X1.8-HN6364 | 1 |
| 5 | BALL OF BEARING 8 G40 b | 7 |
| 6 | RUBBER PLUG | 1 |
| 7 | LOCATING BUSH | 1 |
| 8 | HOUSING | 1 |
| 9 | CLAMP FRAME | 2 |
| 10 | CLAMP BAND | 2 |
| 11 | CLAMP BOLT | 2 |
| 12 | CYLINDER BODY | 1 |
| 13 | RUBBER SLEEVE ASSEMBLY | 1 |
| 14 | LEFT BUFFER COVER | 1 |
| 15 | WASHER 8-Zn8D | 2 |
| 16 | BOLT M8X25-8.8-Zn8D | 2 |
| 17 | SUPPORT DISK | 1 |
| 18 | PISTON | 1 |
| 19 | LIMITING PLATE | 6 |
| 20 | SNAP RING | 1 |
| 21 | DUST-PROOF SLEEVE | 1 |
| 22 | SPRING | 1 |
| 23 | SUPPORT DISK | 1 |
| 24 | DUST-PROOF RING | 1 |
| 25 | FRICTION-REDUCING BUSH | 1 |
| 26 | O RING 44.5X3.53 | 1 |
| 27 | GUIDE ROD | 1 |
| 28 | PISTON ASSY | 1 |

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| **Appendix-2** |
| **Sr No.** | **DESCRIPTION** | **QTY/Set** |
| **Right Hydraulic Buffer Assembly** |
| 1 | HYDRAULIC BUFFER (RIGHT) | 1 |
| 2 | WASHER 20-100HV-ZnCr | 6 |
| 3 | WASHER 20-Zn8D | 6 |
| 4 | BOLT M20X1.5X60-10.9-Zn8P | 6 |

|  |  |  |
| --- | --- | --- |
| **Sr No.** | **DESCRIPTION** | **QTY** |
| **HYDRAULIC BUFFER (RIGHT) BOM** |
| 1 | NUT | 1 |
| 2 | NUT M24X2-04-Zn8P | 1 |
| 3 | SCREW | 1 |
| 4 | O RING 10X1.8-HN6364 | 1 |
| 5 | BALL OF BEARING 8 G40 b | 7 |
| 6 | RUBBER PLUG | 1 |
| 7 | LOCATING BUSH | 1 |
| 8 | HOUSING | 1 |
| 9 | CLAMP FRAME | 2 |
| 10 | CLAMP BAND | 2 |
| 11 | CLAMP BOLT | 2 |
| 12 | CYLINDER BODY | 1 |
| 13 | RUBBER SLEEVE ASSEMBLY | 1 |
| 14 | LEFT BUFFER COVER | 1 |
| 15 | WASHER 8-Zn8D | 2 |
| 16 | BOLT M8X25-8.8-Zn8D | 2 |
| 17 | SUPPORT DISK | 1 |
| 18 | PISTON | 1 |
| 19 | LIMITING PLATE | 6 |
| 20 | SNAP RING | 1 |
| 21 | DUST-PROOF SLEEVE | 1 |
| 22 | SPRING | 1 |
| 23 | SUPPORT DISK | 1 |
| 24 | DUST-PROOF RING | 1 |
| 25 | FRICTION-REDUCING BUSH | 1 |
| 26 | O RING 44.5X3.53 | 1 |
| 27 | GUIDE ROD | 1 |
| 28 | PISTON ASSY | 1 |