



POF 1262  
(FOREIGN PURCHASE)

**GOVERNMENT OF PAKISTAN  
PAKISTAN ORDNANCE FACTORIES  
TENDER ENQUIRY**

To

PPRA

Dear Sirs,

Reference: Tender Enquiry No. 0001-FP-48-TAF DATED 19.07.2017

You are requested to submit quotations for the item(s) noted in the Schedule to the Tender. Offers should be sent duly sealed in an envelope. Please note the following instructions for filling the tender:-

1. SUBMISSION OF TENDER

1.1 Tenders will be opened at 1230 hours on 22.08.2017 and must reach this office on or before 1200 hour upto due date. The tender received late will not be entertained. You may witness the opening of the tender if you so desire. If a representative is deputed, he should bring a letter of authority from you.

1.2 Only one tender should be included in one envelope. The outside of the envelope should be inscribed with:-

Tender Enquiry No: 0001-FP-48-TAF, DATED 19.07.2017.

Tender to be opened on: 22.08.2017 at 1230 Hours.

Address as follows:-

MANAGING DIRECTOR  
PAKISTAN ORDNANCE FACTORIES,  
GADWAL, WAH CANTT (PAKISTAN).  
Post Code 47040

1.3 If envelop does not indicate reference of TEs or received late, the same may be returned un-opened.

2. GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS

2.1 For materials, the prices should be filled in column 5 and delivery date in column 6 of the schedule to this Tender Enquiry. The undertaking should be signed at the bottom of the schedule, which shall form the Quotation. You may use a separate sheet if necessary.

2.2 For Plant & Machinery; you are required to quote in two parts:

Part-I: "Technical Offer" It should exclusively give technical details and literature / brochures of the offered plant, machinery & equipment, validity date, delivery schedule and signed undertaking given on the schedule to this tender enquiry. It must not indicate price, costs etc.

Part-II: "Commercial Offer" It should indicate the commercial terms e.g. price, terms of payment, mode of payment, mode of supply.

Each part should be placed in a separate sealed cover. The envelopes should be inscribed with Part-I "Technical Quotation with out price" & Part-II "Commercial Quotation with price".

2.3 The quotation must remain valid for, at least 90 days from the date of opening of tenders.

2.4 The quotation should hold good for any reduced or enhanced quantities without notice.

2.5 In the event of non-acceptance of offer, intimation may be given to the Tenders on their request.

2.6 Conditional offers or alternative offers are likely to be ignored.

2.7 Quotations should be based on FOB. The consignment will be shipped through Pakistan National Shipping Corporation (PNSC). In case there is no PNSC service in the country of shipping, please quote on C&F basis. The freight should be indicated separately. Insurance premium should not be included in the quoted price. However, where insurance is considered necessary, advice to that effect should be given in the quotation.

2.8 Submission of the offer through an agent in Pakistan should be avoided. In case it is considered inevitable, the agent's quotation must invariably be accompanied by the original Proforma Invoice from the principals / manufacturers.

2.9 Country of origin and port of shipment to be stated.

2.10 The offer of Principal must clearly indicate whether the rate quoted is inclusive of Agent's commission, and if inclusive rate of commission included be specified.

2.11 Suppliers will render necessary information regarding hazardous effects on environment, of the materials/products supplied by them alongwith shipping/ despatch documents.

2.12 If the requisite information is not furnished on the TE form or offer received is not in conformity with the requirement of the TE each offer should be ignored.

### 3. INSPECTION

3.1 Supplies shall be subject to the inspection and acceptance by the competent inspection authority nominated by the Purchaser. Who will arrange at his own cost, inspection facilities such as tools, test equipment, instruments etc will, however, be provided by the Suppliers in accordance with the relevant specifications.

3.2 Where considered necessary by the Purchaser, the stores may be obtained on Warranty/Guarantee, subject to inspection on receipt. Rejected stores will be removed and replaced with the acceptable stores by the Supplier at his own expense, within a specified time.

#### 3.3 TENDER SAMPLE:

Where required offer must accompany tender sample strictly according to the description given in the tender enquiry. Offer not accompanied a tender sample will not be entertained excepting established and reputable firms who have either previously satisfactorily supplied the same or similar store or have submitted an acceptable sample thereof against previous T.E.

### 4. ACCEPTANCE OF OFFERS

4.1 POF may reject all bids or proposals at any time prior to the acceptance of bids or proposals, but is not required to justify grounds for its rejection. POF shall incur no liability towards suppliers or contractors who have submitted bids or proposals.

#### 4.2 PERFORMANCE BOND

(a) The successful bidders will provide Performance Bond at the rate upto 10% of FOB value of contract in favour of the Controller Military Accounts (CMA) POF Wah Cantt. The Performance Bond will be furnished in the form of Deposit at Call Receipt (CDR) from any scheduled bank in Pakistan or an unconditional bank guarantee on prescribed proforma covered by any scheduled bank in Pakistan. The Performance Bond shall be furnished within 45 days from the date of opening of Letter of Credit. It shall be valid for a period of 12 months after the date of expiry of letter of credit. If the Performance Bond is not furnished within the prescribed time of 45 days, the Purchaser reserves the right to:

i. Impose penalty @ 1% per month of the value of CDR/BG.  
(Clause 4.2(a-i) is not applicable in case of procurement of Plant/ Equipment / Machinery Items)

**OR**

ii. Cancel the contract and make other arrangements for purchase of the stores at the risk and expense of the supplier.

(b) No Performance Bond will be required if the total FOB value of the contract is less than US\$ 50,000 and contract is placed directly on the foreign Supplier.

#### 4.3 FAILURE TO SUPPLY THE STORES

All deliveries must be completed by the specified date. If the failure to deliver the stores within the scheduled time should have arisen from "Force Majeure", which the Purchaser may admit as reasonable ground for further time, he will allow such additional time as he may consider to have been required by the circumstances of the case. Otherwise, he will be entitled, at his discretion, to cancel the contract; and/or, claim liquidated damages upto 2% but not less than 1% of the contract price of the items and their quantities for each and every month or part of month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value of particular store which remained unsupplied either in part or in full or to purchase from elsewhere, the unsupplied stores at the risk and cost of the Supplier.

#### 4.4 PAYMENT

Payment will normally be made by means of irrevocable Letter of Credit. Unless otherwise stated 90% payment will be released on submission of dispatch documents to bank while balance 10% payment will be released on receipt & acceptance of store by the consignee.

All bank charges incurred in Pakistan in connection with the establishment of LC will be borne by the purchaser, whereas all bank charges incurred in connection with drawing of payment including charges for confirmation of LC by the advising bank / foreign bank will be borne by the supplier.

#### 5. SECURITY OF INFORMATION

The tenderer and his employees must not communicate any information relating to the sale/purchase of stores under this enquiry to any person other than the manufacturer or to any press or agent not authorized in writing by POFs to receive it.

Please return the Schedule to the tender duly signed by the specified date, alongwith the specifications, drawings etc, if any, enclosed herewith even if you are unable to quote.

Warning:

In case the firm abstain from making offer or fail to return / acknowledge the tender form by the specified date on three consecutive occasions, no further tender enquiry may be issued to them and their name would be liable to be removed from the approved list

Yours faithfully,

(Muhammad Masood)  
GENERAL MANAGER PP&C  
POF Gadwal & TAF  
For PAKISTAN ORDNANCE FACTORIES

## PAKISTAN ORDNANCE FACTORIES

SCHEDULE TO TENDER ENQUIRY NO. 0001-FP-48-TAF, DATED 19.07.2017(1) FOR MATERIALS

Sr. No	Description of Store	Unit	Qty	Price per Unit FOB or Free delivery		Delivery Schedule
				In Figures	In Words	
i	Tungsten Powder (Type TKSD2 FW G1)	Kgs	129,000			Within 03 months after opening of LC.
ii	Nickel Powder (Type TKSD2 FNi TG1)	do	7,250			
iii	Iron Powder (Type TKSD2 Fe TG1)	do	4,130			
iv	Cobalt Powder (Type TKSD2 FCo G1)	do	570			
v	Manganese Powder (Type TKSD2 FCo G1)	do	25			

- (2) For Plant & Machinery: N.A  
Specifications:- Annex-A (attached)
- (3) Special Conditions. Annex-B (attached)
- (4) Undertaking

Should our offer be accepted, we hereby undertake to supply the stores/render the Services contracted on the basis of Conditions of contract embodied in Form POF 1280 and to deposit the performance bond within the prescribed time, failing which it will constitute a breach of contract, and POF will have the right to purchase the stores/services elsewhere at our risk and cost.

Place .....

Signature of the Tenderer.....

Date .....

Name .....

Position .....

Address .....

## SPECIFICATION OF METAL POWDERS (Modified).

<p><b>Tungsten Metal Powder (Type TKS D2 (F W G-1))</b></p> <p>Symbol: W  Atomic Number: 74  Atomic Weight: 183.85  Specific Gravity: 19.3 gm/Cm<sup>3</sup>  Melting Point: 3410 °C  Boiling Point: 5660 °C  Crystallographic ]  Structure ] Body centered cubic.  Lattice Spacing: 0.316 (nm)  Grain Size F-SSS: 2.5-3.5 (µm)  Carbon: 0.003 % Max  Oxygen: 0.05 % Max  Loose Density: 2.85-3.35 gm/Cm<sup>3</sup>  Tap Density: 5.0-7.1 gm/Cm<sup>3</sup>  Purity 99.9 % Min.</p>	<p><b>Manganese Metal Powder TKSD-2 (FMn G-1)</b></p> <p>Symbol: Mn  Atomic Number: 25  Atomic Weight: 54.938  Specific Gravity: 7.43 gm/Cm<sup>3</sup>  Melting Point: 1245 ±1 °C  Boiling Point: 2150 °C  Crystallographic]  Structure ] Complex  Lattice Spacing: 2.24 (nm)  Grain Size F-SSS: 5.0-9.0 (µm)  Loose Density: 2.5-3.5 gm/Cm<sup>3</sup>  Fe 0.07 % Max.  Oxygen: 0.5 % Max.  Carbon: 0.04 % Max.  Sulphur: 0.05 % Max.  Other Impurities 0.03 % Max.  Purity 99 % Min</p>
<p><b>Nickel Metal Powder (Type TKSD-2 (FNi TG-1))</b></p> <p>Symbol: Ni  Atomic Number: 28  Atomic Weight: 58.71  Specific Gravity: 8.9 gm/Cm<sup>3</sup>  Melting Point: 1453 °C  Boiling Point: 2732 °C  Crystallographic:]  Structure ] Face centered cubic  Lattice Spacing: 0.352 (nm)  Grain Size F-SSS: 2.2 -2.8 (µm)  Loose Density: 0.5-0.6 gm/Cm<sup>3</sup>  Oxygen: 0.15 % Maxi  Carbon: 0.2 % Max.  Iron: 0.01% Max.  Sulphur: 0.001% Max.  Other Impurities 0.01% Max.</p>	<p><b>Iron Metal Powder (Type TKSD-2 (F Fe TG-1))</b></p> <p>Symbol: Fe  Atomic Number: 26  Atomic Weight: 55.85  Specific Gravity: 7.87 gm/Cm<sup>3</sup>  Melting Point: 1535 °C  Boiling Point: 2750 °C  Crystallographic:]  Structure ] Body centered cubic  Lattice Spacing: 0.287 (nm)  Grain Size F-SSS: 5-8 (µm)  Loose Density: 2.2 - 3.2 gm/Cm<sup>3</sup>  Tap Density 3.4-4.5 gm/Cm<sup>3</sup>  Carbon: 0.03 % Max.  Oxygen: 0.3 % Max.  Purity 99.5 %</p>
<p><b>Cobalt Metal Powder TKSD-2 (F Co G-1)</b></p> <p>Symbol: Co  Atomic Number: 27  Atomic Weight: 58.933  Specific Gravity: 8.9 gm/Cm<sup>3</sup>  Melting Point: 1495 ±1 °C  Boiling Point: 2900 °C  Crystallographic ]  Structure ] Closed Packed Hexagonal  Lattice Spacing: 2.501 (nm)  Grain Size F-SSS: 1.05-1.45 (µm)  Loose Density: 0.65 - 1.00 gm/Cm<sup>3</sup>  Tap Density 1.45-1.95 gm/Cm<sup>3</sup>.  CaO 0.06 % Max.  SiO<sub>2</sub> 0.03 % Max.  Fe 0.04 % Max.  Ni 0.04 % Max.  Oxygen: 0.9 % Max.  Nitrogen Absorption} 70000-110000  Specific surface} Cm<sup>2</sup>/ Cm<sup>3</sup>  Purity 99.8 % Min.</p>	<p><b>Test Methods:</b></p> <p>i. <b>GRAIN SIZE:</b> Test is performed on Fisher Sub Sieve Sizer (FSSS). This apparatus is universally used in labs, for measurement of Average Grain Size of Metal Powders.</p> <p>ii. <b>SCOTT DENSITY:</b> Test is performed on Scott Volumeter in accordance with ISO-3923/2-1981.</p> <p>iii. <b>TAP VOLUME / DENSITY:</b> Test is performed on Electro Mechanical tapping apparatus in accordance with ISO-3953-1977.</p> <p>iv. <b>CARBON CONTENTS:</b> Carbon contents are determined on Strohleim Carbon apparatus using combustion method.</p> <p>v. <b>OXYGEN CONTENTS:</b> Oxygen Contents are determined on Strohleim Oxygen Apparatus (O-MAT-353) using combustion method.</p>

Special Conditions:

- (a) Prices to be indicated on FOB basis & airfreight must be indicated for the consignment upto (C&F) Karachi basis.
- (b) Advance free sample (01 Kg) for Tungsten Powder & ½ Kg each for Nickel, Iron, Cobalt & Manganese powders, conforming to tendered specifications to be submitted alongwith the offer for test / evaluation. The firm who's samples of said metal powders have already qualified in test/trial, need not submit fresh samples.
- (c) Every production lot of metal powders will be inspected by inspector nominated by purchaser at the Firm's premises. Oxygen and Carbon content to be tested at an independent Laboratory of international repute if considered necessary by Inspector. Samples will be taken by inspector. Testing charges will be borne by supplier. All other variables given in the specifications of contracted store will be got tested by the satisfaction of inspector for each production lot at supplier's laboratory.
- (d) Supplier shall also provide metal powders test certificates duly signed and verified by the inspector showing actual values against all the variable items mentioned in the specification. The certificates shall be provided in triplicate for each production lot of Tungsten metal powder.
- (e) Supplier will furnish a certificate of sinterability of metal powders separately for each lot.
- (f) Tungsten metal powder to be supplied in drums/containers of 100 Kgs each, whereas Nickel, Iron, Cobalt & Manganese Powder to be supplied in 25-50Kg drums. The metal powders inside to be packed in thermally sealed polythene bags of 0.25mm thick or by some other means determined by the supplier that affords the same level of protection against oxidation and be well secured against damage in handling and transportation as well.
- (g) Metal Powders will be shipped within 90 days after opening of LC duly inspected by the PATLO. Tungsten Powder can be shipped in (02) consignments with approx. gap of 4-6 weeks. Full quantity of Nickel, Iron, Cobalt & Manganese metal powders to be shipped / dispatched alongwith 1<sup>st</sup> consignment of Tungsten metal powder.
- (h) Supplier will clearly mention in the offer whether export permit for Metal Powders from country of origin / port of shipment is required / involved or other wise. Obtaining of Export Permit (if any involved) from concerned authorities is the responsibility of Supplier, however, End Use/End User certificate from concerned Pakistani Ministry will be obtained/provided by POFs against firm's request.