

REQUEST FOR QUOTATION (RFQ) / INQUIRY @ KMPCL, CHHATTISGARH

SERVICES FOR REPAIRING OF SAC MOTOR SHAFT AND PREPARATION OF NEW SHAFT	
Plant: 6x600 MW KSK Mahanadi Thermal Power Plant (TPP), Chhattisgarh	
Company Name: KMPCL	RFQ No: EMD/SERVICES/KMPCL/355, Dated 22 nd Jan 25
Location: Janjgir-Champa Dist. Chhattisgarh	Revision - 0

1.	Scope of Work	As per the attached Annexure - 1
2.	BOQ	As per the attached Annexure - 2
3.	Last date of Submission of offer	Within 10 days from the date of receipt of Inquiry.
4.	Working Period	
	a. Duration of Work	Duration of the Work shall be from the date of handover of Equipment – 60 Days
	b. Mobilization	NA
	c. Date of Start of Work	Shall be informed during finalization of work
	d. Notice to Proceed	Shall be intimated 3 days in advance from the date of Start of work.
	e. Completion of Work	Within 30 days from the date of start of work till submission of report
	f. Validity of work	One Year (as standard)
6.	Payment Terms	100% upon completion of works within 30 days upon submission /of Commercial invoice duly certified by EIC & Plant Head.
7.	Correspondence Address for Inquiry	KSK MAHANADI POWER COMPANY LIMITED 8-2-293/82/A/431/A, Road No. 22, Jubilee Hills, Hyderabad – 500033, Telangana. (Offer Submission) Contact: Mr. GS Bajwa – 7728888516 Email: gurpreet.b@sk.co.in , contracts@sk.co.in
8.	Site/ Works Address	KSK MAHANADI POWER COMPANY LIMITED (KMPCL), Nariyara Village, Akaltara Tehsil, Janjgir - Chempa Dist - 495556, Chhattisgarh.
9.	Special Note	Please attach stamped and signed copy of all the inquiry / RFQ documents along with your offer.

A. SCOPE OF WORK : As per the attached Annexure - 1

B. BILL OF QUANTITY (BOQ): As per the attached Annexure - 2

C. QUALIFYING CRITERIA (EXPERIENCE):

1. Bidder should have executed similar work and should enclose proof of the same.
2. Bidder shall also submit documents supporting to the related work carried out.

The experience claimed by the bidder shall be considered, if the said experience is in the name of the bidder directly and not by subletting the contract. Firm to furnish satisfactory work completion certificate of executed orders, if not have worked with KMPCL earlier for similar job.

During the work period, the successful bidder has to depute well familiar experienced Engineers/ diploma holders/ Senior Electricians. Bidder has to submit the proof about the qualification and experience of labour, supervisor and engineer deputed for overhauling jobs along with tender documents such as copy of appointment letters or P.F. submission Challan, for last 2 years along with qualification of personnel's who will be deputed for this work.

D. MQP / QAP:

Contractor shall submit their MQP (as applicable) for further review and approval from the Owner. In case contractor don't have such a quality plan then they have to follow KMPCL's MQP / QAP as per mutual discussions.

E. GENERAL CONDITIONS OF THE CONTRACT:

1. General Scope of Contractor: Applicable only if the Vendor is working @ KMPCL Plant Site

- a. Contractor should deploy competent workers for the particular job and should authorize his workers for carrying out electrical works such as welding, grinding and other works carried out by electrical appliances.
- b. Contractor shall submit the latest General Medical Test Report of the manpower deployed by the contractor along with the documents for issuance of necessary Gate Pass.
- c. The contractor shall maintain all the tools & tackles in healthy condition throughout the period of work. Contractor shall arrange all the required General Tools for execution of the scope of work including the testing equipment. The testing equipment and tools & tackles should be of reputed make with valid calibration certificate.
- d. One copy of calibration certificates for testing instruments used to be submitted by contractor to KMPCL after WO released & before site mobilization.
- e. Special Tools supplied by the OEM's shall be issued by the Owner (as per availability basis) to the contractor on returnable basis. In case of some alternate arrangement is required against the Special Tool (non-availability) the same shall be supported by the contractor to save the time during overhauling.
- f. All the consumables required for completion of work to be supplied by contractor, unless specified separately.
- g. Scrap, Waste and Effluent disposal if any to be dumped at the designated place within the plant premises by the contractor as per the instruction of Engineer- in-charge.
- h. As per the working plan the Supervisor should be available in all the working shifts for close monitoring.
- i. The contractor shall make his own arrangement of Crane, Hydras, Tractor trailers, Trucks, Hand trolleys, manpower, lifting tools & tackles etc. for all types of material handling job inside KMPCL's plant area at his own cost. This includes loading, unloading and transportation of the material / spares inside plant working area for maintenance work, issue of materials / spares from stores to site of work, return of material back to stores, disposal of scrap & old unused material – from site of work to workshop - from site of work to stores - from the site to the scrap yard / place as specified by the Engineer-in-Charge.
- j. The contractor should approach the Engineer in charge for electric supply point(s) and all electric connections and circuits shall be drawn with his approval. In case of non-compliance of the above, or in case of any mishap or accident Contractor solely shall be responsible for all consequences.
- k. Contractor shall ensure to possess all the required permits (PTW) and isolation form the EIC, prior to the start of the works.
- l. Contractor should provide all safety equipment to their workers such as safety shoes, helmets, goggles, aprons, safety belts, appropriate hand gloves etc. Good and approved quality appliance shall be arranged and replaced by new ones as soon as worn out by Contractor at his cost.
- m. Each and every portable tool is to be used with three plugs and three wires for single phase systems/ 3 phase four wire system for 3 phase system only, so as to avoid electrical shock while working. Proper earthing to be checked both at supply end at tools end by qualified electrician before commencement of work.

- n. Contractor shall ensure hot and height permits availability before start of job. Execution of job without hot and height permit will be the responsibility of Contractor and shall attract penalty as decided by KMPCL EIC.
- o. Contractor shall ensure 100% illumination at the work place. Any hindrance caused shall attract penalty under unsafe conditions.
- p. Three wire sockets and properly insulated electrical boards with earth leakage circuit breakers (ELCB) are to be used by Contractor. ON/OFF switch should be connected in live wire and not in neutral wire. This should be ensured by qualified electrician.
- q. The decision of Engineer-in-Charge shall be final in regard to all matters relating to this contract.
- r. Hydra, trailer and crane will be in contractor scope for shifting the materials.
- s. Any scaffolding required for doing the job shall have to be erected and dismantled by the contractor. Material for the same shall be arranged by contractor unless separately specified in the contract.
- t. Proper housekeeping is a must during entire work period. Hazardous material and inflammable material should be handled so as not to cause harm to the plant or people.
- u. In case of any ambiguity / dispute about any conditions of contract, Special Conditions of Contract will prevail over General Condition of Contract.
- v. The decision of Engineer-in-Charge shall be final in regard to all matters relating to the scope of work.
- w. Work will be carried out on round the clock basis or agreed time.
- x. Supervisor will be available on shift basis for close monitoring.
- y. All the tests carried out at site must submit test reports in spiral binding from in 6 sets.
- z. If any work/consumable/tools and tackles not mentioned above which is required for completion of the work is in the scope of contractor.

2. **General Scope of Owner: Applicable only if the Vendor is working @ KMPCL Plant Site**

- a. Permits will be issued by the Owner as per the requirement and based on the documents.
- b. All the available relevant drawing will be shared as per the requirement of scope of work.
- c. Spares required against the activities will be provided by the Owner.
- d. The electricity, water, compressed air etc., shall be provided at fixed points by KMPCL on the basis of 'as is where is' available in the plant. However, further extension cabling / hoses / piping etc. shall be arranged by the contractor.
- e. Drinking water facility shall be made available by the Owner.
- f. EOT Crane along with operators etc. under the scope of owner, if not specified separately.
- g. Workshop facility for machining activities if not specified separately shall be provided by the Owner.

3. **Statutory Compliance: Applicable only if the Vendor is working @ KMPCL Plant Site**

- a. Contractor has to produce WC policy/ESIC as applicable, before the commencement of work.
- b. All provisions of the Factory Act 1948, The Chhattisgarh Factory Rules 1950, Indian Electricity rules 1956, and other rules and regulations should be strictly adhered by the contractor.
- c. The contractor shall ensure compliance with all the Acts, Rules & Regulations pertaining to Health, Safety as applicable from time to time.
- d. If any of KMPCL safety officers finds that Contractor is not following the Safety Rules and regulations including use of personal protective equipment at site, he is authorized to stop your work immediately. In case of violation of rules after issue of warning letter contractor shall be liable to penalty as decided by the concerned / safety section.
- e. Safety of the workers to be engaged in the job is Contractor's responsibility and KMPCL will not be responsible for any type of compensation to Contractor's worker, if any accident occurs during the work and Contractor will be liable for all payments, maintenance etc. to the worker / workers' family as per statute or rule in force in the State or the Country as a whole.

4. **Insurance Of The Workmen: Applicable only if the Vendor is working @ KMPCL Plant Site**

- a. The contractor shall insure all his workmen for payment of compensation in case of any accident under the provision of Workmen's Compensation Act. The supporting papers/documents in this regard shall have to be submitted before start of the work.

- b. The Contractor shall ensure that all their personnel and machinery are covered adequately under an appropriate insurance policy and shall keep Owner fully indemnified against any claims arising whatsoever during the execution of the work. Contractor shall produce necessary documentary proof before the commencement of work at Site.

5. **Safety: Applicable only if the Vendor is working @ KMPCL Plant Site**

- a. Induction & Training: All the persons to be deployed by the contractor have to undergo safety induction before being engaged in any job and moreover they have also to undergo safety training regularly.
- b. Contractor should provide all safety equipment's to their workers such as safety shoes, helmets, goggles, aprons, welding screen, safety belts, appropriate hand gloves etc. Good and approved quality appliance shall be arranged and replaced by new ones as soon as worn out by Contractor at his own cost.
- c. Work should be carried out with all PPEs and under KMPCL safety guidelines
- d. If any of KMPCL safety officers finds that Contractor is not following the Safety Rules and regulations including use of personal protective equipment at site, he is authorized to stop the work immediately. In case of violation of rules after issue of warning letter, the contractor shall be liable to penalty as decided by the concerned / safety officer / EIC.
- e. Adequate supervision must be ensured during execution for compliance of safety measures.
- f. In case of injury to person, the incidence is to be reported to concerned section without delay and all legal formalities completed at earliest.
- g. Safety of the workers to be engaged in the job is Contractor's responsibility and KMPCL will not be responsible for any type of compensation to Contractor's worker, if any accident occurs during the work and Contractor will be liable for all payments, maintenance etc. to the worker / workers' family as per statute or rule in force in the State or the Country as a whole.

6. **Termination**

The Work Order/Contract is subject to termination by the owner at any time before the contractor/agency commences mobilization of manpower and resources.

7. **Quality And Safety**

You shall implement all applicable quality norms in relation to the performance of the Scope of Work by establishing a well-equipped laboratory and a dedicated quality engineer. You shall also comply with all safety norms and maintain industrial practices for safety of men, material and also cover them under insurance. KMPCL shall be completely indemnified from any obligations arise out of any accident, incident or loss of men, material and property.

8. **Special Note**

Kindly note, any payment made under this Work Order whether as advance or otherwise, is strictly for providing the services as per this Work Order. In any circumstances, any payment given under this Work Order shall not be adjusted against any outstanding dues, of whatsoever nature, towards KMPCL or any company of KSK Group. In case service is not provided within time stipulated in completion schedule or is not in accordance with the agreed quality, the party/contractor shall refund the entire advance amount within 7 days of intimation in this regard from KMPCL, without any prejudice.

9. **PROGRESS REPORTS**

You shall provide final report in mutually agreed formats for circulation among all the relevant parties.

10. **CONFIDENTIALITY:**

No party shall disclose this "WO" or any part thereof, without the written consent of the other party, except that such consent is not required when such disclosure must be made to a lender, Statutory Authority or in pursuance of any directive from a Regulatory Authority.

11. **INDEMNITY:**

Notwithstanding anything contained in this "WO", the Contractor hereby agrees and undertakes to indemnify and keep indemnified Owner from and against all and any claims, demands, action, charges, losses, reasonable costs (including without limitation the fees, disbursements and other charges of counsel), expenses, claims, damages, penalties and liabilities that Owner or its Directors or Officers may

incur or suffer as a result of, arising out of or in connection with breach by the Contractor of any of its' obligations, undertakings or covenants contained in this 'WO'.

12. **FORCE MAJEURE**

Neither of us shall be considered to have defaulted in the performance of our respective contractual obligations under this Contract, if such non-performance is as consequence of force majeure which shall mean any event beyond the reasonable control of the parties including but not limited to the acts of God, earthquake, typhoon or cyclone, floods, lightening, landslide, fire or explosions, environmental pollution, plague or epidemics, strike and lockouts, (lasting more than fourteen (14) consecutive calendar days except, sabotage, blockade, war, invasion, act of foreign enemies hostilities (whether war to be declare or not), civil war rebellion, revolution, insurrection / or military usurping power or confiscation or trade embargoes or destruction or requisition by order of any Government or any public authority. However, the affected party shall take all measures to mitigate the impact of such force majeure. Commercial difficulty shall not be force majeure.

13. **ARBITRATION**

All disputes or differences whatsoever arising out of this "WO" which cannot be settled through mutual negotiations shall finally be settled by arbitration through arbitration in accordance with the provisions of the Arbitration and Conciliation Act 1996. The venue of such arbitration shall be Hyderabad. The decision of the Arbitrator shall be final and binding on the Parties.

14. **JURISDICTION**

Parties agree that the courts at Hyderabad shall have the exclusive jurisdiction over all disputes and matters that arise under or pursuant to this 'WO'.

15. **NOTICES**

Any notice, request or instruction permitted or required to be given hereunder by any party to the other shall be in writing and shall be deemed sufficiently given if delivered personally against receipt or sent by Registered Post A.D or by Speed Post / courier with A.D. at the address of the parties mentioned in the WO.

16. **PERSONAL CONDUCT:**

Entering of any of contractor's person into the factory under influence of alcohol / drugs is strictly prohibited. Further any act of sabotage to Owners resources with mala fide intentions shall be taken very seriously and immediate removal of the person(s) will be effected.

F. DEVIATION:

In case of any deviation during the submission of the offer, the bidder must fill the same in the below formats for technical & commercial deviations (if any).

• **Technical Deviation**

Sr.no	Reference Clause No.	Deviation Taken

• **Commercial Deviation**

Sr.no	Reference Clause No.	Deviation Taken

Annexure-1 – Scope of Work

Shaft Runout Repair/Refurbishment of Service Air compressor Motor

➤ **List of Jobs and BOQ:**

S.No.	WORK DESCRIPTION	QTY
A	Shaft Runout Repair/Refurbishment, of Service Air compressor motor	01
B	New Rotor manufacturing for Service Air compressor motor	01
C	DE and NDE bearing housing Repair work for Service air compressor Motor	04

➤ **Technical Description of Service air compressor motor**

SL.NO	DESCRIPTION	Dimension
I	Total length of the shaft	2020 mm (2mtrs approx.)
II	Rotor present status	Shaft is assembled with rotor winding
III	Material	EN 8 (Carbon steel shaft)
IV	Bearing seating area Diameter	140 mm
V	Maximum dia of shaft	155mm
VI	Face diameter of both ends	90 mm / 120 mm
VII	Rated Power of motor	350KW
VIII	RPM of motor	1500

A. Scope of Work for Shaft Runout Repair/Refurbishment, of Service Air compressor motor

- Ensure the service air compressor shaft is clean and free of debris and Use a dial gauge or appropriate tool to measure the runout.
- Rotate the shaft and note the maximum deviation (in mm or microns).
- Record the runout readings at different points along the shaft for a complete profile.
- Prepare an official communication or report, attach the runout readings and any observations highlight improvements or deviations post-repair, Send the report to KMPCL via email or the agreed communication channel.
- Final assembly dynamic balancing as per ISO 1940 (Grade of balancing-2.5)
- Final document submission as per approved MQP

B. Scope of work for New Rotor manufacturing for Service Air compressor motor

- a) Preparation of the drawing in accordance with the existing sample shaft and drawing, which shall be submitted to KMPCL for final approval.
- b) Procurement of raw materials from reputable forging vendors, along with the Material Test Certificate (MTC) of the raw materials to be provided.
- c) Non-Destructive Testing (NDT), such as Ultrasonic Testing (UT), is to be conducted prior to machining.
- d) Proof and final machining shall be carried out in accordance with the approved drawing.
- e) Surface roughness and finish must comply with the relevant standards.
- f) Final dimension inspection is required.
- g) Removing a rotor cage from its pressed fitting requires precision and proper handling to avoid damage to the rotor, cage, or associated parts.
- h) Rotor need to clean properly
- i) Reinstalling a rotor cage onto a pressed fitting requires precision to ensure proper alignment and prevent damage.
- j) Final runout inspection must be performed.

Annexure-1 – Scope of Work

Shaft Runout Repair/Refurbishment of Service Air compressor Motor

- k) Dynamic balancing shall adhere to ISO 1940 balancing grade requirements.
 - l) Submission of final documentation shall follow the approved Manufacturing Quality Plan (MQP).
- C. Scope of work for DE and NDE bearing housing Repair work for Service air compressor Motor**
- a) Measurement of the internal diameter and width of the existing bearing housing.
 - b) Fabrication of a new step sleeve according to the outer diameter of the bearing while accounting for interference.
 - c) Machining of the internal diameter of the existing bearing housing to match the dimensions of the step sleeve.
 - d) Insertion of the step sleeve and securing it with the bearing housing in accordance with vendor standard procedures.
 - e) Conducting a final fitment inspection along with bearings (the bearings will be supplied by KMPCL).
- D. Scope includes:**
Shifting and lifting of below mentioned item from KMPCL site to Vendor workshop and return to KMPCL shall be in the scope of contractor.
- a) Motor 1 Rotor- Work for the Repair and Machining
 - b) Motor 2 Damage Rotor-New Shaft manufacturing
 - c) Motor Bearing Housing DE and NDE- 4 Nos, for Both motor- housing Repair work
 - d) 2 Nos of Bearing
- E. Special Conditions for the Work:-**
- a) Submit MQP after award of contract for KMPCL review and mention KMPCL witness points.
 - b) Before start of work, submit welding WPS/PQR for any similar repair work handled earlier
 - c) Stage and PDI inspection from KMPCL
 - d) Dynamic Balancing of rotor after repair work (Grade of balancing-2.5).
 - e) Final runout check and runout will be within 0.05 mm.
 - f) Provide bearing shaft Fitment guarantee
 - g) Carry out all works as per instruction of EIC of KMPCL.
 - h) EIC - KMPCL shall sign the work completion certificate.
- F. Materials in scope of Contractor: -**
- All the material / special grade welding electrodes required for completion of works are in the Scope of Contractor.
- G. Battery Limits: -** Repair of service air compressor motor shaft and bearing Housing of Motors
- H. List of Tests :-**
- MPT / UT / DPT of shaft at different stages of repairing
 - Dynamic Balancing of rotor after repair work (Grade of balancing-2.5).
 - Final runout check and runout will be within 0.05mm
- I. Drawings & other details (If Any):** Drawing prepared by owner shall be furnished. Agency has to verify the same with the rotor provided and then proceed on the job

Annexure-2					
BOQ for Prepare and Repair of Service air compressor motor shaft					
S. No.	Description	Quantity	UOM	Unit Rate	Amount
I	Work Description				
1	Repair/Runout of Service air compressor motor shaft and clear runout as per the scope of work in Annexure-1	1			
2	Manufacturing of new rotor shaft for Service air compressor motor having below specification -Total length of the shaft:- 2020mm -Rotor present status:- Shaft is assembled with rotor winding -Material:-EN 8 (Carbon steel shaft) -Bearing seating area Diameter:- 140 mm (Observed cracks in DP test after machining 2.5mm at our workshop) -Maximum diameter of shaft:- 155mm -Face diameter of both ends:- 90 mm / 120 mm (90 mm is near damaged side (Cracked side)) -Rated Power of motor:-350KW -RPM of motor:-1500	1			
3	Repair and machining/Sleeve insertion of Motor Housing at Both end DE and NDE side (Both Motors) as per scope of work in Annexure-1	4			
Total Basic					0
GST @ 18%					0
Total Value With GST					0