

प्रतिभूति कागज कारखाना, नर्मदापुरम-461005 (म.प्र.)

(भारत प्रतिभूति मुद्रण तथा मुद्रा निर्माण निगम लिमिटेड की इकाई)

भारत सरकार के पूर्ण स्वामित्वाधीन

(मिनीरत्न श्रेणी-1 सीपीएसई एवं आई.एस.ओ 9001:2015, 14001:2015, 45001:2018, 50001:2018 एवं आई.ई.सी.17025:2017 प्रमाणित)

SECURITY PAPER MILL, NARMADAPURAM - 461005 (MP)

(A Unit of Security Printing & Minting Corporation of India Limited)

Wholly owned by Government of India

Miniratna Category-I CPSE & ISO 9001:2015, 14001:2015, 45001:2018, 50001:2018 & IEC17025:2017 Certified

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आज़ादी का
अमृत महोत्सव

Tel. No.: 07574-255259, Fax No.07574-255170, E-mail: gm.spm@spmcl.com, Website: <http://spmarmadapuram.spmcl.com>

EXPRESSION OF INTEREST (EOI)


No. ME01/EOI/2023-24/189

Dated 17.05.2023

Security Paper Mill, Narmadapuram, a unit of SPMCIL wholly owned by Govt. of India, Ministry of Finance, invites Expression of Interest (EOI) from the reputed firms for **“Development of Screw tail Coupling and Safeset Coupling”**. Interest firms/manufacturers/suppliers may visit our website <http://spmarmadapuram.spmcl.com> for detailed EOI.

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|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Scope of Work | 1. Scope of Work includes Development of safeset coupling (Existing Model No. MTX 156-ST-KB 140) and low speed crownteeth Gear coupling for New Pulp Plant. This whole process includes Material testing, Reverse engineering for development of coupling drawing and providing details technical specification of Bivis safeset coupling and low speed coupling. (Details as per attached Annexure-1) . 2. Ensuring one to one interchangeability and meet the performance criteria. |
| (2) Interested firm may submit the following credentials. | a) Letter of interest. b) Company profile and catalogues. c) The vendor should be OEM or authorized dealer of original manufacturer of hydraulic torque limiter and Gear coupling. d) For authorized dealers, vendor shall provide valid authorization certificate issued by OEM for the current year along with bid. e) Firm should provide reference list of similar kind of invites i.e. Development/ supply of different type of Torque limiter/ Gear coupling within the last 10 years in any process industry. f) Audited annual reports for the last three financial years. |
| (3) Submission of EOI | Tenderer shall ensure that their EOI tender, duly sealed and signed. Complete in all respects as per instructions contained in the EOI tender, are dropped in the tender box located at the address given below on or before the closing date and time indicated in the tender, failing which the EOI tenders will be treated as late and rejected. |

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|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | <p>The bid is to be submitted in one pare in sealed envelopes duly super scribed with our EOI reference No. with date and due date on the top of the sealed envelope and be addressed to The chief General Manager, Security Paper Mill, Narmadapuram -461005 (M.P.)</p> <p>The EOI tender duly prepared as per requirement, should reach this office by Registered Post/ Courier Services/ Drop box only, on or before the due date prescribed. EOI Tenders received by Fax/Email will not be accepted and summarily be rejected.</p> |
| (4) Last Date and time of receipt information. | The firm may visit SPM, if desired, and submit their EOI to "The Chief General Manager, Security Paper Mill, Narmadapuram" up to Dt. 16.06.2023 at 11:00. |
| (5) Opening date and time of EOI | On Dt. 16.06.2023 at 15:00. |


 (Balbir S. Prajapati)
 Manager (Material)
 For Chief General Manager

Scope of Work

Scope of Work:-

EOI Invited for Development of one to one interchangeable to existing imported spares of Screw tail coupling and safeset coupling.

Overview of Existing imported spares

The Twin spline shaft assembly is main component of Bivis machine used for the assembly of different screw segments. This twin screw assembly rotates together in the same direction between 02 half barrels fitted with metallic liners (Tiles) for producing cotton pulp. Power is transferred from motor to gear box through safeset coupling and gear box to screw extruder assembly through screw tail coupling. Both couplings are consumable in nature and required to change if found damaged during inspection

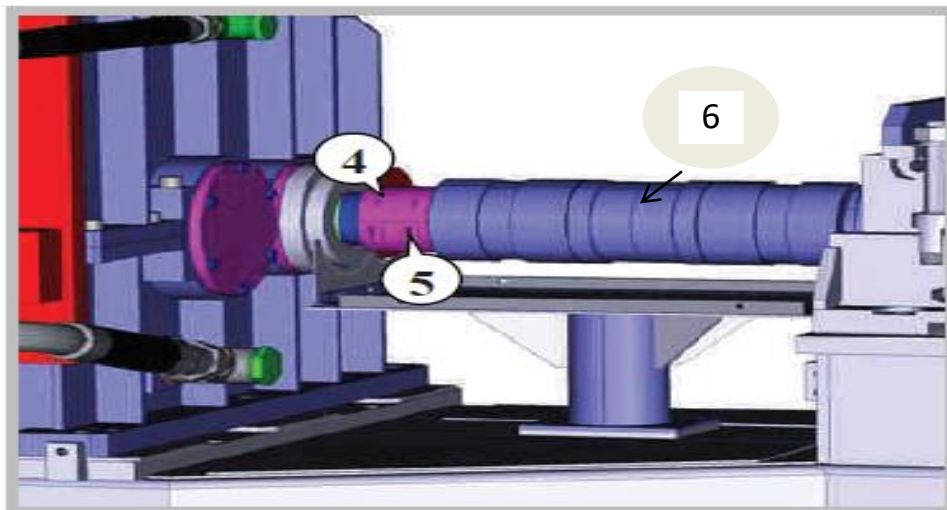
Details are given below:-

1. Screw tail coupling is installed in pair between gear box and twin screw shaft. Each part of pair has three segments. Two internal splines bore segments have 20 splines similar to gear box output shaft and screw assembly input shaft at one end. Both segments have female crowned teeth in other end. One intermediate segment which has male teeth at both ends fits between two female teeth segments. Gear box ratio is 2.66:1 and output rpm is 450 rpm

Pictorial view of the Screwtail coupling

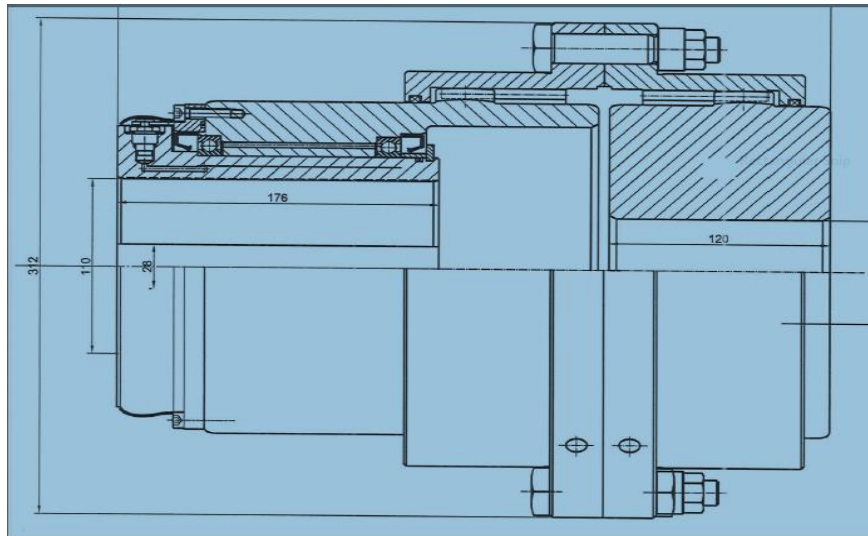
4,5 & 6 are all together required to be developed

Coupling shows as 6 and 4 & 5 are two half covers over gear box spline shaft along with coupling.



2. Safeset coupling is installed between motor and gear box input. This coupling also works as torque limiter and in case of higher torque beyond limit; coupling gets free by shearing a brass plug and unable to transfer power. Safe set coupling has oil chamber. Coupling gets lock on shaft by filling oil and pressurised at recommended pressure. The coupling has combination of two parts one is hydraulic pressurised chamber and other one is crowned gear coupling. Safeset coupling existing model No. MTX 156 -ST-KB 14

Indicative drawing for safeset coupling



3. Both the coupling shall be identical to existing in all respect and tolerance must be maintained as existing.
4. Hardening, tempering, Stress Relieving & Straightening, angularity and radial accuracy must be done as per sample of existing OEM spares.
5. Drawings are not available. Only pictorial view for screw tail coupling and indicative drawing image for safeset is available which is attached.

Essential Conditions:

1. Scope of Supply: Development process consists of Design, Manufacture & Supply of screw tail & safe set coupling for one to one interchangeable to existing one in ready to use condition.
2. This whole process includes Material testing, Reverse engineering for development of couplings drawing and providing detail technical specification of Bivis safeset coupling and low speed coupling.
3. Ensuring one to one interchangeability and meet the performance criteria.
4. The Bidder should be manufacturer and supplier high performance, high accuracy precision couplings.

5. Documentary evidence in the form of complete work order/PO, satisfactory completion certificate etc. related to manufacturing or development of high accuracy Torque limiter couplings.
6. Infrastructure of the bidder along with list of equipment, precision casting & machining facilities, machine tools available etc. are to be submitted along with the offer.
7. The data given in specification & drawing is for reference purpose only, Firm may visit at SPM Narmadapuram with suitable instrument to take dimensions of existing couplings to ensure one to one replacement of the OEM spares
8. The supplier should provide the technical catalogue/ Test Certificates along with bid.
9. Supplier shall submit GA drawings of components in favour of SPM hand over to SPM in Hard copy, soft copy.
10. Firm should ensure load capacity similar to the existing components and rectify or replace the item in case of deviation, fittings problem arises during installation and running condition.
11. Firm should ensure one to one interchange ability of machine components in terms of Fitment, size, Tolerance,, metallurgy expected life and load carrying capacity while designing of parts.

Seal and Signature of Bidder
