

ANNEXURE - B
PRE QUALIFYING CRITERIA FOR SUPPLIERS OF BLADE FLATS
OF GRADES X22 Cr Mo V 121 (HY10766) AND X 20Cr13 (HY10764)

Suppliers of the blade flats shall confirm / fulfill the following conditions:

1.0 MANUFACTURING AND TESTING FACILITIES:

The details of the manufacturing and testing facilities of the Mills / manufacturer shall be submitted in the format enclosed as Annexure-C for assessment by BHEL. The company catalogues or company's website addresses which gives complete information as required by this tender conditions can also be provided along with the offer.

Only manufacturers are permitted to quote for the present tender. No trader/intermediaries will be accepted for ordering.

2.0 FIRST PIECE QUALIFICATION / PROCESS QUALIFICATION:

Suppliers shall explicitly confirm their acceptance for the process qualification as specified in HY10766 Rev.10 & HY10764 Rev.10 which will be applicable to each size of blade flat before supplies.

Note: i) If any of the suppliers are able to submit the evidences of their supplies of Steam turbine blade flats to M/s Siemens, Germany or already supplying blade flats to BHEL Hyderabad, they can be considered for the waiver of process qualification requirements for the same grade of the flats for the present tender subject to the conditions mentioned in Cl.5.0.

ii) In case of supplies made to M/s Siemens Germany, the evidences like purchase order copies and corresponding material test certificates, creep test reports as applicable, etc. shall be submitted. The purchase order copies shall not be more than five years old from the date of issue of this enquiry.

3.0 CREEP TESTING OF THE PILOT LOT:

All the manufacturers who are required to carry out Process Qualification as per Clause 2.0 mentioned above shall explicitly confirm their acceptance for carrying out creep tests on the two samples of the first lot of the blade flats of material X22 Cr Mo V 121 (HY10766) as per the following test parameters.

No. of samples to be tested	:	Two
Test temperature	:	600 Degrees C.
Stress, Min	:	180 MPa
Minimum time before rupture	:	200 hrs.

Samples for creep test will be approved by BHEL Hyderabad before carrying out creep tests. The test reports will be reviewed and the dispatch clearance for the first lot will be given only after acceptance of creep test results for the above orders by BHEL Hyderabad

4.0 INSPECTION OF THE FIRST LOT OF EACH MATERIAL GRADE AND SIZE OF THE BLADE FLATS where process qualification is applicable:

Inspection of the first lot of each material grade and size will be carried out in the presence of BHEL Hyderabad representative / TPIA as per order conditions. A QAP shall be submitted along with the technical offer for review and acceptance by BHEL.

The QAP as given in BHEL specifications is not applicable for the present tender for the suppliers who are required to undergo process qualification and creep tests as per Clause no. 2.0 & 3.0 above.

5.0 PAST EXPERIENCE:

- i) The manufacturers who are having experience of manufacturing and supplying blade flats for OEMs of steam turbines other than BHEL Hyderabad and *M/s Siemens Germany* will be considered for the present enquiry subjected to the qualification of conditions mentioned against Clause 2.0 and 3.0.
- ii) Vendors who are supplying blade flats to BHEL for the first time by participating in the present tender shall submit the evidences of their past experience. Minimum three PO's with cumulative quantity not less than five tons of each size(size of enquiry +/-10mm on Flat dimensions is considered as one size for X22 Cr Mo V 121_ Grade material and +/-30mm on Flat dimensions is considered as one size for X 20Cr13_ Grade material) shall be successfully executed and atleast one PO shall not be more than five years old from the date of issue of this enquiry. The evidences shall necessarily include the highest and lowest cross-sections being manufactured.

The vendors who has supplied blade flats to BHEL in the past will be acceptable based on the review of records available with BHEL

- iii) Evidences (such as unpriced PO's, copy of manufacturer's test certificates) meeting the requirement of BHEL specifications shall be submitted for review and acceptance by BHEL.

6.0 No deviations to BHEL specifications and sizes as per enquiry are permissible. Any deviations will lead to rejection of the offer.

ANNEXURE -C

DETAILS OF THE MILLS SUPPLYING BLADE FLATS TO BHEL HYD

BHEL ENQ. NO. :

DATE:

1.0	ORGANISATIONAL INFORMATION			BHEL REMARKS
1.1	MILL NAME :			
1.2	HEAD OFFICE			
	ADDRESS: TELEPHONE NO. WEB SITE			
1.3	FACTORY / WORKS			
	ADDRESS: TELEPHONE NO. E-MAIL (of the chief contact person)			
1.4	BRANCH OFFICE / MARKETING OFFICE			
	ADDRESS TELEPHONE E-MAIL(of the chief contact person)			
2.0	MANUFACTURING FACILITIES:			
2.1	MELTING FACILITIES :	CAPACITY / SIZE		
2.2	HOT / COLD ROLLING OR/AND FORGING FACILITIES	CAPACITY / SIZE		
2.3	HEAT TREATMENT FACILITIES (INCLUDING QUENCHING FACILITIES) FOR MINIMUM 2.5m OF LENGTHS)			
2.4	STRAIGHTENING FACILITIES			
2.5	TESTING FACILITIES:			
	TESTING FACILITY	EQUIPMENTS/MACHINES	CAPACITY / SIZE	
2.51	CHEMICAL			
2.52	MECHANICAL TEST			
2.53	MPI/DP			
2.54	ULTRASONIC TEST (Dimensions/Straightness measurement)			
2.55	OTHER FACILITIES			
3.0	MILLS PAST EXPERIENCE / CREDENTIALS			
3.1	CUSTOMER REFERENCE LIST OF SAME ITEMS			
3.2	MILLS PRODUCTION RANGE (SIZE AND MATERIAL GRADES)			
3.3	COPY OF VALID ISO 9000 CERTIFICATE FOR THE MILL			
3.4	ANY OTHER INFORMATION LIKE REGISTRATION / SUPPLIES TO SISTER UNITS OF BHEL WITH EVIDENCES (OPTIONAL INFORMATION)			

- Note: 1) The above data shall be furnished / certified by the manufacturer or mill only. Data certified by any other agencies will not be accepted
- 2) Any of the process / operation is sub-contracted, shall be mentioned by giving the details of the facilities and tie - up letter.
- 2) Mills catalogues shall also be provided
- 3) The above information will be used for scrutinizing the technical offers for the above mentioned enquiry

SIGNATURE AND COMPANY STAMP OF THE MILL