

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.11 & HY10764 Rev.11. However, 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.

(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.)

3.0 HIGH TEMPERATURE TESTS (For "process qualification" when waiver as per 2.0 above is not applicable)

AA) CREEP TESTS FOR X22 CrMoV121Material grade:

- i) 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 sample 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	:	One
Test temperature	:	550 °C (Minimum)
Stress, Min	:	180 MPa (Minimum)
Minimum time before rupture	:	1000 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

- ii) If the manufacturer has already tested any sample of same grade of material (utilizing same manufacturing processes and facilities by them which will be used for the supply of blade flats as per the present enquiry) for creep testing as per the above given test parameters, then the "Creep test certificate" clearly indicating the above test parameters in the test report can be submitted along with their technical offer for consideration of waiver for creep tests requirement for the present enquiry.

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 (including BHEL and Siemens Germany) will be considered for the present enquiry subjected to the fulfillment of requirements mentioned against Clause 2.0 and 3.0.
- ii) The vendor shall submit at least one reference including unpriced PO copy and manufacturer's test certificates as evidences for any of the size range mentioned in the items of this enquiry with minimum quantity of 2000 Kg. Reference PO shall not be more than five years old from the date of enquiry.

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

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