

BHARAT HEAVY ELECTRICALS LIMITED

FOUNDRY DIVISION

TECHNO – COMMERCIAL BID

Tender Document No. : **FYM / CONT / 2009 – 10 / 08**

NAME OF WORK : **MANUFACTURING & REPAIR OF WOODEN / THERMOCOLE / METALLIC PATTERNS FOR CASTINGS**

ITEM	DESCRIPTION / NATURE OF WORK	ESTIMATED QTY.	UNIT	REMARKS
01	Manufacturing & repair of wooden / thermocol / metallic patterns for castings	10	Cu. Mtr.	

1.0 SCOPE OF WORK

- Layout of casting drawing in 1:1 scale
- Preparation of wooden & thermocol segments – Planing & cutting segments of desired size. Provision for Machining operation should be kept.
- Construction of pattern as per lay out – Screwing, Nailing, Dovelling & layer formation
- Assembly of pieces and segments.

Signature of Contractor

- Hand finishing through hand files and sand paper
- Machining (Milling, Turning) of patterns for Diameter preparation
- Machine finishing of pattern with disc sander, bobbin sander etc.
- Putty finishing of pattern
- Self inspection – preparation of dimensional report of patterns
- Painting of pattern
- Repair and modification of old patterns
- 5 – S activity in Pattern Shop and Pattern Store
- Identification of old and broken patterns to be scrapped.
- Dismantling of old / scrap pattern for use of wooden segments and planks.
- Proper arrangement of wooden segments taken out from old / scrap pattern.
- Collection of loose aluminium pieces and screws in separate bins.

5-S Activity to be carried out in Pattern Store

- i. Identification of waste pattern to be disposed off.
- ii. Unscrewing waste pattern to take out useful wooden planks.
- iii. Storing of separated wooden planks in pattern (wooden store)
- iv. Disposal of waste wooden pieces in scrap yard.
- v. Cleaning of pattern in pattern store.
- vi. Systematic arrangement of pattern store.

Notes :

- 1) All tools & equipments like milling m/c, lathe, disc sander, bobbin sander files etc. shall be provided by BHEL Bhopal.
- 2) Contractor shall not engage any female labour for the execution of this work without the written Permission of Engineer Incharge of work.
- 3) Measurement of output will be based on the patterns manufactured / repaired in Cu. M.
- 4) There may be $\pm 25\%$ variation in quantity from the estimated and proposed quantity.

Signature of Contractor

2.0 **WORK MEASUREMENT**

Based on the weekly / monthly report duly signed by concerned supervisor & counter signed by shop executive.

3.0 **PERSONAL PROTECTION SAFETY EQUIPMENTS REQUIRED**

1. UNIFORM	1. GLOVES (LEATHER)
2. SAFETY SHOES	2. DANGRI
3. HELMET	3. FACE MASK RESPIRATOR

4.0 **PROCEDURE FOR SUBMISSION OF TENDER QUOTATION** :

Tender quotations to be submitted in two bid system.

5.0 **PAYMENT TO CONTRACTOR**

Payment by BHEL will be made on the basis of total executed Quantity by the firm. The payment shall be made on **Quarterly Basis.**

6.0 **JOB ASSESSMENT**

As per our assessment and estimate, minimum 10 Nos. of contract workers are required for Patter manufacturing of 10 Cu.Mtr. Before quoting, the party should contact the concerned foundry executive for any clarification and actual work assessment.

Signature of Contractor

Date : _____

BHARAT HEAVY ELECTRICALS LIMITED

FOUNDRY DIVISION

PRICE BID

Tender Document No. : **FYM / CONT / 2009 – 10 / 08**

Name of Work : **MANUFACTURING & REPAIR OF WOODEN / THERMOCOLE / METALLIC PATTERNS FOR CASTINGS**

ITEM	DESCRIPTION / NATURE OF WORK	ESTIMATED QTY.	RATE QUOTED PER Cu. Mtr. (inclusive of all taxes, duties, incidentals etc expect service tax)		REMARKS
			In Fig.	In Words	
1	Manufacturing & repair of wooden / thermocole / metallic patterns for castings	10 Cu. Mtr.			

Signature of Contractor
Date : _____