



BHEL, BHOPAL

CIM DIVISION

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SCOPE OF WORK**REV. 00****NIT No. : CIM/TURBO/21-22, Date : 24/07/2021****Sub :- MANUFACTURING OF STATOR COILS/BARS OF HYDRO IN CIM DIVISION**

The various items to be made are listed as below and the quantities mentioned are tentative.

S.No	Item Description	Item No.	No of coils or set	Approx. man-hrs required
1	Hydro Generator Stator Bars/Coils	#1	12795 No	215029
2	Hydro Connectors	#2	18 Set	

1.1 MANUFACTURING OF STATOR COILS / BARS OF HYDRO IN CIM

For manufacture of Hydro Coils/bars, the contractor shall be responsible for the following work:

a) Hydro Stator bars/coils for non VPI design : Sequence of main operations is mentioned below.

- Conductor cutting machine setting for the job as per drawing.
- Conductor cutting and insulation removing from lead end.
- Stacking of conductors.
- Conductor bending and Transposition of conductors and assembly of bar.
- Preparation of bars and Stack pressing.
- Inter turn testing.
- Initial forming.
- dispatch for further operation
- Inter turn insulation (In case of coils)
- Sizing, inner corona tapping.
- Overhang insulation or end winding insulation
- Insulation on Slot portion
- Sizing, finishing
- Despatch for further operation
- Preforming of bars/coils before pressing
- Final consolidation/pressing
- Final forming
- Lead forming
- Lead cutting
- Tan delta testing
- Stress Grading Painting and Finishing
- Red gel painting
- HV testing



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- Any other test if required
- Packing for Dispatch

Where ever machine will involve for above operation, machine setting will include.

b) Hydro Connectors

- Insulation as per drawing
- Finishing (application of red gel)
- Testing as per ITS.
- Packing & dispatch.

All other necessary operations according to the type of job to manufacture. Operations mentioned above are indicative. Other operations required to produce final product are inclusive.

N.B.

In addition to above work, Contractor has to ensure following parameters also.

- General cleanliness of workplace and upkeep of machines.
- Loading/unloading, handling, job movement of coils and miscellaneous activities
- Day to day co-ordination with concerned Shop In-charge, supervisor and quality control personnel. For this, adequate number of supervisors shall be deployed.