

GAS & POWER PLANT DIVISION

Scope Of Work

Annexure-I

Subject: Fabrication & laying of 4" compressed air pipeline and down take pipeline of 1" in extended part of Golden Jubilee block for Production purpose.

A) Following works are to be done on 4" overhead pipeline of compressed air:

- 1) Fabrication and laying of around $80 \pm 5\%$ metres (in total), 4" compressed air pipeline inside newly extended Golden Jubilee block (eastern side), with all fittings like valves, bends, interconnecting flanges etc. Also proper pipeline supports are to be provided wherever required. Height of pipeline which is to be laid is around 8 metres from the ground. This newly fabricated pipeline shall be connected with existing 4" pipeline on two places, inside the block.
- 2) Complete hydraulic testing of the fabricated pipeline at 10 Kg/cm² hydraulic pressure and purging the same with Compressed air.
- 3) Installation of dummy flange (blank flange) in newly fabricated 4" compressed air pipeline in eastern most side on two locations.
- 4) Painting of the above newly fabricated pipeline with one coat of red oxide and then with two coats of paint as per IS 2379: 1990, Reaffirmed in 2006 (IS for pipeline coding) also marking the direction of the flow by arrows in black colour after every 6 meters on the pipeline.

B) Following works are to be done on 1" down take pipeline of compressed air:

- 1) Fabrication and laying of around $65 \pm 5\%$ metres (in total), 1" Compressed air down take pipeline from above newly fabricated 4" pipeline (in SI no. A), with all fittings like valves, bends, interconnecting flanges etc. Also proper pipeline supports are to be provided wherever required.
- 2) Complete hydraulic testing of the fabricated pipeline at 10 Kg/cm² hydraulic pressure and purging the same with Compressed air.
- 3) Installation of compressed air usage points in the bottom of every down take pipeline of compressed air and providing valves for operation.
- 4) Painting of the above newly fabricated pipeline with one coat of red oxide and then with two coats of paint as per IS 2379: 1990, Reaffirmed in 2006 (IS for pipeline coding) also marking the direction of the flow by arrows in black colour after every 6 meters on the pipeline.

Note:

- 1) Proper pipeline supports shall be provided to all the pipelines as wherever required.

- 2) All the consumables such as pipelines, fittings, valves, paint, electricity, cutting gases etc shall be provided by BHEL free of cost.
- 3) All tools & tackles including hand tools, welding machine, paint brush, pulley block, crane/hydra (if required) etc. is in the scope of contractor.
- 4) Contractor has to take the permit for "Working at height" as per BHEL norms for any work which involves working at a height of 2.5 meters or more.
- 5) Before welding/cutting work, inside of blocks or near existing LPG, Metal cutting gas pipeline or near any fire hazard area, contractor shall take hot work permission as per BHEL rules.
- 6) Contractor shall provide all the PPEs and other safety appliances to his workers at his own cost & maintain the same, which may be required under the rules/regulations/law.
- 7) The contractor has to work during nights as well as during holidays and Sundays according to the exigencies of the works, without extra cost.
- 8) Contractor has to produce a medical fitness certificate for all the workmen who are engaged in working at height for the above work from a registered medical practitioner.
- 9) Insurance of all the work men deputed by the contractor is in the scope of contractor only. Contractor has to submit a copy of same (if applicable) before starting the work.
- 10) Contractor is responsible for ensuring that his workmen while working at heights, hook-up their safety belts with permanent structures only.
- 11) The contractor has to ensure the safety of their workmen during the work. Safety equipment e.g safety belts, rope ladder, helmets, safety shoes, hand gloves, safety goggles, nose mask etc and all required safety items as per BHEL norms and requirement of work are to be arranged by the contractor.
- 12) Care must be taken while carrying out the work to ensure that no structure and installation, fittings, fixtures are damaged. Any damage done to the same or any other BHEL property will have to be repaired/replaced by the contractor, failing to which, the same shall be got done at his risk and cost. The decision of BHEL Bhopal on the propriety of adequacy of any repairs/replacements work done by the contractor or any costs recoverable from the contractor in this behalf shall be final and binding on the contractor.

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