

RAIL COACH FACTORY, KAPURTHALA		
Specification No.	Description	Covering Page
Mech/M&P/3100/GM/19-2 Rev.- NIL	Drill Machine ( 10 mm)	

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## 1.0 IMPORTANT INSTRUCTIONS TO TENDERERS FOR FILLING TECHNICAL BID

- 1.1 Bidders are required to give clause wise comments on the technical specifications, confirming compliance/non-compliance with details of deviations if any along with their effect on the performance. Back references to be avoided, offers are likely to be ignored in case of non-compliance of these instructions for furnishing the information.
- 1.2 Unless otherwise stated, latest alterations/ revisions of specifications/ standards/ drawings shall be applicable. In respect of safety standards and environmental standards relevant to the machine, the machine manufacturers shall ensure compliance with international (CE/ISO/DIN/JIS)/National standards (IS) (where applicable).
- 1.3 Tenderers should offer and quote for all the specified concomitant accessories, as these are considered essential for commissioning and utilization of the machine. Even if bidder does not recommend the purchase any of these accessories, the price must be quoted for comparison purposes and their recommendation/suggestion indicated in the offer. Tenderers should also quote for optional accessories, spares and consumable spares as asked in the specifications.
- 1.4 In case, any item is required in sets, please specify nos./pieces per set. This is essential for proper technical evaluation of the offer. Offers received without this may be considered as incomplete and liable to be rejected.
- 1.5 The bidder should quote only for the specified make of sub-assemblies and equipment wherever specified. Makes of sub-systems other than the specified ones will normally not be acceptable. In case, some other make is quoted, specific reasons for the same including its features/advantages over specified makes must be brought out in the offer.
- 1.6 In case there is a contradiction in any information provided (some parametric values given in the specification and those given in the brochure or some other document enclosed by the tenderer), unless specifically mentioned in the deviation cum confirmation statement the values as given in the specification shall be taken as confirmed by the tenderer and offer evaluated accordingly.
- 1.7 The Purchaser may accept internationally accepted alternative specifications which ensure equal or higher quality than the specifications mentioned in the Technical Specification. However, the decision of the Purchaser in this regard shall be final.
- 1.8 Purchaser reserves the right to verify the details submitted by the bidder by actual site visits.
- 1.9 Other terms & condition of the contract will be as per Indian Railway Standard conditions of contract.

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## 2.0 DESCRIPTION

Supply of portable double insulated hand tools electrical drill machine 10 mm Dia

## 3.0 SCOPE OF SUPPLY

3.1 The Contract shall cover –

- i) The supply and delivery of equipment.
- ii) The supplier before quoting the equipment shall ensure that the equipment should be supplied with all necessary spares.
- iii) Training to personal regarding operation and maintenance at RCF Kapurthala to entire satisfaction of the purchaser.

## 4.0 SPECIFICATIONS

4.1 Double insulated tool should be suitable to operate on single-phase AC power supply 230 volts. 50Hz. The Induction voltage effect on the body of tool should be zero volts under all abnormal condition. It should be shockproof.

4.2 It should be strictly as per IS 4665 Part-II or it's equivalent International Standard, marked on the name plate of the machine also.

### 4.3 Supply Voltage

4.3.1 The supply voltage should be  $230 \pm 10\%$  Volts.

4.3.2 The frequency should be  $50 \pm 3\%$  Hz.

4.3.3 There should be no loss of power under the permissible variation of the power supply system.

### 4.4 Speed (RPM)

4.4.1 The measured speed in case of universal or AC/DC Motor shall not more than  $\pm 20\%$  of guaranteed speed at full load as per IS 4665 Part (i) 1984.

4.4.2 No load speed shall be 2200 RPM or more.

### 4.5 Power Input & Current

4.5.1 The power input at normal load at rated voltage or at the upper limit of rated voltage range shall not exceed the rated input of the tool by more than the deviations specified as per IS 4665 Part (I) 1984.

4.5.2 The power rating of the tool shall be 400 Watts minimum.

### 4.6 Temperature Rise

4.6.1 Tool should be suitable to work perfectly in order at 0-50 degree centigrade dusty & 98% humidity conditions.

4.6.2 The temperature rise of the tool and the surface of its supports under the normal conditions shall not exceed the value specified as per IS 4665 Part (i) of 1984 with relevant to the insulation standard of the tool.

### 4.7 Cable

4.7.1 The tool should be supplied with 10 metres<sup>2</sup> core PVC work shop flexible cable size 1.5 mm<sup>2</sup>.

4.7.2 The core colour should be black and red the cable should meet with IS -694 Standard IS No. size and make should be engraved on the cable at each meter.

4.7.3 The tool should be provided with industrial type 10 Ampere metallic plug top.

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## 5.0 OTHER FEATURES

- 5.1 Machine should have fail proof auto stop carbon brushes to avoid premature failure of armature.
- 5.2 The maximum weight of machine should not be more than 1.9 kg.
- 5.3 Hand grip size should be very convenient to the operator.
- 5.4 The name plate of the tool should be permanently fitted on the body of the tools with rivets.
- 5.5 It should include the general tools required for operational fitment time to time.
- 5.6 Whole body of the machine should be made with unbreakable fiber.

## 6.0 CONCOMITANT ACCESSORIES

- 6.1 The tenderer shall supply a list of concomitant accessories, which will be supplied along with the machine. The cost of each listed concomitant accessory should be quoted separately. Wherever for any reason the cost of any concomitant accessory is included in the basic price of the machine, the same should be specifically mentioned.
- 6.2 Any other accessory, which in the opinion of the tenderer can contribute to higher production rates, should be indicated and quoted separately.

## 7.0 OPTIONAL ACCESSORIES AND SPARES

- 7.1 The tenderer should furnish details of optional accessories & spares covered under warranty.
- 7.2 The tenderer should be furnishing the price list of optional accessories & spare parts required for two years normal maintenance of the equipment.
- 7.3 List of recommended optional accessories & spares for normal maintenance after expiry of warranty period to till useful life of the equipment.
- 7.4 Life estimated/expected for each equipment and its sub assembly.

## 8.0 OPERATING CONDITIONS

The equipment shall be capable to operate at temperature 0°C. to +50°C, Relative Humidity 98% max.

## 9.0 COMMISSIONING AND PROVING OUT

- 9.1 The successful tenderer shall have to commission the machine within 15 days from the date of receipt of machine at RCF, Kapurthala.
- 9.2 The successful tenderer shall have to prove out the performance of the machine at RCF premises to the entire satisfaction of the consignee.

## 10.0 TRAINING OF STAFF

The training for operation, maintenance and trouble shooting of the Equipment shall be provided to 3 persons of RCF to their full satisfaction free of cost at RCF, Kapurthala.

## 11.0 ELIGIBILITY CRITERIA

- 11.1 The tenderer shall be registered on IREPS website ([www.ireps.gov.in](http://www.ireps.gov.in)) to participate in the tendering process.
- 11.2 The tenderer shall have established quality control system and organization to ensure the supply of good quality products to the purchaser.

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11.3 The tenderer shall provide a performance statement giving a list of major supplies of same/similar equipments effected in last 5 years to the reputed organizations giving details of the order no. and date and the quantity supplied and whether the supply was made within the delivery schedule. Such period shall be reckoned from the date of opening of tender.

11.4 References must be given to prove that the instrument model quoted is latest one and has earlier been installed at least 03 locations and has been successfully operating for last 02 years.

Tenderer not submitting the requisite information may note that his offer is liable to be ignored.

12.0 **DEVIATION**

The tenderer should clearly certify that the machine offered fully meets the specification various design features incorporated in the machine to fulfill different technical performance requirements should be fully explained in the offer. However, minor deviations from this specification, which do not affect or in any way interfere with the stipulated performance standards, or would result in improved safety/reliability or would reduce recurring maintenance/operating cost of the machine, can be considered for acceptance.

13.0 **AFTER SALES SERVICE**

Supplier should be able to repair and supply various spares required from time to time and should able to attend the problems with respect to equipment supplier should also be able to calibrate the equipment as required by the user.

14.0 **TECHINCAL LITERATURE:-**

The supplier shall supply the following manuals:

- |  |           |
|--|-----------|
| a) Operating / Maintenance Manuals       | 03 copies |
| b) Spare Part Manuals with Price list    | 03copies  |
| c) Electric /Electronic Circuit diagrams | 03 copies |
| d) Safety Manuals                        | 03 copies |

15.0 **SPECIAL FEATURES**

Special features incorporated into the machine, if any shall be indicated separately by the tenderer, clearly indicating the advantage of these features.

16.0 **MAKE**

16.1 The supplier shall furnish the complete details of Model No. Make & Manufacturer's details/ address, Country and authorization details of Dealership.

16.2 The firm shall provide the calibration certificate of National / International Traceability along with validity of at least two years.

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## 17.0 SERVICING FACILITIES

- 17.1 The tenderer shall clearly spell out in the offer about the facility available with him or his agent/dealer for providing adequate after sales service in Punjab during warranty period.
- 17.2 The tenderer shall also indicate the service organization located at various places in India and availability of trained staff, maintenance spares etc.
- 17.3 The contractor shall give a comprehensive spare part list with OEM details and price for all the sub systems.
- 17.4 The tenderer/contractor shall provide list of spares, consumables required for maintenance for 5 years after completion of warranty period
- 17.5 For maintenance during warranty following criteria shall be considered.
- Service engineer of the supplier shall be available for attending to the system faults during first 07 days after successful commissioning of equipments during 09.00 - 17.00 hrs on all working days including Saturdays.
  - Service engineers shall visit RCF on quarterly basis thereafter till the end of warranty/extended warranty period for Preventive Maintenance at least for one full day at a time.
  - In case of any breakdown affecting the performance of the system completely or partly, firm shall depute its service engineer as soon as and when informed by any suitable means like Fax, SMS or email possible after receiving such call.
  - Breakdown period shall be calculated from 8 hours after it's reporting to the firm upto the time it is attended. If intimation to the firm is delayed from Railway's side, then the breakdown period calculation will start from the time by which it is reported to the firm.
- 17.6 Total up time of the system should be at least 90%. Up time shall be counted in following manner:-
- Total breakdown of less than 8 hours shall be ignored for the purpose of this calculation.
  - Penalty may be imposed if the down time is more than 10% without any valid reasons. The levy of token penalty as deemed fit based on the merit of the case may also be consider as per clause 17 (b) of GCC -201.
- 17.7 Warranty period for part or machine shall be extended after completion of warranty period by the duration under which the part or machine remains under breakdown during warranty.
- 17.8 Tenderer shall provide list of spares, consumables required for maintenance for 5 years after completion of warranty period as per annexure-A
- 17.9 Tenderer shall provide expected life for the components of the system and provide the maintenance schedule required for 10years for as per annexure -A
- 17.10 Tenderer shall provide the service charges /per day/per man for deputing service engineer on the machine on requirement separately for Indian and Foreign engineer.

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**18.0 SCHEDULE OF ANNUAL MAINTENANCE CONTRACT (AMC) FOR PERIOD OF 5 YEARS AFTER COMPLETION OF WARRANTY PERIOD**

- 18.1 Tenderer shall provide proposal for 5 year Annual Preventive Maintenance schedule to be executed after completion of warranty period in the format as per annexure-B.
- 18.2 The firm shall maintain the machine in good working condition during the contract period and shall correct the fault or failures, repair or replace the worn or defective parts/equipment during the normal working hours of shop where the equipment has been installed. Unserviceable parts/equipment need to be replaced at no extra cost with brand new parts/equivalent or superior specification.
- 18.3 The firm shall respond by deputing service personal to oral / telephonic/ or other modes of intimation for repair and maintenance of the said machines [within 2 hours](#).
- 18.4 The firm shall ensure that the machine is in proper working condition, to the full capacity, after repair and maintenance.
- 18.5 To have a timely supply of spares during AMC, the contractor shall furnish a total list of spares which should contain list of spares that shall be arranged by the firm, both chargeable, duly mentioning the charge against each item, and spares which shall be non-chargeable, and list of spares to be held by RCF.
- 18.6 The contractor shall clearly list-out the list of consumables required for day-to-day operation of the machine. It shall be the scope of RCF to arrange the consumables once the completion certificate is issued for the retrofitted machine.
- 18.7 The tenderer/contractor shall provide suitable standby when repairs exceeds 2 hours. When any equipment is taken for repair to the tenderer/contractor's premises suitable standby equipment should be provided.
- 18.8 Besides attending the breakdown calls, the firm shall attend to the corrective and preventive maintenance of the machines once in a month.
- 18.9 The AMC is valid for five years from the date of completion of the warranty period . No freight is admissible.
- 18.10 During the AMC period, whatever equipment is defective shall be handed over to RCF. During completion of the AMC period the machines should be handed over in full working condition to its full capacity.
- 18.11 The firm should maintain a register duly indicating the nature of defects and repair attended and got signed by RCF authority. Preventive maintenance schedule should be made. The schedule should be made in such a way that more than one machine should not be attended on the same day. A copy of the schedule should be given to RCF at the beginning of the AMC and the schedule should be strictly followed and on carrying out the preventive maintenance the same should be entered in the register and got signed by RCF authority.
- 18.12 AMC charges shall be paid quarterly as one quarter of the total AMC charges applicable for that year on submission of bills duly certified by the engineers in charge with regard to the satisfactory execution of AMC during the period for which the bill is claimed. Income tax @ 2% or service tax as applicable at the time of payment shall be deducted at source.

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ANNEXURE-A

S.N.	Item	Part No.	Service Life	Price

Annexure –B

S.N.	Year	AMC Charges
1.	IST YEAR	
2.	IIND YEAR	
3.	IIIRD YEAR	
4.	IVTH YEAR	
5.	VTH YEAR	

**19.0 WARRANTY**

The warranty condition of contract will be as per IRS conditions or as quoted by the tenderer whichever is later.

**Note:** Tenderer to furnish following detail of the Drilling Machine offered

S.no.	Technical Parameter	Offered by Tenderer

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