

**SPECIFICATION OF DEEP SEARCH MINE/METAL DETECTOR.**

| <b>Sl. No.</b> | <b>Specifications</b>  |
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| 1.             | <b>Detector technology</b><br>Pulse Technology / Micro Processor or Microcontroller Based.   |
| 2.             | <b>Detection Capability</b><br>(i) Should be able to detect both ferrous and non-ferrous metals.<br>(ii) Should be able to detect separately two metal pieces placed closed to each other.<br>(iii) Should be able to detect small object placed near the large metal object with separate indication for both.<br>(iv) Should be able to localize with double tone pin pointing and static direction i.e. the center of target correspondence to tone Change and should not require the movement of the head.   |
| 3.             | <b>Detection range</b><br>Should be able to detect<br>(i) 15 gram steel – at the depth of at least 15 cm<br>(ii) 50 mm nail – at the depth of at least 20 cm<br>(iii) 50 paise coin – at the depth of at least 20 cm<br>The exact position of the metal should be pin pointed.   |
| 4.             | <b>Construction</b><br>Rugged construction, must be fully sealed, Waterproof and submersible in water. The equipment should be able to work effectively in all types of soils and water conditions. Wiring should be concealed. Should be foldable for being carried in a bag / case. Rod should extend from 75 cm, to 180 cm.   |
| 5.             | <b>Control Units</b><br>Microprocessor/Microcontroller based system with the provision of self-diagnostic and automatic correction methods, without any delay.   |
| 6.             | <b>Deployment Time</b><br>The equipment should be ready to operate in less than one minute.  |
| 7.             | <b>Operational Weight</b><br>Operational weight of the equipment, excluding the hard case should be less than 4 Kgs.   |
| 8.             | <b>Compensation</b><br>Should be able to compensate automatically against signals from conducting soil and near by metallic objects like pipes / poles etc.  |
| 9.             | <b>Alarm</b><br>Audio and visual LED alarm and LCD to display bar graph of object detection and battery status. There should also be light weight earpiece for listening to audio alarm.   |
| 10.            | <b>Power Requirement</b><br>Internal rechargeable battery which should have protection against reverse polarity. Battery should cater to minimum 8 hours operation before needing recharge. Battery should be hermetically sealed and separate from the electronic circuit. Routine operation at 220 V ac 50 Hz.   |
| 11.            | <b>Carrying Case</b><br>The casing shall be compact, portable and light weight.  |
| 12.            | <b>Weather</b><br>The equipment should be able to operate in – 10 <sup>0</sup> C to 55 <sup>0</sup> C and also in 95% humid conditions.  |
| 13.            | Easy routine maintenance and user friendly operation.  |
| 14.            | <b>Guaranty/Warranty – 3 Years.</b> Sufficient spares should be available in stock with the supplier and certificate for availability of spares in Chandigarh for at least 7 years after the warranty period.  |
| 15.            | <b>Live Demonstration :-</b> As a part of technical evaluation of bids, the bidders shall arrange presentation and live demonstration of their quoted equipments/items within a period of 7 to 10 days from the opening of technical bids to show that they fully conform to this quotation. The bidders will be intimated the exact date and time slot for them to carry out such demonstration. The bidders are advised to make all necessary arrangements for the live demonstration of their equipments well in advance as they will be required to adhere to the time schedule given to them soon after bid opening/ technical bid evaluation.  |
| 16.            | <b>Miscellaneous –</b> The firm should be able to provide the following alongwith the equipment :-<br>1. One test sample for each machine for testing during commissioning and during maintenance. Training tools-charts, slides, training brochure, training work model, blow up diagram, video films on demonstrations and use etc.<br>2. Technical manual giving full description of the item practical training at least 4 times in a year continuing during warranty period.<br>3. User's handbook and literature on preservation/maintenance as applicable.<br>4. Procedure for packing, handling, transportation, storage and battery replacement.<br>5. <b>The following information is also required:</b><br>(a) Attach Annexure – List of the Institution where your product has been Installed along with satisfaction report of the users.<br>(b) Provide Technical Specification of your product brochure.<br>(c) Also informed your term & condition regarding annual maintenance of the entire equipment for all 07 (seven) years after expiry of the Warrantee period. |