

QRs OF MOTORIZED SLIDING GATE WITH OPEN PROTOCOL AND SAFETY MECHANISMS

| SN | Technical Features | Specification |
|-----|-------------------------------|--|
| 01 | Features of Gate | <p>i) Gate of material should be Steel (MS/SS to be specified by User), and should have standard design for use in government premises.</p> <p>ii) The gate leaf should comprise rectangular hollow section/square hollow section, square bars and perimeter frame of sufficient strength.</p> <p>iii) The gate should be supported by MS/SS(to be specified by User) adjustable upper guide bracket with bearing, guide post with safety strike, 4" MS/SS wheels (to be specified by User) with ball bearings and axle with lubrication point. The track should be 25mm toughened MS/SS (to be specified by User) bar mounted on top of a 4" wide MS/SS (to be specified by User) plate of adequate strength.</p> <p>iv) The gate should be coated with epoxy primer.</p> <p>v) The dimension of the gate and weight ($\pm 10\%$) shall be determined by user as per their requirements (For calculation Standard weight chart is enclosed).</p> <p>vi) The complete system should be sustainable for smooth operation of the gate.</p> <p>vii) The gate system should have electromechanical operation.</p> <p>viii) It should have non reversing system by an electric break to prevent movement of sliding leaves when the motor is stopped.</p> <p>ix) The gate sliding rail must be linear and horizontal.</p> |
| 02. | Operational features of Motor | <p>i) It should be capable to operate industrial sliding gate weighing up to weight of the gate defined by user or more.</p> <p>ii) Speed of motor could be fixed/adjustable as per the requirement of user with a minimum speed of 12mts/m.</p> <p>iii) It should be ideal for fast operation and continuous duty.</p> <p>iv) It should have reversible gear motor with electric brake.</p> <p>v) It should have frequency Invetter for programming of</p> <p>a) Running Speed.</p> <p>b) Deceleration Speed.</p> <p>c) Ramp-up time (acceleration)</p> <p>d) Ramp-down time (deceleration)</p> <p>vi) The control panel should be integrated and protected by metal housing and fibre cover for all weather operation.</p> <p>vii) There should be slot holes and height adjustment pins for adjusting position of the motor.</p> <p>viii) The motor should have adequate covering for all weather protection.</p> |

| | | |
|---|-----------------------------|--|
| | | <p>ix) In the event of power failure, it should be possible to move the gate manually and the manual release device can be activated from the outside of the motor without removing the cover.</p> <p>x) Rack of galvanized steel as per the length of the gate</p> <p>xi) Operation of Gate through push button and remote</p> <p>xii) Photocell should be provided for the safety of the vehicle/pedestrians during the operation of the Gate</p> <p>xiii) Flash light during the operation of the Gate.</p> |
| 3 | Technical features of motor | <p>a) Power supply 230v~(+/-5%), 50Hz</p> <p>b) Use temperature (°C) -10 to +55 deg °C.</p> <p>c) Protection class IP 44 or better.</p> |



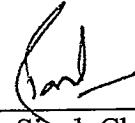
(Subhash)
SI/RM/BSF



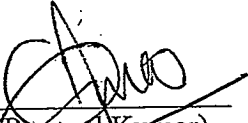
(Jeet Singh)
Insp/ITBP



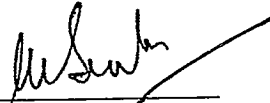
(Jeet Singh)
NB/Sub Comm./AR



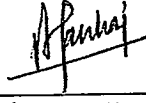
(Ravindra Singh Chauhan)
Asstt. Commandant/NSG



(Pramod Kumar)
Asstt. Commandant/SSB



(Krishna Kant Sinha)
SSA/BPR&D



(Abhiram Pankaj)
2I/C/CRPF



(Sanjay Prakash)
DIG/GBS/CISF



ADG/HQ

CISF

(Chairman)

Approved/Not Approved



DG/BSF

TRIAL DIRECTIVES OF MOTORIZED SLIDING GATE WITH OPEN PROTOCOL AND SAFETY MECHANISMS

| SN | Technical Features | Specification | Trial Directives |
|-----|-------------------------------|--|---|
| 01 | Features of Gate | <p>i) Gate of material should be Steel (MS/SS to be specified by User), and should have standard design for use in government premises.</p> <p>ii) The gate leaf should comprise rectangular hollow section/square hollow section, square bars and perimeter frame of sufficient strength.</p> <p>iii) The gate should be supported by MS/SS(to be specified by User) adjustable upper guide bracket with bearing, guide post with safety strike, 4" MS/SS wheels (to be specified by User) with ball bearings and axle with lubrication point. The track should be 25mm toughened MS/SS (to be specified by User) bar mounted on top of a 4" wide MS/SS (to be specified by User) plate of adequate strength</p> <p>iv) The gate should be coated with epoxy primer.</p> <p>v) The dimension of the gate and weight ($\pm 10\%$) shall be determined by user as per their requirements (For calculation Standard weight chart is enclosed).</p> <p>vi) The complete system should be sustainable for smooth operation of the gate.</p> <p>vii) The gate system should have electromechanical operation.</p> <p>viii) It should have non reversing system by an electric break to prevent movement of sliding leaves when the motor is stopped.</p> <p>ix) The gate sliding rail must be linear and horizontal.</p> | To be physically checked by BOO. |
| 02. | Operational features of Motor | <p>i. It should be capable to operate industrial sliding gate weighing up to weight of the gate defined by user or more.</p> <p>ii. Speed of motor could be fixed/adjustable as per the requirement of user with a minimum speed of 12mts/m.</p> <p>iii. It should be ideal for fast operation and continuous duty.</p> <p>iv. It should have reversible gear motor with electric brake.</p> <p>v. It should have frequency Inverter for programming of</p> <p>a) Running Speed.</p> <p>b) Deceleration Speed.</p> <p>c) Ramp-up time (acceleration)</p> | To be physically checked by BOO and firm to provide undertaking in this regard. |

| | | | |
|---|-----------------------------|---|---|
| | | <p>d) Ramp-down time (deceleration)</p> <p>vi. The control panel should be integrated and protected by metal housing and fibre cover for all weather operation.</p> <p>vii. There should be slot holes and height adjustment pins for adjusting position of the motor.</p> <p>viii. The motor should have adequate covering for all weather conditions.</p> <p>ix. In the event of power failure, it should be possible to move the gate manually and the manual release device can be activated from the outside of the motor without removing the cover.</p> <p>x. Rack of galvanized steel as per the length of the gate</p> <p>xi. Operation of Gate through push button and remote</p> <p>xii. Photocell should be provided for the safety of the vehicle/pedestrians during the operation of the Gate.</p> <p>xiii. Flash light during the operation of the Gate.</p> | |
| 3 | Technical features of motor | <p>a) Power supply 230v~(+/-5%), 50Hz</p> <p>b) Use temperature (°C) -10 to +55 deg °C.</p> <p>c) Protection class IP 44 or better.</p> | To be physically checked by BOO and firm to provide national/international accredited lab certificate in reference to point |



(Subhash)
SI/RM/BSF



(Jeet Singh)
Insp/ITBP



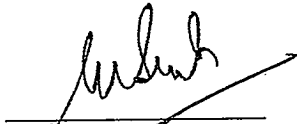
(Jeet Singh)
NB/Sub Comm./AR



(Ravindra Singh Chauhan)
Asstt. Commandant/NSG



(Pramod Kumar)
Asstt. Commandant/SSB



(Krishna Kant Sinha)
SSA/BPR&D



(Abhiram Pankaj)
2I/C/CRPF



(Sanjay Prakash)
DIG/GBS/CISF



ADG/HQ
CISF
(Chairman)

Approved/Not Approved

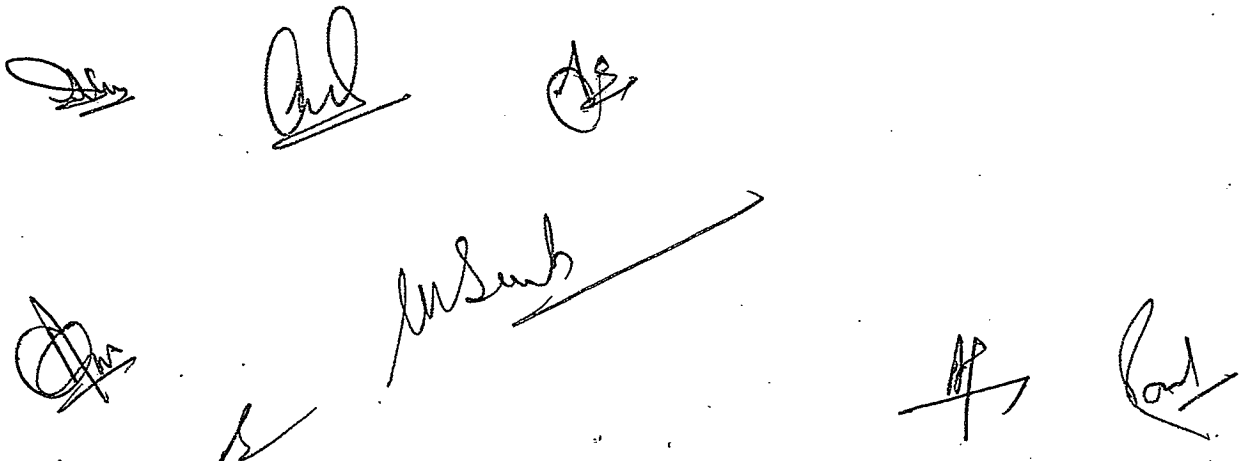


DG/BSF


**QRS/TECHNICAL SPECIFICATION OF MOBILE RAISED OBSERVATION
POST(MROP)**


109


| SL No | TECHNICAL SPECIFICATION |
|-------|--|
| 01 | The Mobile raised observation post proposed shall have two portions i.e. the Cabin and base structure. Cabin shall be made of 70 mm thick GI sheet sandwich panels with allowance of entry gate & windows at required places/locations. |
| 02 | The cabin shall be mounted/integrated/fixed upon the base structure and the total unit shall be held to enable the unit move on plain concrete surface or the likewise surface. |
| 03 | The Mobile raised observation post shall have one GI-sandwich panel made (3"~2.8" thick) watch cabin of size 4'X4'X8' (H); having slope roofing (like hut) that would be mounted on MS angle framed 'base structure'. |
| 04 | The Mobile raised observation post cabin shall have one door, three windows (2'X2') with shutter glass panels on three walls at a height of 4 ft from the base (for air circulation and clear line of sight). There should be sufficient port for firing on each shutter windows. There should be provision of MS railing on four sides of the cabin for preventing falling and other obvious security-cum-ease reasons. |
| 05 | Inside of the Mobile raised observation post shall be provided one 12" wall fixed fan of any standard make, two LED points for light, one point (Switch + socket) each for 15 AMP and 5 AMP. |
| 06 | At exterior of the Mobile raised observation post shall provide four LED points for light on all its four sides. All the LED light should be able to illuminate 1380 Sq Ft area and compatible solar panel, battery/Inverter be provided for illumination of the aforesaid mentioned area. The details are as under:- i. Four 18 to 20 watt LED luminous which will cover the each side 345 Per sq ft and total area of 1380 sq ft. ii. Battery 500 AH. iii. Solar panels of 250 watts 2 Nos. iv. 850VA/12V inverter. Place for installation of the inverter should be designed in the beneath of cabin for safety purpose. v. All lights will be auto timer switch off/on. |
| 07 | All the control panel shall be provided inside of the Mobile raised observation post cabin. |
| 08 | All the electrical arrangements mentioned above will be fixed to one main pair of wire which shall be left outside of the Mobile raised observation post cabin that can be attached to the mains to make it operational. |
| 09 | The base structure shall be made of MS angle as per the sketch work mentioning size and other required specifications (Drawing attached). |
| 10 | The cement board of 18 mm thickness shall be fixed upon the base structure to form the landing platform. |
| 11 | The landing platform shall be a height of 8' from the ground level including the height of base wheels of 8". |

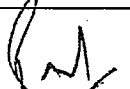



| | |
|----|---|
| 12 | <p>Design of Wheels -</p> <p>a) The MROP should be portable for which the wheels have to be attached it. The wheels have to be compatible and design to ensure safety i.e. to make it stable with the break provision/ OR any attachment in all legs of the MROP to avoid any incidental happening/injury to the persons.</p> <p>b) Wheels should be designed strongly, compatible with MROP, and smoothly movable to carry MROP from one place to another place.</p> <p>c) 4 caster set made of PVC with an encasing made of steel (each caster of 8" dia) fixed to cabinet unit and the ladder system to sustain a combined load of base and cabin.</p> <p>d) 4 stopper rods compatible to the wheels attached as an additional support</p> |
| 13 | <p>Specification of Ladder : Ladder should be provided in detachable mode along with wheel provision, which can be fixed and removed with the mobile observation post as per the requirement. The detailed specifications are as under</p> <p>a) Height of Ladder - 8 Feet or compatible from ground to the upper landing platform of the guard cabin.</p> <p>b) Steps of the Ladder Should be made of MS angle having dimension of 2 Ft wide and 3mm thickness. All the steps should be placed in the ladder with equal distance from each other with maximum span of 1Ft.</p> <p>c) All the steps should be supported with MS angle made compatible railing running to its both the sides from zero level till its top to avoid injury to the persons.</p> <p>d) Proper attachments such as Hooks are likewise should be made available at top of ladder for manual connecting and removal of it with MROPs landing base.</p> |

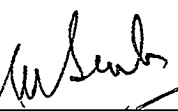

 (Subhash)
 SI/RM/BSF



 (Jeet Singh)
 Insp/ITBP

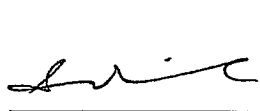

 (Jeet Singh)
 NB/Sub Comm./AR



 (Ravindra Singh Chauhan)
 Asstt. Commandant/NSG


 (Prasad Kumar)
 Asstt. Commandant/SSB


 (Krishna Kant Sinha)
 SSA/BPR&D


 (Abhiram Pankaj)
 2I/C/CRPF


 (Sanjay Prakash)
 DIG/GBS/CISF


 ADG/HQ
 CISF
 (Chairman)

Approved/Not Approved

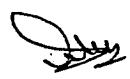

 DG/BSF


107


TRIAL DIRECTIVES OF MOBILE RAISED OBSERVATION POST(MROP)

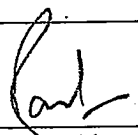
| SI No | Technical Specification | Trial Directives |
|-------|--|----------------------------------|
| 01 | The Mobile raised observation post proposed shall have two portions i.e. the Cabin and base structure. Cabin shall be made of 70 mm thick GI sheet sandwich panels with allowance of entry gate & windows at required places/locations. | To be physically checked by BOO. |
| 02 | The cabin shall be mounted/integrated/fixed upon the base structure and the total unit shall be held to enable the unit move on plain concrete surface or the likewise surface. | To be physically checked by BOO. |
| 03 | The Mobile raised observation post shall have one GI-sandwich panel made (3"~2.8" thick) watch cabin of size 4'X4'X8' (H); having slope roofing (like hut) that would be mounted on MS angle framed 'base structure'. | To be physically checked by BOO. |
| 04 | The Mobile raised observation post cabin shall have one door, three windows (2'X2') with shutter glass panels on three walls at a height of 4 ft from the base (for air circulation and clear line of sight). There should be sufficient port for firing on each shutter windows. There should be provision of MS railing on four sides of the cabin for preventing falling and other obvious security-cum-ease reasons. | To be physically checked by BOO. |
| 05 | Inside of the Mobile raised observation post shall be provided one 12" wall fixed fan of any standard make, two LED points for light, one point (Switch+ Socket) each for 15 AMP and 5 AMP. | To be physically checked by BOO. |
| 06 | At exterior of the Mobile raised observation post shall provide four LED points for light on all its four sides. All the LED light should be able to illuminate 1380 Sq Ft area and compatible solar panel, battery/Inverter be provided for illumination of the aforesaid mentioned area. The details are as under:- i) Four 18 to 20 watt LED luminous which will cover the each side 345 Per sq ft and total area of 1380 sq ft. ii) Battery 500 AH. iii) Solar panels of 250 watts 2 Nos. iv) 850VA/12V inverter. Place for installation of the inverter should be designed in the beneath of cabin for safety purpose. v) All lights will be auto timer switch off/on. | To be physically checked by BOO. |
| 07 | All the control panel shall be provided inside of the Mobile raised observation post cabin. | To be physically checked by BOO. |
| 08 | All the electrical arrangements mentioned above will be fixed to one main pair of wire which shall be left outside of the Mobile raised observation post cabin that can be attached to the mains to make it operational. | To be physically checked by BOO. |
| 09 | The base structure shall be made of MS angle as per the sketch work mentioning size and other required specifications (Drawing attached). | To be physically checked by BOO. |
| 10 | The cement board of 18 mm thickness shall be fixed upon the base structure to form the landing platform. | To be physically checked by BOO. |
| 11 | The landing platform shall be a height of 8' from the ground level including the height of base wheels of 8". | To be physically checked by BOO. |
| 12 | Design of Wheels - a) The MROP should be portable for which the wheels have to be attached it. The wheels have to be compatible and design to ensure safety i.e. to make it stable with the break provision/ | To be physically checked by BOO. |

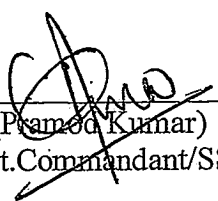
| | | |
|----|---|----------------------------------|
| | <p>OR any attachment in all legs of the MROP to avoid any incidental happening/injury to the persons.</p> <p>b) Wheels should be designed strongly, compatible with MROP, and smoothly movable to carry MROP from one place to another place.</p> <p>c) 4 caster set made of PVC with an encasing made of steel (each caster of 8" dia) fixed to cabinet unit and the ladder system to sustain a combined load of base and cabin.</p> <p>d) 4 stopper rods compatible to the wheels attached as an additional support</p> | |
| 13 | <p>Specification of Ladder : Ladder should be provided in detachable mode along with wheel provision, which can be fixed and removed with the mobile observation post as per the requirement. The detailed specifications are as under</p> <p>a) Height of Ladder - 8 Feet or compatible from ground to the upper landing platform of the guard cabin.</p> <p>b) Steps of the Ladder Should be made of MS angle having dimension of 2 Ft wide and 3mm thickness. All the steps should be placed in the ladder with equal distance from each other with maximum span of 1Ft.</p> <p>c) All the steps should be supported with MS angle made compatible railing running to its both the sides from zero level till its top to avoid injury to the persons.</p> <p>d) Proper attachments such as Hooks are likewise should be made available at top of ladder for manual connecting and removal of it with MROPs landing base.</p> | To be physically checked by BOO. |

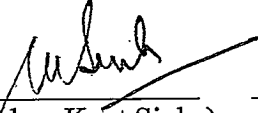

 (Subhash)
 SI/RM/BSF

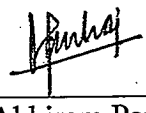

 (Jeet Singh)
 Insp/ITBP



 (Jeet Singh)
 NB/Sub Comm./AR

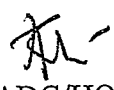

 (Ravindra Singh Chauhan)
 Asstt. Commandant/NSG


 (Pramod Kumar)
 Asstt. Commandant/SSB


 (Krishna Kant Sinha)
 SSA/BPR&D


 (Abhiram Pankaj)
 2I/C/CRPF


 (Sanjay Prakash)
 DIG/GBS/CISF


 ADG/HQ
 CISF
 (Chairman)

Approved/Not Approved


 DG/BSF