

No. IV-17012/34/2009/Prov-(S) - 503
Government of India/भारत सरकार
Ministry of Home Affairs/गृह मंत्रालय
Police Modernization Division/पुलिस आधुनिकीकरण प्रभाग
Prov.I Desk/संभरण-I डेस्क

26, Mansingh road, Jaisalmer House,
New Delhi, Dated: 06 August, 2013

To

DsG: AR(through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

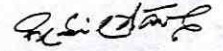
Subject : QRs/Specifications of Kerosene oil fired Bukhari complete with exhaust pipes.

The QRs/Specifications in respect of Kerosene oil fired Bukhari complete with exhaust pipes as per Annexure have been accepted by the Competent Authority in MHA.

2. Henceforth, all the CAPFs should procure the above items required by them strictly as per laid down Technical Specifications/QRs.

Encl: As above

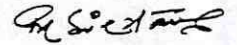
Yours faithfully,



(P. K. Srivastava)
Under Secretary to the Govt. of India
Tel: 23381278

Copy forwarded for necessary action to :-

(i) ✓ SO(IT), MHA : It is requested to host the QRs/Specifications (soft copy being sent through mail) on the MHA website (under the page of Organisational Set up-Police Modernisation Division- Qualitative Requirements)



(P. K. Srivastava)
Under Secretary(Prov.I)

Copy to: Director (Procurement), MHA
Copy for information to : PS to JS(PM)

Specification for kerosene oil fired bukhari complete with exhaust pipes


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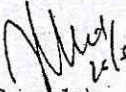
This specification covers the complete details of the following :

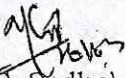
1. Parts used in the manufacture of kerosene fired oil bukhari along with their quantity.
2. Applicable reference documents.
3. Materials used for the manufacture of the parts along with the relevant IS specifications.
4. Manufacture and functionality of each part per bukhari set.
5. Dimensions and Weight.
6. Fuel consumption.
7. Tolerances.
8. Painting / coatings.
9. Workmanship and quality control.
10. Tests.
11. Proper packaging for safe transportation.
12. Sampling plan and criteria of conformity.
13. Operation manual.

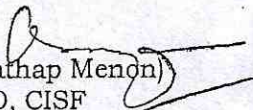
1. **Parts used in the manufacture of kerosene fired oil bukhari**


1. Fuel tank to hold the kerosene oil
2. Kerosene oil control valve (regulator) to control the flow of oil from the fuel tank into the burning chamber
3. Burning chamber in which the oil burns to give heat output
4. Metallic outer body to enclose the fuel tank and the burning chamber
5. Exhaust pipes to take the gases of combustion out of the room into the open air
6. Lighter to ignite the kerosene oil in the burning chamber
7. Scrapper rod to clean the burning chamber as and when required

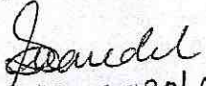

(M.M. Gosai)
Dy. SR, BPR&D
Representative


(Manish Bambla)
DC (Prov) CRPF
Representative

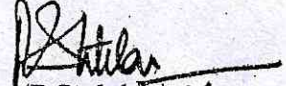

(N.S. Sodha)
DC (Prov), BSF
Representative



(Prathap Menon)
SAO, CISF
Representative



(D.N. Gaur) 28/6/13
Asstt. Director (QA)
Technical Member
DGS&D


(S.C. Mondal) 28/6
Director (QA)
Technical Member
DGS&D


(Lt. Col. Kaldeep Singh)
Assam Rifle
Representative


(P. Stobdan) 26/6/13
DIG (Prov), SSB
Representative


(S.R. Roy) 28/6/13
DIG (Prov), ITBP
Representative


(Prashant Kumar)
IG (Prov)
IT B Police

The complete part detail chart is tabulated below :

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S. No.	Nomenclature	Part No	Qty / Bukhari
1	Fuel tank of 10 litre capacity	00010	1
	1.1 Kerosene oil filter	00011	1
	1.2 Filter lid	00012	1
	1.3 Fuel guage meter	00013	1
	1.4 Open / Close plastic knob	00014	1
	1.5 Fuel control rod	00015	1
	1.6 Fuel control pin	00016	1
	1.7 Brass nipple for fuel outlet	00017	1
2.	Aluminium pipe (short) with both ends flared	00020	1
	2.1 Hexagonal Nut 17x19	00021	1
	2.2 Hexagonal Nut 14x19	00022	1
	2.3 O-Ring champered	00023	1
	2.4 O-Ring non-champered	00024	1
3	Aluminium pipe (long) with both ends flared	00030	1
	3.1 Hexagonal Nut 17x19	00031	1
	3.2 Hexagonal Nut 14 x33	00032	1
	3.3 O-Ring champered	00033	1
	3.4 O-Ring non-champered	00034	1
4	Oil Control Valve / Regulator	00040	1
5	Regulator Plate	00050	1
	5.1 M8 x 12 screws	00051	3
	5.2 Regulator Control Rod	00052	1
	5.3 Numbering Plate	00053	1
	5.4 Plastic Regulator Control Knob	00054	1
6	Heating Cylinder / Burning chamber	00060	1
	6.1 Cast Iron Lid and Frame	00061	1
	6.2 Kerosene oil burner	00062	1
	6.3 Burner Inlet Nipple	00063	1
	6.4 Burner Rings	00064	2
	6.5 Burner Rivets	00065	6
	6.6 Damming plate	00066	1
	6.7 Damming plate base support	00067	1
	6.8 Asbestos washer 3mm dia	00068	1
	6.9 Asbestos washer 6mm dia	00069	1

(Signature)
26/6/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

(Signature)
26/6
(Manish Bamola)
DC (Prov)CRPF
Representative

(Signature)
26/6/13
(N.S. Sodha)
DC (Prov), BSF
Representative

(Signature)
(Prathap Menon)
SAO, CISF
Representative

(Signature)
28/6/13
(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D

(Signature)
28/6
(S.C. Mondal)
Director(QA)
Technical Member
DGS&D

(Signature)
(Lt. Col Kuldeep Singh)
Assam Rifle
Representative


(Signature)
28/6/13
(P.Stobdan)
DIG (Prov), SSB
Representative

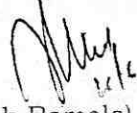
(Signature)
28/6/13
(S.R. Roy)
DIG(Prov), ITBP
Representative

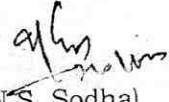
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(Prashant Kumar)
IG (Prov)
IT B Police

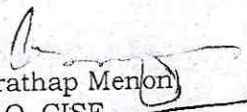
7	Lower Support for Heating Cylinder	00070	1
8	Reflector Plate	00080	1
9	Outer Frame Connecting Brackets	00090	2
10	Side Walls	00100	2
11	Base Plate Tray	00110	1
12	Cover Hood	00120	1
13	Front Panel	00130	1
14	Front Panel Bottom Hooks	00140	2
15	Back Wall	00150	1
16	Fuel Tank Partition Plate	00160	1
17	Cover Hood Hinges	00170	2
18	Scraper Rod	00180	1
19	Lighter Rod	00190	1
20	120 mm dia exhaust bend	00200	1
21	120 mm dia and 900 mm long exhaust pipe	00210	4
22	Exhaust cap cover	00220	1
23	Labels		
	23.1 Heat Output Label	00231	1
	23.2 Brand Label	00232	1
	23.3 Operating Instruction Label	00233	1
24	Operation Manual booklet	00240	1
25	Hardware - Screw Lock Patti	00250	40
26	Hardware - Screws	00260	40
27	Hardware - Split Pin	00270	2
28	Packing Box	00280	1
	28.1 Packing straps	00281	2
	28.2 Metal Clamps for polypropylene straps	00282	2
29	Breather Box	00290	1

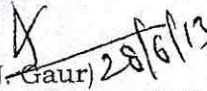
When an order is placed for the supply of kerosene fired bukharis, it shall be supplied complete with all the items mentioned in the above table.

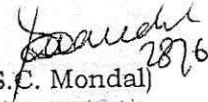

 (M.M. Gosal)
 Dy SP, BPR&D
 Representative



 (Manish Bamola)
 DC (Prov) CRPF
 Representative



 (N.S. Sodha)
 DC (Prov), BSF
 Representative

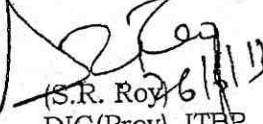

 (Prathap Menon)
 SAO, CISF
 Representative



 (D.N. Gaur) 28/6/13
 Asstt. Director (QA)
 Technical Member
 DGS&D


 (S.C. Mondal) 28/6
 Director(QA)
 Technical Member
 DGS&D


 (Lt. Col. Kuldeep Singh)
 Assam Rifle
 Representative


 (P. Stobdan) 26/6/13
 DIG (Prov), SSB
 Representative


 (S.R. Roy) 26/6/13
 DIG(Prov), ITBP
 Representative


 (Prashant Kumar)
 IG (Prov)
 ITB Police

2. Applicable Reference Documents

Reference is made in this specification to the following documents:-

- IS: 158 - 1981 Ready mixed paint, black and heat resistant up to 400°C
- IS: 277 - 2003 Galvanized steel sheet (plain)
- IS: 2062 - 1999 Mild Steel wire for general engineering purpose
- SWR -14 Bolts, Nuts, Rivets, Machine Screws etc
- IS: 1079 - 1988 Hot rolled carbon steel sheets and strips
- IS: 319 - 1989 Free cutting brass bars, rods and sections
- IS: 513 - 1994 Cold rolled carbon steel sheets and strips
- IS: 2102(PtI) 1980 General tolerances for dimensions, form and positions
- IS: 2500(PtII) 1992 Inspection by attributes and by count of defects
- IS: 4905-1968 Methods for Random Sampling
- CIGS/US/239 Labels carton
- IND/GS/1683 Polypropylene strapping
- IND/TC/2246 Asbestos Yarn
- JSS: 8115 - 1 Rigid collapsible boxes

Note : Latest IS specification / Defence specification / JSS as applicable should be prevalent.

(Signature)
21/6/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

(Signature)
21/6
(Manish Bamola)
DC (Prov) CRPF
Representative

(Signature)
(N.S. Sodha)
DC (Prov), BSF
Representative

(Signature)
(Prathap Menon)
SAO, CISE
Representative

(Signature)
28/6/13
(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D

(Signature)
28/6
(S.C. Mondal)
Director(QA)
Technical Member
DGS&D

(Signature)
(Lt. Col. Kulddeep Singh)
Assam Rifle
Representative

(Signature)
(P. Stobdan)
DIG (Prov), SSB/1912
Representative

(Signature)
26/6/13
(S.R. Roy)
DIG(Prov), ITBR
Representative

(Signature)
(Prashant Kumar)
IG (Prov)
I T B Police

3. Materials

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The kerosene fired oil bukhari shall be made from materials as stipulated in the table below and shall conform to the specifications quoted against each.

S. No.	Items / components	Part No	Material
1	Fuel Tank of 10 Litre capacity	00010	Cold rolled carbon steel sheets conforming to IS 513:1994
	1.1 Kerosene oil filter	00011	High density polyethylene
	1.2 Filter lid	00012	Polycarbonate IS
	1.3 Fuel guage meter	00013	Polycarbonate
	1.4 Open/Close plastic knob	00014	Polycarbonate
	1.5 Fuel control rod	00015	M.S Wire conforming to IS 270:1978
	1.6 Fuel control pin	00016	Free cutting steel conforming to SWR 14
	1.7 Brass nipple for fuel outlet	00017	Free cutting brass conforming to IS 319:1989
2	Aluminum pipe (short) with both ends flared	00020	Flexible aluminum tube coil (alloy and temper 1050F)
	2.1 Hexagonal Nut 17 x 19	00021	Free cutting steel conforming to SWR 14
	2.2 Hexagonal Nut 14 x 19	00022	Free cutting steel conforming to SWR 14
	2.3 O-Ring Champered	00023	Free cutting steel conforming to SWR 14
	2.4 O-Ring non-champered	00024	Free cutting steel conforming to SWR 14
3	Aluminum Pipe (long) with both ends flared	00030	Flexible aluminum tube coil (alloy and temper 1050 F)
	3.1 Hexagonal Nut 17 x 19	00031	Free cutting steel conforming to SWR 14
	3.2 Hexagonal Nut 14 x 33	00032	Free cutting steel conforming to SWR 14
	3.3 O-Ring Champered	00033	Free cutting steel conforming to SWR 14
	3.4 O-Ring non-champered	00034	Free cutting steel conforming to SWR 14
4	Oil Control Valve / Regulator	00040	
5	Regulator Plate	00050	Cold rolled carbon steel sheets 1.2 mm thick conforming to IS 513:1994
	5.1 M8 x 12 screws	00051	Free cutting steel conforming to SWR 14

P. Gosal
26/6/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

Manish Barnola
16/6/13
(Manish Barnola)
DC (Prov)CRPF
Representative

N.S. Sodha
26/6/13
(N.S. Sodha)
DC (Prov), BSF
Representative

Prathap Menon
26/6/13
(Prathap Menon)
SAO, CISF
Representative

D.N. Gaur
28/6/13
(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D

S.C. Mondal
28/6
(S.C. Mondal)
Director(QA)
Technical Member
DGS&D

Lt. Col. Kandeep Singh
(Lt. Col. Kandeep Singh)
Assam Rifle
Representative

P. Stobdan
26/6/13
(P. Stobdan)
DIG (Prov), SSB
Representative

S.R. Roy
26/6/13
(S.R. Roy)
DIG(Prov), ITBP
Representative

Prashant Kumar
(Prashant Kumar)
IG (Prov)
I T B Police

S. No.	Items / components	Part No	Material
	5.2 Regulator Control Rod	00052	Mild steel wire 5.0 mm thick conforming to IS 280- 1978
	5.3 Numbering Plate	00053	Anodized aluminum 0.8 mm thick
	5.4 Plastic Regulator Control Knob	00054	Polycarbonate
6	Heating Cylinder / Burning chamber	00060	Cold rolled carbon steel sheets 0.8 mm thick conforming to IS 513:1994
	6.1 Cast Iron Lid and Frame	00061	Grey Cast Iron
	6.2 Kerosene oil burner	00062	Cold rolled carbon steel sheets 0.8 mm thick conforming to IS 513:1994
	6.3 Burner Inlet Nipple	00063	Free cutting steel conforming to SWR 14
	6.4 Burner Rings.	00064	Hot rolled carbon steel sheets and strip 3.0 mm thick conforming to IS 1079-1988
	6.5 Burner Rivets	00065	Free cutting steel conforming to SWR 14
	6.6 Damming Plate	00066	Cold rolled carbon steel sheets conforming to IS 513:1994
	6.7 Damming plate base support	00067	Cold rolled carbon steel sheets conforming to IS 513:1994
	6.8 Asbestos washer 3mm dia	00068	Asbestos Yarn conforming to IND/TC/2246
	6.9 Asbestos washer 6mm dia	00069	Asbestos Yarn conforming to IND/TC/2246
7	Lower Support for Hating Cylinder	00070	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
8	Reflector Plate	00080	Cold rolled carbon steel sheets 0.8 mm thick conforming to IS 513:1994
9	Outer Frame Connecting Brackets	00090	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
10	Side Walls	00100	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
11	Base Plate Tray	00110	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
12	Cover Hood	00120	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
13	Front Panel	00130	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
14	Front Panel Bottom Hooks	00140	Cold rolled carbon steel sheets 1.0 mm thick conforming to IS 513:1994
15	Back Wall	00150	Galvanized sheet 0.8 mm thick conforming to IS 277-2003

Parul
 (M.M. Gosal)
 Dy SP, BPR&D
 Representative

Manish
 (Manish Bamola)
 DC (Prov) CRPF
 Representative

N.S. Sodha
 (N.S. Sodha)
 DC (Prov), BSF
 Representative

Prathap Menon
 (Prathap Menon)
 SAO, CISF
 Representative

D.N. Gaur
 (D.N. Gaur)
 Asstt. Director (QA)
 Technical Member
 DGS&D

S.C. Mondal
 (S.C. Mondal)
 Director(QA)
 Technical Member
 DGS&D

Lt. Col. Kuldeep Singh
 (Lt. Col. Kuldeep Singh)
 Assam Rifle
 Representative


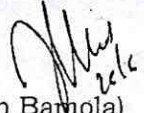
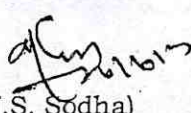
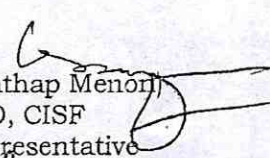

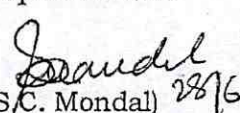


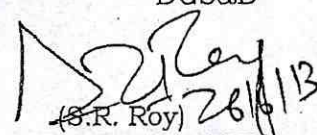

P. Stobdan
 (P. Stobdan)
 DIG (Prov), SSB
 Representative

S.R. Roy
 (S.R. Roy)
 DIG(Prov), ITBP
 Representative

Prashant Kumar
 (Prashant Kumar)
 IG (Prov)
 I T B Police

S. No.	Items / components	Part No	Material
16	Fuel Tank Partition Plate	00160	Galvanized sheet 0.8 mm thick conforming to IS 277 - 2003
17	Cover Hood Hinges	00170	Cold rolled carbon steel sheets conforming to IS 513:1994
18	Scrapper Rod	00180	Mild Steel wire 5.0 mm thick conforming to IS 280 - 1978
19	Lighter Rod	00190	Mild Steel wire 3.0 mm thick conforming to IS 280 - 1978
20	120 mm dia exhaust bend	00200	Cold rolled carbon steel sheets conforming to IS 513:1994
21	120 mm dia and 900 mm long exhaust pipe	00210	Cold rolled carbon steel sheets conforming to IS 513:1994
22	Exhaust cap cover	00220	Cold rolled carbon steel sheets conforming to IS 513:1994
23	Labels		
	23.1 Heat Output Label	00231	Anodized aluminum 0.5 mm thick
	23.2 Branch Label	00232	Plastic
	23.3 Operating Instruction Label	00233	Plastic Sticker
24	Operation Manual booklet	00240	Paper booklet
25	Hardware - Screw Lock Patti	00250	
26	Hardware - Screws	00260	Free cutting steel
27	Hardware - Split Pin	00270	
28	Packing Box	00280	2 ply corrugated cardboard box 3.0 mm thick
	28.1 Packing straps	00281	Polypropylene strips 11.5 mm wide and 0.9 mm thick conforming to IND/GS/1683
	28.2 Metal Clamps for polypropylene straps	00282	Hot rolled carbon steel sheets and strip 0.5 mm thick conforming to IS 1079-1988
29	Breather Box	00290	Cold rolled carbon steel sheets conforming to IS 513 : 1994

Note : Specific dimensions related to the bukhari needs to specify against each item / component mentioned above wherever is not specified.

 (M.M. Gosal) Dy. SP, BPR&D Representative	 (Manish Bamola) DC (Prov)CRPF Representative	 (N.S. Sodha) DC (Prov), BSF Representative	 (Prathap Menon) SAO, CISE Representative
 (D.N. Gaur) Asstt. Director (QA) Technical Member DGS&D	 (S.C. Mondal) Director(QA) Technical Member DGS&D	 (Lt. Col. Kandeep Singh) Assam Rifle Representative	 (P. Stobdan) DIG (Prov),SSB Representative
 (S.R. Roy) DIG(Prov), ITBP Representative		 (Prashant Kumar) IG (Prov) I T B Police	

4. Manufacture and functionality of each part bukhari set

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S. No.	Part Number	Manufacture	Functionality
1	00010	Fuel tank must be made of 0.8 mm CRC sheets and properly painted. The edges should be round and the welds joint be leak proof	To store kerosene oil. Its capacity should be at least 10 litres so as store allow the bukhari to run for at least 10 hours without refueling
2	00011	Injection moulded with stainless steel mesh	To filter the kerosene oil while it is being poured into the fuel tank.
3	00013	Injection moulded and then assembled	To display the amount of fuel left in the tank
4	00014	Injection moulded	To allow fuel to leave or shut off from the fuel tank
5	00015	Extruded	Connects the open / close knob to the fuel control pin
6	00016	Turning item	To open / close the brass nipple
7	00017	Turning item	To act as a connection between the fuel tank and aluminum pipe
8	00020	Ends flared	Transfer fuel from fuel tank to the oil control valve / regulator
9	00021	Turning item	To tighten the aluminum pipe to the brass nipple
10	00022	Turning item	To tighten the aluminum pipe with the regulator inlet
11	00023	Turning item	To prevent oil leaks at the flares of the aluminum pipe
12	00024	Turning item	To prevent oil leaks at the flares of the aluminum pipe
13	00030	Ends flared	Transfer fuel from regulator to the burner
14	00031	Turning item	To tighten the aluminum pipe to the burner nipple inlet
15	00032	Turning item	To tighten the aluminum pipe with the regulator outlet
16	00033	Turning item	To prevent oil leaks at the flares of the aluminum pipe
17	00034	Turning item	To prevent oil leaks at the flares of the aluminum pipe

Gosal
26/1/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

Manish
20/6
(Manish Bamola)
DC (Prov) CRPF
Representative

N.S. Sodha
26/1/13
(N.S. Sodha)
DC (Prov), BSF
Representative

Prathap Menon
(Prathap Menon)
SAO, CISF
Representative

D.N. Gaur
28/6/13
(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D

S.C. Mondal
28/6
(S.C. Mondal)
Director(QA)
Technical Member
DGS&D

Lt. Col. Kulddeep Singh
(Lt. Col. Kulddeep Singh)
Assam Rifle
Representative

P. Stobdan
26/6/13
(P. Stobdan)
DIG (Prov), SSB
Representative

S.P. Roy
26/1/13
(S.P. Roy)
DIG(Prov), ITBP
Representative

Prashant Kumar
(Prashant Kumar)
IG (Prov)
I T B Police

S. No.	Part Number	Manufacture	Functionality
19	00040	Bought out item	To control the flow of oil from the fuel tank into the burner and hence control the heat output of the bukhari
20	00050	Drawn from sheet metal	Oil control valve is to be mounted on this item
21	00051	Turning items (Hardware)	To fasten the oil control valve
22	00052	Extruded	To connect the oil control valve / regulator to the regulator control knob
23	00053	Aluminum (Anodized / Printed)	To display the regulator setting
24	00054	Injection moulded	To turn the regulator on / off and high / low
25	00060	Drawn from sheet metal	To enclose the flame
26	00061	Casting	To emit the heat into the room
27	00062	Drawn from sheet metal	Fuel combustion takes place
28	00063	Turning item	Connects the aluminum pipe to the burner for fuel transfer
29	00064	Drawn from sheet metal	Helps to heat up the burner
30	00065	Turning rivets	Support for the burner rings
31	00066	Drawn from sheet metal	Prevents flames and sparks from escaping into the exhaust pipes
32	00067	Drawn from sheet metal	Provides support to the damming plate
33	00068	Asbestos Yarn	Makes the cast iron frame leak proof to smoke
34	00069	Asbestos Yarn	Makes the cast iron lid leak proof to smoke
35	00070	Drawn from sheet metal	Provides support to the heating cylinder
36	00080	Drawn from sheet metal	Reflects the heat up from the burner bottom
37	00090	Drawn from sheet metal	Part of the outer frame and supports the cast iron and side walls
38	00100	Drawn from sheet metal	Provides the sides to the outer frame
39	00110	Drawn from sheet metal	Provides base support to the outer frame
40	00120	Drawn from sheet metal	Provides top cover to the outer frame

P. Gosai
 (M.M. Gosai)
 Dy. SP, BPR&D
 Representative

Manish Bamola
 (Manish Bamola)
 DC (Prov)CRPF
 Representative

N.S. Sodha
 (N.S. Sodha)
 DC (Prov), BSF
 Representative

Prathap Menon
 (Prathap Menon)
 SAO, CISE
 Representative

D.N. Gaur
 (D.N. Gaur)
 Asstt. Director (QA)
 Technical Member
 DGS&D

S.C. Mondal
 (S.C. Mondal)
 Director(QA)
 Technical Member
 DGS&D

Lt.Col Kuldeep Singh
 (Lt.Col Kuldeep Singh)
 Assam Rifle
 Representative

P. Stobdan
 (P.Stobdan)
 DIG (Prov),SSB
 Representative

S.R. Roy
 (S.R. Roy)
 DIG(Prov), ITBP
 Representative

Prashant Kumar
 (Prashant Kumar)
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S. No.	Part Number	Manufacture	Functionality
41	00130	Drawn from sheet metal	Provides frontal support of the outer frame
42	00140	Drawn from sheet metal	Secures the bottom of the front panel
43	00150	Drawn from sheet metal	Provides back support to the outer frame
44	00160	Drawn from sheet metal	Prevents heat from going towards the fuel tank
45	00170	Drawn from sheet metal	Helps to open and close the cover hood
46	00180	Extruded / drawn from sheet metal	Cleans the heating cylinder as and when required
47	00190	Extruded	To ignite the fuel initially
48	00200	Drawn from sheet metal	To take exhaust gases out of the room
49	00210	Drawn from sheet metal	To take exhaust gases out of the room
50	00220	Drawn from sheet metal	Protects the exhaust pipe from rain
51	00231	Anodized aluminum and printed	Displays heat output of the bukhari
52	00232	Plastic label	Displays the product name
53	00233	Plastic label	Displays ignition instructions
54	00240	Paper booklet	Gives complete installation and running details
55	00250	Drawn from sheet metal	Tightening of screws
56	00260	Turning item (hardware)	To assemble the bukhari
57	00270	Extruded (hardware)	Interlocking the regulator rod and the regulator
58	00280	Cardboard	For proper packing the bukhari
59	00281	Plastic	For tightening the packing box
60	00282	Drawn from sheet metal	To fasten the strap
61	00290	Drawn from sheet metal	To control the air inlet into the heating cylinder

Note : Part-wise drawing with dimension and detail are to be submitted by the tenderer keeping in view overall dimension of the main equipment with the tender.

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 Dy. SP, BPR&D
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(Signature)
 (Manish Bamola)
 DC (Prov)CRPF
 Representative

(Signature)
 (N.S. Sodha)
 DC (Prov), BSF
 Representative

(Signature)
 (Prathap Menon)
 SAO, CISF
 Representative

(Signature)
 (D.N. Gaur)
 Asstt. Director (QA)
 Technical Member
 DGS&D

(Signature)
 (S.C. Mondal)
 Director(QA)
 Technical Member
 DGS&D

(Signature)
 (Lt. Col. Kuldeep Singh)
 Assam Rifle
 Representative

(Signature)
 (P.Stobdan)
 DIG (Prov),SSB
 Representative

(Signature)
 (S.R. Roy)
 DIG(Prov), ITB
 Representative

(Signature)
 (Prashant Kumar)
 IG (Prov)
 I T B Police

5. Dimensions and Weight

The overall dimensions and the weight of the bukhari should consider the ease of transportation as a very important criterion. The bukahri should not be very heavy and very bulky so as to make transportation to far off places especially the high mountainous areas difficult. Keeping this in mind the overall outer dimensions and weight of the bukhari should be as under :

- Height of the bukhari < 75 cms
- Breadth of the bukhari < 60 cms
- Depth of the bukhari < 40 cms
- Weight of the bukhari < 38 kgs

6. Fuel consumption

The bukhari should have an efficient burner so that the fuel consumption at high heat output should not be more than 1 litre of kerosene oil per hour.

7. Tolerances

Unless otherwise specified normal engineering tolerances (coarse) shall be permitted as per IS: 2102 (Pt 1)- 1980.

8. Painting / coatings

All components (except the exhaust pipes, bends and cap) of the bukhari shall be coated from outside to prevent corrosion and rusting. The paint / coatings shall have to be heat resistant to at least 400° C so that the paint does not get damaged when the bukhari heats up. The exhaust pipes, bends and cap can be coated with a coating / paint that is heat resistant up to 100°C. The reason for this being that the exhaust gases are not very hot.

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<p><i>(Signature)</i> 28/5/13</p> <p>(D.N. Gaur) Asstt. Director (QA) Technical Member DGS&D</p>	<p><i>(Signature)</i> 28/5/13</p> <p>(S.C. Mondal) Director(QA) Technical Member DGS&D</p>	<p><i>(Signature)</i></p> <p>(Lt.Col Kuldeep Singh) Assam Rifle Representative</p>	<p><i>(Signature)</i> 28/5/13</p> <p>(P.Stobdan) DIG (Prov), SS Representative</p>
<p><i>(Signature)</i> 28/5/13</p> <p>(S.R. Roy) DIG(Prov), ITBP Representative</p>		<p><i>(Signature)</i></p> <p>(Prashant Kumar) IG (Prov) IT B Police</p>	

9. Workmanship and Quality Control


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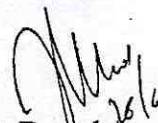
1. The bukhari and its components shall be finished smooth all over and shall be free from burrs, sharp edges, dents and other surface defects.
2. All components edges should be either drawn using dies and presses or the edges shall be perfect corners.
3. All welding joints shall be neat, continuous and free from porosity.
4. The fit and final assembly of all the components shall be proper and perfect.
5. All screws, rivets and other hardware items shall be tightened properly so that they don't become loose due to vibration that can take place during transportation in a truck.

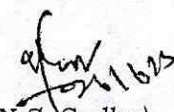
10. Tests


The bukhari shall be subjected to the following tests :


1. **Leak Test :** It is absolutely critical that the bukhari should not leak at any joint. Kerosene oil leak tests have to be performed for the fuel tank, the inlet and outlet aluminum pipes and the inlet at the burner.
2. **Performance Test :** The bukhari complete fitted with all the exhaust pipes and bends shall be subject to burning tests consisting of 6 hours of continuous burning (minimum). During burning the bukhari shall fulfill the following conditions :
 - a. Bukhari shall not show any signs of leakage of smoke through any joints.
 - b. There shall be no seepage of oil or oil vapour from nuts, pipes etc.
 - c. Flow of oil shall be controllable by the oil control valve / regulator.
 - d. There shall be no flash back of flame.
 - e. There shall be no sparks or flames going out of the exhaust pipes.
 - f. The heat flow shall be controllable from low heat to high heat.
 - g. The paint of the bukhari shall not burn or change colour at maximum heat output.
3. **Pressure Test:** The fuel tank of bukhari need to be leak proof so that there is not smell in the room and to reduce the risk of fuel catching the fire. To prevent any leak of fuel, fuel tank is tested at 1 kg/cm³ for any potential leak.

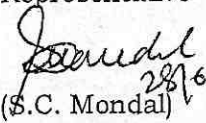

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Representative



(Manish Barola)
DC (Prov) CRPF
Representative

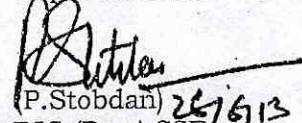

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DC (Prov), BSF
Representative

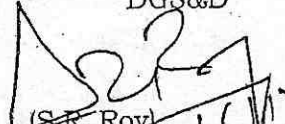

(Prathap Menon)
SAO, CISF
Representative



(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D


(S.C. Mondal)
Director(QA)
Technical Member
DGS&D


(Lt. Col. Ku/deep Singh)
Assam Rifle
Representative


(P. Stobdan)
DIG (Prov), SSE
Representative


(S.R. Roy)
DIG (Prov), TBP
Representative


(Prashant Kumar)
IG (Prov)
I T B Police

11. Proper packaging for safe transportation

Proper packaging of the bukaris is essential for its safe transportation. Each bukhari shall be packed in 2 ply cardboard box and properly strapped.

- a) Cardboard box rigid collapsible type D conforming to JSS:8115-1
- b) Polypropylene strapping 0.9 mm thick and 11.5 mm wide IND/GS/1683

12. Sampling plan and criteria of conformity

1. **Formation of lot.**

- a. The delivery shall be visually inspected by quality assurance officer at the spot in the first instance to ascertain its homogeneity in respect of nature, size, shape, source and year of manufacture. If it is homogeneous the delivery shall be treated as one lot. If not, it shall be segregated by the supplier into separate groups so that each group which is homogeneous within itself forms a lot.
- b. The supplier shall arrange the units of the homogeneous lot in such a way that all the units are easily accessible to the quality assurance officer to enable him to draw samples from any portion of the homogeneous lot.

2. **Sampling procedure**

Sampling of stores shall be done adopting appropriate sampling methods as per IS 4905-1968 so that samples drawn as per table I and table II given for assessing various quality requirements, are truly representative of the lot.

3. **Scale of sampling**

The number of samples - units to be drawn for assessing the quality of the store, characteristic wise, should be in accordance with the table I for dimensional / non destructive / visual inspection and table II for detailed laboratory testing.

(Signature)
26/6/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

(Signature)
26/6
(Manish Bamola)
DC (Prov)CRPF
Representative

(Signature)
26/6/13
(N.S. Sodha)
DC (Prov), BSF
Representative

(Signature)
(Prathap Menon)
SAO, CISF
Representative

(Signature)
28/6/13
(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D

(Signature)
28/6
(S.C. Mondal)
Director(QA)
Technical Member
DGS&D

(Signature)
(Lt. Col. Kuldeep Singh)
Assam Rifle
Representative

(Signature)
28/6/13
(P. Stobdan)
DIG (Prov), SSB
Representative

(Signature)
(S.R. Roy)
DIG(Prov), ITB
Representative

(Signature)
(Prashant Kumar)
IG (Prov)
ITB Police

Table I

(57)

Sampling plan indexed by limited quality (LQ) for visual inspection (based on 12.5% LQ)

Lot Size	Sampling Size (n)	Acceptance Number (a)
Up to 50	15	0
51 to 90	16	0
91 to 150	18	0
151 to 280	20	0
281 to 1200	32	1
1201 to 3200	50	3
3201 to 10000	80	5

Note : When 'n' exceeds the lot size use 100% inspection testing

Source : ISO: 2859/2 - 1985 (f), Sampling procedure for inspection by attribution Part 2, sampling plan indexed by Limited Quality (LQ) for isolated lot inspection.

Table II

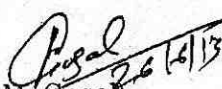
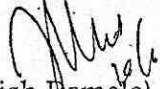
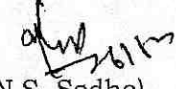

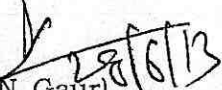
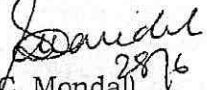




Sampling plan indexed by AQL for laboratory tests based on AQL 4% level S-3

Lot Size	Sampling Size (n)	Acceptance Number (a)
Up to 50	3	0
51 to 150	5	0
151 to 500	8	1
501 to 3200	13	1
3201 to 35000	20	2

Note : i) The rejection number (r) will always be one more than acceptance number (a)

ii) When the sampling size equals or exceeds lot size do 100% inspection / testing with zero acceptance number.

Source : IS: 2500 (Part I)- 1992: (Sampling Inspection Table)

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 (D.N. Gaur) Asstt. Director (QA) Technical Member DGS&D	 (S.C. Mondal) Director(QA) Technical Member DGS&D	 (Lt. Col Kuldeep Singh) Assam Rifle Representative	 (P. Stobdan) DIG (Prov), SSB Representative
 (S.P. Roy) DIG(Prov), ITBP Representative		 (Prashant Kumar) IG (Prov) I T B Police	

4. **Criteria of conformity**

- a) All the sample units as specified in Table I and II are required to be tested / inspected irrespective of the rejection number (=Ao+ 1) being achieved earlier.
- b) The lot shall be considered conforming to the specified quality if the number of defective units observed in the sample is not more than the respective acceptance number of each class of defects.
- c) When the sample size equals or exceeds lot size, do 100% quality assurance.
- d) The number of sample units to be sampled for laboratory testing should be a multiple of the number of /tests which cannot be carried out simultaneously on the same sample units.

5. **Sampling Inspection**

- a) The quality assurance officer shall draw samples as per the table I for dimensional / non destructive / visual inspection to assess the quality of the lot. If the quality of the lot indicates conformity to the standards as laid down in the table I, sampling for laboratory testing will be done. Otherwise the lot shall be straightway rejected.

6. **Sampling for laboratory testing**

- a) If the lot is considered conforming to the quality standards as specified in table I sampling for the laboratory testing shall be carried out as per table II and the samples shall be subject to the laboratory testing.

7. **Bulk Inspection**

- a) If the laboratory test report indicates that the lot does not conform to the standard as specified in table II, the whole lot shall be rejected. Otherwise the lot shall be inspected 100% thoroughly for workmanship, finish and other critical / major and visual defects. All the items found defective shall be rejected.

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26/6/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

Manish Bamola
16/6
(Manish Bamola)
DC (Prov)CRPF
Representative

N.S. Sodha
(N.S. Sodha)
DC (Prov), BSF
Representative

Prathap Menon
(Prathap Menon)
SAO, CISE
Representative

D.N. Gaur
28/6/13
(D.N. Gaur)
Asstt. Director (QA)
Technical Member
DGS&D

S.C. Mondal
28/6
(S.C. Mondal)
Director(QA)
Technical Member
DGS&D

Lt.Col Kuldeep Singh
(Lt.Col Kuldeep Singh)
Assam Rifle
Representative

P. Stobdan
26/6/13
(P. Stobdan)
DIG (Prov), SSB
Representative

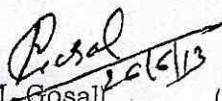
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(S.R. Roy)
DIG(Prov), ITBP
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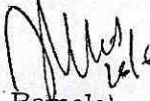
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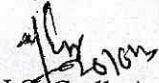
13. Operation Manual

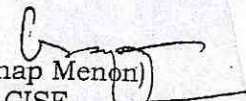
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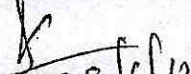
Each bukhari should be accompanied by a detailed operation manual with easy to understand diagrams on how to install it, operate it and maintain it.

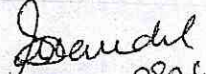

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Representative


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DC (Prov) CRPF
Representative

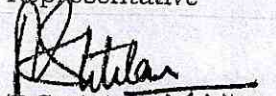

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DC (Prov), BSF
Representative



(Prathap Menon)
SAO, CISF
Representative



(D.N. Gauth) 8/6/13
Asstt. Director (QA)
Technical Member
DGS&D

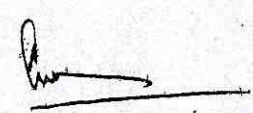

(S.C. Mondal) 28/6
Director (QA)
Technical Member
DGS&D


(Lt. Col Kundeeep Singh)
Assam Rifle
Representative


(P. Stobdan) 26/6/13
DIG (Prov), SSB
Representative

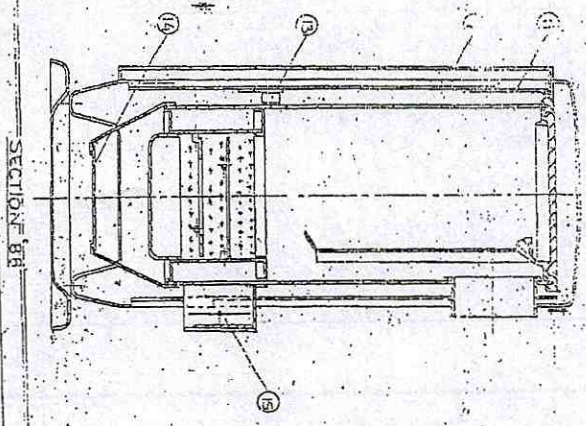
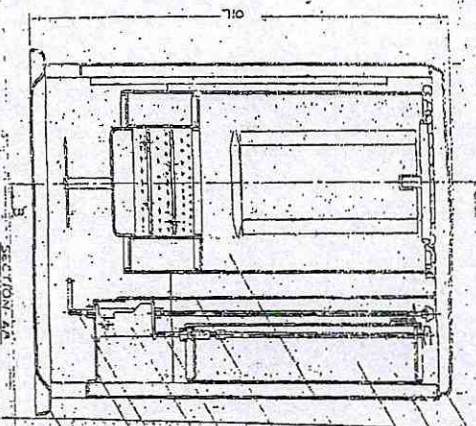
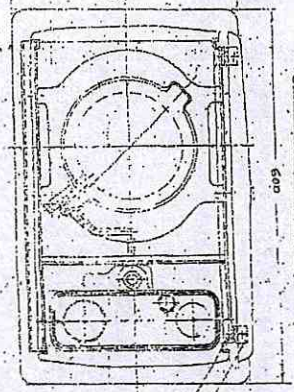

(S.R. Roy) 2/11/13
DIG (Prov), ITBP
Representative


(Prashant Kumar)
IG (Prov)
ITB Police


(AJAY CHADHA)
DG, ITBP
CHAIRMAN

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TOP VIEW WITHOUT COVER JBOX



ALL DIMENSIONS ARE IN MM

S/N	Nomenclature	QTY	Part No
1	Cover Head	1	00110
2	Slide Plate	2	00210
3	Fuel Tank	1	00210
4	Heating Cylinder	1	00210
5	Fuel Tank Partition Plate	1	00210
6	Alum. Pipe (Cover)	1	00210
7	Oil Control Valve	1	00210
8	Alum. Pipe (Long)	1	00210
9	Regulator Plate	1	00210
10	Base Plate (Box)	1	00110
11	Outlet Frame Cornibended	2	00210
12	FRONT Panel	1	00110
13	Lower Support for H.Cyl.	2	00110
14	Resticker Plate	1	00210
15	Breather Box	2	00110
16	Cover Holed Hinges	2	00110
17	Back Wall	1	00110

TITLE
KEROSENE OIL FIRED
GUN
GUN

[Signature]
28/6/13
(M.M. Gosal)
Dy. SP, BPR&D
Representative

[Signature]
(Manish Bamola)
DC (Prov) GRPF
Representative

[Signature]
(N.S. Sodha)
DC (Prov), BSF
Representative

[Signature]
(Prathap Menon)
SAO, CISF
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[Signature]
28/6/13
(D.N. Gaur)
Asstt. Director (OA)
Technical Member DGS&D

[Signature]
(S.C. Mondal)
Director(OA)
Technical Member
DGS&D

[Signature]
(A.C. Kulkarni)
Asstt. Dir.
Representative

[Signature]
(P. Stoodary)
Dir. (Prov), SIB
Representative

[Signature]
(S. S. S. S.)
Dir. (Prov), ITB
Representative

[Signature]
(Prasanth Kumar)
IG (Prov)
T-T B Police
Representative