SPECIFICATIONS FOR BODY PROTECTOR (SUIT)

INTRODUCTION

The purpose of this body suit is to protect the personnel from injuries caused during action. The suit should not hamper the mobility and agility of the person wearing it. It should be easy to wear without assistance from another person. It should be high impact resistant, fire retardant and resistant to common chemicals.

SPECIFICATIONS

PARTS OF THE SUIT

1. Torso with groin protector
2. Upper arm protector
3. Elbow protector in pair
4. Knee and shin guard in pair
5. Thigh guard belt complete with hip protection

SIZE

The size of the body suit kit should be such that they should fit in body height from 165 to 195 cm for male and 158 to 165 cm for female.

WEIGHT

The weight should not exceed 6 kg +/- 10%

TORSO PROTECTION

(i) The outer fabric should be made of fire retardant Polyurethane and inner made of impact resistant EVA foam of thick 4-5mm

(ii) The opening should be preferably at the back with adjustable nivar tape to fit any body shape and size.

GROIN PROTECTION

Necessary elastic tape must be stitched to the groin protector for safety and comfort.

ARM PROTECTION

(i) It should have a thickness of minimum 4mm EVA foam with shore hardness 35-40.
(ii) Inner lining should be of sweat absorbing mesh type fabric.
(iii) There should be elastic tape of one inch inside and 2 numbers of 1.5 inch stitched with Velcro adjustment for safe and comfortable fit
(iv) Total length of the arm protector should be not less than 15 inch.
SHIN PROTECTOR

(i) It should have a thickness of minimum 8mm EVA foam.
(ii) Inner lining should be sweat absorbing mesh type fabric.
(iii) There should be elastic tape of 1 inch inside and 2 numbers of 2 inch stitched with Velcro adjustment for safe and comfortable fit.
(iv) Total length of the shin protector should not be less than 22 inch.

GENERAL SPECIFICATIONS:

1. The suit should be light in weight.
2. It should be fire retardant.
3. The shape of the shoe fitting at shoulder should be such that both hands can be raised full stretch.
4. The Velcro cross should be used as far as possible at chest protector, shoulderand knee cap points.
5. It should be unbreakable; material used should be high Impact EVA foam and good enough to absorb the shock at the chest.
6. It should be made with high impact Ethylene Vinyl Acetate (EVA) foam, unbreakable, and tough, durable and to provide total body protection against stone projectiles, knife attack and ordinary chemicals.
7. It should be easy to wear, adjustable, should not restrict free movement of the limbs and comfortable to wear in all climates.
8. The suit should be made with inner lining, made of sweat absorbing fabric (detachable and washable)& provide neck to toe protection.
9. The suit should have a high level of flexibility.
10. The system should ideally be sized to fit any range or type of body shape.
11. The suit design should also allow emergency removal of the system from an injured user.
12. The Colour should be -Black/Dark Navy Blue
13. Carry bag should be made of Nylon
14. Chest Protector should have following features:-
   a) It should have neck protector and Groin protection attached to it.
   b) It should have an inner layer of knitted mesh, which is sweat absorbent and made of nylon.
   c) It should have 4mm - 5mm impact resistant rubber.
   d) The grow protector should be attached to the chest protector but it should be foldable.
15. The upper arm protector should be attached to shoulder pad with a back system so that it can be removed in emergency.
The department LOGO must be screen printed on the chest protector for easy identification in appropriate size and colour.

The body protector (suit) preferably with international standard CE/EN certified and the copy of the certification must be attached with the tender/demonstration.

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<tr>
<th>Name</th>
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<tr>
<td>Shri. ShefeenAhamed K., IPS</td>
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<td>Shri. Sugathan, DySP, CBCID, OCW I</td>
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