

SPECIFICATION RT57-08-02-01

SPECIFICATION FOR ARMoured SUV VEHICLES

1. GENERAL

- 1.1 The South African Police Service requires complete armoured SUV vehicles

2. SPECIFICATION

- 2.1 The Armouring must be as light as possible but be B6 compliant and be upgradable to STANAG level 1 on all vertical sides to stop the following calibre bullets and all lesser threats:
- a) 5,56 x 45 mm Nato Ball Lead core (R4, R5).
 - b) 7,62 x 39 mm Ball Mild Steel Core (AK-47).
 - c) 7,62 x 51 mm Nato Ball Lead Core (R1).
 - d) 7,62 x 39 mm API (AK-47).
- 2.2 The floor, roof and windows must be armoured with B6 compliant and be upgradable to STANAG level 1
- 2.3 Optional items for security of executives:
- a. Inside partitioning
 - b. Fire Suppression System
 - c. Oxygen

3. Cab Armouring

- 3.1 Multilayer transparent armoured windshield with a no-spall inner layer to protect occupants against glass spatter to windows, doors, roof, "A"- Pillars, "B"- Pillars, Multilayer transparent armoured windows and doors.
- 3.2 The side windows must be able to slide down halfway into the door.
- 3.3 Hinges and lifters must be custom made & reinforced for all doors.
- 3.4 Fuel tank, radiator, battery, and firewall must be ballistic protected.
- 3.5 Communication jacks for intercom system must be installed.
- 3.6 3 fire extinguishers to be provided and fitted in easily to reach places.
- 3.7 The armouring must give a good ergo-metric internal height.

4. Vehicle handling.

- 4.1 The armoured conversion must not hamper nor impair the driver's ability to handle the vehicle safely and with ease.

5. Suspension

5.1 Front.

- 5.1.1 Heavy-duty shocks and adjustable air-suspension system must be fitted.

- 5.2.1 Heavy-duty torsion bars / shafts must be fitted.

- 5.2.3 Reinforced front sway bars must be fitted.

5.2 Rear.

- 5.2.1 Heavy-duty shocks and adjustable air-suspension system must be fitted.

- 5.2.2 Additional leaf springs to be added (if designed with).

- 5.2.3 Reinforced back sway bars to be fitted.

6. Brake System.

- 6.1 High performance brake – custom-made brake rotors to disperse heat effectively and to accommodate the additional weight of the armour.

- 6.2 High performance brake pads to maintain brake performance with high heat at high speed.

7. Tyres and Rims.

- 7.1 Heavy Duty rims (5) per vehicle to be provided.

- 7.2 Heavy Duty Tyres (5) per vehicle Run flat capability.

- 7.3 State brand name and size:.....

- 7.4

8. Roof Pillars

- 8.1 Roof pillar A, B & C as per Cab Armouring.

9. Seat configuration & Load bay

- 9.1 2nd row further back option.

- 9.2 Tail gate/fifth door open options specified per vehicle with an option to be used as an escape door

10. Materials.

- 10.1 The South African Police Service will not supply any materials
10.2 The materials specified are to be supplied by the manufacturer.
10.3 A trim chart containing a sample must accompany the pre-production samples.

11. WORKMANSHIP AND PERFORMANCE STANDARD

- 11.1 The System (complete unit) to be:
11.2 Of uniform and acceptable make and colour.
11.3 In compliance with this specification and approved SABS / SANS Standards materials.
11.4 Free from defects, which affects their appearance and may affect their serviceability, marks, and spots, stains, incurred during production.
11.5 Material must be new and of acceptable grade and size.
11.6 Workmanship and finish must be of good quality.
11.7 Welding joints, full length or spaced, must be continuous, free from slag, and non-porous.
11.8 Special attention must be given to the cleaning of welding joints so that it is left free of slag, roughness holes, and weak joints.
11.9 All surfaces, including welding joints, must be cleansed of all dirt, scale, welding splutter, rust, and grease, before painting process starts.

12. PROTECTION AGAINST CORROSION:

- 12.1 All ferrous metal parts must be protected against rust in an acceptable and suitable method. The fasteners used must be of a material, which will not be affected by corrosion. The joints/fasteners must be solid or suitably sealed to prevent penetration by water and moisture. Not rubberised.
12.2 The unit must be sprayed with lacquer or enamel with a minimum thickness of 0,1 mm.
12.3 The paint must be of a type, which is not affected by the new alcohol/fuel blends.

13. PAINTING AND PREPARATION:

- 31.1 All joints and ferrous metal parts to be rendered waterproof, rustproof by treatment with zinc-chromate primer, or similar.
13.2 All steel work to be sandblasted or thoroughly chemically cleaned and de-rusted prior to painting.

14. Maintenance and postproduction service.

- 14.1 Spare parts, pertaining to the armoured conversion, must be readily available throughout the Republic of South Africa.
- 14.2 Repairs, pertaining to the armoured conversion, must be concluded within 30 days.

15. Marking

- 15.1 The successful bidder responsible for the armoured conversion may not under any circumstances place their Trademark, company name, or logo on the vehicle.

16. DETAILS WITH THE BID:

- 16.1 Additional information for evaluation of the bid such as brochures and details about the similar work performed previously may be supplied with the bid documents.
- 16.2 The body builder must issue a Homologation letter, e-Natis model number from NRCS registered with the Special Classification “S” mark and weighbridge certificate to the end user before delivering the units.
- 16.3 The following test reports must be available on request:
 - 16.4 Tilt test.
 - 16.5 Rollover protection test.
 - 16.6 Window safety glazing test.
 - 16.7 Brake system test.
- 16.8 Test certificates for the Ballistic capabilities of the steel and glass to be supplied from a certified SANAS accredited Test agency

17. INSPECTION AND ACCEPTANCE:

- 17.1 The end user will subject all materials, workmanship, and construction to inspection and acceptance.
- 17.2 The first completed unit will be considered as a prototype and will be subjected to inspection and acceptance by members of the Department.

18. SAFETY PRECAUTIONS:

- 18.1 Each part or equipment and electrical wiring must conform to the Act on Occupational health and Safety, Act 85 of 1993.

19. PARTICULARS WITH BID:

- 19.1 The requirements of this specification are a minimum and in order to do an evaluation, it is required to submit load distribution drawings, calculations, material selection and detail drawings of each SUV vehicle with the bid. Failure to do so will invalidate the bid.

20. GUARANTEE:

- 20.1 The product must be guaranteed in terms of the General Conditions of Contract.