

**DESERT FIELD BOOT  
( REF. ATTP 1098 )**

**TECHNICAL SPECIFICATION**

**CE ENISO 20347 :2004 O1 FO ORO  
NATO STOCKS NR : 8430270168975**



## 1-SUBJECT

This specification covers the technical specifications, control and test methods of Desert field boot – style ref. ATTP 1098

The following NATO Stock Numbers (NSN) is covered by this specification:  
NATO STOKS NR. 8430270168975

### The Requirement

- **Comfort:** The most important requirement in any is for it to be comfortable. However, comfort is dependent on a number of things
- **Fit:** The boot must fit properly so that it grips the heel but allows freedom for the toes to move
- **Shock Absorbency:** The boot sole must be effective in absorbing shocks to minimise damage to the ankle and lower legs.
- **Spring:** The design of the boot should help to return energy to the foot to aid walking and running
- **Security:** It must lace effectively to hold the foot in place. If the foot slips inside the boot, it will cause blistering
- **Breathability:** The boot must allow the foot to breathe and for the sweat to escape. The foot can produce litres of sweat and if it is trapped, it will make the foot wet, causing blistering because the skin becomes soft and fungal infections. Therefore the quality of the materials used is most important as good materials give good breathability
- **Waterproofness:** The boot must keep the foot dry. Cold wet feet will make you feel uncomfortable and will lower your morale
- **Grip:** The boot must provide grip to stop you slipping in muddy ground to stop the foot slipping
- **Support:** The boot must be flexible to allow good movement but also must give good ankle support for when you are carrying heavy loads Protection. The boot should protect the foot from sharp objects, acids and oils
- **Durability:** Boots must be durable. Once the boots have worn in and are comfortable, the policemen want to keep those boots for some time
- **Effectiveness:** The boots should remain effective over a range of temperatures, climate and ground conditions

## **2- SPECIFICATIONS**

### **2.1. GENERAL PROPERTIES**

- This boot is designed according to the desert conditions. All materials provide comfort and flexibility in desert conditions.
- Soft and good quality, cow leather in desert colour
- Padded collar and tongue for comfort
- Breathable lining
- Flexible points for ankle at front and back
- The zipper on side for Easy fastening ( Wear and Move )
- Eyelets are resistant against rust.
- Sweat absorber , anti-bacterial, anti-static sock insert ( inlay sole )
- There will an optional second inlay sole to adjust the fitting of foot inside boot to reach the best comfort
- Size range is between 36 – 48 Continental Sizing / 3 – 13 British Sizing
- Direct injection double density polyurethane sole durable against hydrolysis in hot and humidity environment
- Boot has anti-static property and shock absorber heel for more comfort
- Standards : The boot will comply with NATO standards  
The boot will comply with European Norm ENISO20347 O1.  
Testing to the following standard ENISO 20347:2004 ( +A1;2007 ) in the category O1  
Boot may have a CE label defining the above standard and category

### **2.2. TECHNICAL SPECIFICATION**

#### **2.2.1. UPPER LEATHER :**

Upper Material :	Cow suede leather
Colour :	Desert
Thickness :	1.8 mm ( minimum ) ( for vamp and counter )
Breaking strength :	2.2 kg/mm <sup>2</sup> ( minimum )
Tearing strength :	2 kgf (minimum)
pH value :	3,2 ( minimum )

#### **2.2.2. OUTER / CANVAS :**

Material :	Polyamide Textile
Colour :	Beige
Property :	High abrasion resistance
Abrasion :	Dry - 25600 revs ( minimum ) Wet - 12800 revs ( minimum )
Tearing strength :	Warp : 14 kgf ( minimum ) Weft : 14 kgf ( minimum )
Water Repellency :	4 ( minimum )
Colour Fastness :	4 ( minimum )

### **2.2.3. LINING :**

Property :	Breathable, sweat absorber, anti-bacterial
Material :	Polyamide textile
Abrasion :	Dry - 25600 revs ( minimum ) Wet - 12800 revs ( minimum )
Tearing strength :	Warp : 2.5 kgf ( minimum ) Weft : 2.5 kgf ( minimum )

### **2.2.4. LASTING INSOLE BOARD :**

Property :	Anti-static, anti-bacteriel, sweat absorber
Material :	Bonded synthetic fibre board Texon
Thickness :	2,5 mm ( minimum )
Cracking angle :	90 degree ( minimum )

### **2.2.5. SUPPORTS :**

Toe cap support :	Thermoplastic fibre board
Thickness :	1,8 mm ( minimum )
Ankle (stiffener ) support :	Thermoplastic fibre board
Thickness :	1,6 mm ( minimum )
Collar Support :	6mm, 65 density PU foam
Tongue Support :	6mm, middle density sponge

### **2.2.6. ACCESSORIES AND OTHERS :**

Eyelets ( holes ), hook :	7 pairs per boot Rustproof Bronzed colour
Zipper :	Rough plastic ( YKK Brand )
Zipper Puller Cover :	Cow suede leather in desert colour Fixed by polyamide or polyester velcro (YKK)
Sewing thread:	Polyester or Polyamide
Laces:	Polyester or Polyamide Round shape ( wick inside ) Length: According to the boot
Inlay Sole ( Footbed ) :	Micro fiber coated opencell PU – Anti-static, sweat absorber, anti-bacterial

### 2.2.7. SOLE :

- Sole Technology : Direct Injection and Moulded :
- Material : Double density polyurethane ( midsole and outsole layers )
  
- Anti-staticness : provides to minimize electrostatic build up to avoid the risk of spark ignition.  
Electrical resistance : 0,1 megaohm ( minimum )  
1000 megaohm ( maximum )
- Shock Absorbing Heel : provides comfort when jumping ,walking, running , etc. by absorbing downward force in excess of a body weight  
Energy absorption : 20 joules ( minimum )
  
- Hydrolysis resistance : provides durability on sole against humidity and hot weather conditions and longer self life for products at international storage terms  
Hydrolysis test results will be minimum; when Polyurethane outsoles and soles with an outer layer composed of polyurethane are tested in accordance with ENISO 20344:2004, 8.5. The cut growth shall not be greater than 6,0mm before 150.000 flex cycles. 150mm length strip sample will be placed in an oven of 70 °C suspended above water for 14 days, then the sample is placed in a room conditioned to 23 °C with 50% humidity
  
- Oil resistant outsole
- Slip resistant outsole
- Heat resistant up to 110 °C degree
  
- Light weight, flexible, high performance and comfort

Flexing resistance : 4 mm ( maximum )

Abrasion resistance : If density < 0,9 : volume loss 250 mm<sup>3</sup> ( maximum )  
If density > 0,9 : volume loss 150 mm<sup>3</sup> ( maximum )

Tearing strength : 8 kn/m ( minimum )

Upper / outsole bonding: 4 newton/mm ( minimum )

## 3 – QUALITY ASSURANCE

Quality system is supported by the implementation of ISO 9001:2000 Quality System Certificate and membership of SATRA (international laboratory in U.K. ) to audit and test the product.

Product is according to NATO standards.

Product is according to European Standards and marked with **CE** label ( if required )

	P0001	:	Manufacturer reference
<b>CE</b>	EN ISO20347:2004	:	Reference of European standard
	( +A1;2007 )		
	O1	:	Type of classification
	G2415-01	:	Product group identification
	0321	:	Notified Body No ( SATRA )

Each pair of boot has a customer information leaflet which is put in inner boxes. This leaflet includes information about product, standard and product care.

## **4 - LABELLING AND PACKAGING**

### **4.1. LABELLING:**

CE label is stitched inside tongue and each pair bears this CE marking.

Each pair of boot will have cleaning instruction

Each inner box bears a label sticker, which shows product name and size of the boot.

Each outer box bears a label sticker, which shows product name, size of the boot and quantity pairs inside box.

### **4.2. PACKAGING:**

Each pair of boot is packed separately in tough recycled cardboard box (inner box). Then one set will be packed together.

10 pairs of boots are packed in a ripped cardboard box (outer box). This quantity can be changed according to customer requirement.

Final packaging shall maintain enough protection to prevent any damage of goods under normal shipment and handling conditions.