

**COMBAT BOOT  
( REF. ML 300 DV )**

**TECHNICAL SPECIFICATION**

**NATO STOCKS NR : 8430270056548  
CE ENISO 20347:2004 O1 HRO**



**OR**



## **1-SUBJECT**

This specification covers the technical specifications, control and test methods of Combat boot – style ref. ML 300 DV Black Combat Boot

The following NATO Stock Numbers (NSN) is covered by this specification:

NATO STOKS NR. 8430270056548

All tests are made in accordance with the European Norm ENISO 20344:2004 and the product is complying with the European Norm ENISO 20347:2004

## **2- SPECIFICATIONS**

### **A. GENERAL**

This boot is designed according to the field conditions. All materials provide comfort and flexibility.

Full grain, good quality cow leather in black colour and free from defects like cracks, rotten, burnt, scorched etc. Split leather is never advised for uppers.

Padded collar for comfort and secure fit.

Eyelets are resistant against rust

Supported toe and back heel

Sweat absorber , anti-bacterial, washable, anti-static sock insert ( inlay sole )

Direct vulcanized single density rubber sole durable against very tough conditions, hot and/or cold environments.

Electrical resistance, Antistatic footwear to minimize electrostatic build up to avoid the risk of spark ignition.

Size range is between 39 – 48 French Sizing / 6 – 13 British Sizing

Standards : NATO and European ( ENISO 20347:2004 O1 HRO )

### **B. TECHNICAL SPECIFICATION**

#### **UPPER LEATHER :**

Upper Material :	Full grain genuine Cow leather
Colour :	Black
Thickness :	1.8 mm ( minimum )
Breaking strength :	15 N/mm <sup>2</sup> ( minimum )
Tearing strength :	120 N ( minimum )
pH :	3,2 ( minimum )
Oil :	2.5 – 9 % ( Between )
Ash :	4.5 % ( maximum )
Chrome :	2.5 – 7.5 % ( between )
Dynamic water resistance:	time for penetration of water $\geq$ 60 min.
Absorption of water after 60':	$\geq$ 30%; penetration of water between 60' and 90' no greater than 0.2 gr.

### **LASTING INSOLE BOARD :**

Property :	Anti-bacteriel, sweat absorber
Material :	Bonded leather fibre board Supported by steel shank
Thickness :	2,0 mm ( minimum )
Cracking angle :	90 degree ( minimum )

### **SUPPORTS :**

Toe cap support :	Thermoplastic fibre board
Thickness :	1,8 mm ( minimum )
Stiffener support :	Bonded Fibre board
Thickness :	1,6 mm ( minimum )
Ankle Support :	6mm, 65 density PU foam

### **ACCESSORIES AND OTHERS :**

Eyelets ( holes ) :	9 pairs round eyelets, Rustproof
Sewing thread:	Polyester or Polyamide Breaking strength : 30N ( minimum )
Laces:	Polyester or Polyamide Flat-Round shape Breaking strength : 500 N ( minimum ) Length: According to the boot
Inlay Sole ( Footbed ) :	Anti-static, sweat absorber, anti-bacterial, removable Material : Non-woven textile coated felt Antistaticness: 0,1 mOhm – 1000 mOhm ( between ) Water absorbtion : 35% ( minimum )

### **SOLE :**

Property :	Direct vulcanized and Moulded : It provides durability and resistance against sole-upper separation Rubber : High durability High performance Anti-staticness ( A ) : It provides to minimize electrostatic build up to avoid the risk of spark ignition. Hydrolysis resistance: It provides durability on sole against very humidity, hot and cold weather conditions and longer self life for products at international storage terms Oil resistant outsole ( FO ) : The sole will not swell or become brittle and crack when worn in harsh industrial environments Slip resistant outsole Heat resistant outsole up to 300 °C degree ( HRO )
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Material :	Rubber
Outsole density :	1,15 gr /cm <sup>3</sup> (± 0,2 tolerance)
Hardness :	Outer layer: 65 ± 8 Shore A
Slip resistance :	Co-efficient of friction 0.28 heel – 0.32 flat ( minimum )
Flexing resistance :	Cut growth 4 mm after 30.000 cycles ( maximum )
Abrasion resistance :	volume loss 150 mm <sup>3</sup> ( maximum )
Tearing strength :	4 kN/m ( minimum )
Upper / outsole bonding:	4 newton/mm ( minimum ) if the sole material tear during the test , the result will be min.3 N /mm
Heat resistance ( HRO ):	No melting or crack after contact at 300 °C for 60 sec.

### **3 – QUALITY ASSURANCE**

All raw materials before production and all finished products after production are being tested in our laboratory which has been accredited by SATRA International Notified Body in UK and by Turkish Standard Institute (TSE) .

It 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.

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**

The single boot in each box separated by tissue paper or polypropylene paper to prevent them from coming into contact.

Each pair of footwear is packed in a box with handle in corrugated cardboard inner boxes. The inner boxes shall be placed in outer boxes made of double wall cardboard having, with 10 or 12 pairs in each outer box.

On one side of the inner box the indications below is printed on a sticker with clearly visible characters.

- exact name, reference and/or article of the product contained;
- size details of the product contained;

The outer boxes shall be closed and sealed with adhesive tape on all the flaps.

On one side of the outer boxes the indications below is printed on a sticker with clearly visible characters.

- name of the supplier company ( if required );
- exact name, reference and/or article of the product contained;
- quantity of the product contained;
- size details of the product contained;
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Final packaging shall maintain enough protection to prevent any damage of goods under normal shipment and handling conditions.