



# M-8370 S3 / Metal Free

## Oil Resistant & Slip Resistant Work Boots

Upper : Full Grain Smooth Cow Leather

Lining : BactiVOID™ Breathable Sandwich Mesh

Insole : Anti-Fatigue Memory Foam Insoles

Outsole : QuantumHold™ PU/Nitrile Rubber Injection

Toecap : VortiGard™ Composite Toecap

Penetration : VortiGard™ Kevlar Midsole Plate

Size : EU 37-47#, UK 3-13#, US4-14#

CE EN ISO 20345:2022+A1:2024 S3S SR FO CI HI HRO

ASTM E 2149-2020 Approved Anti-microbial Lining & Insoles (Odor Resistant)

Application : Onshore Drilling Rig, Offshore Drilling Platform, Oil Field Site, Pipeline Station, Oil Refinery etc



200 JOULE  
TOECAP



SLIP-  
RESISTANT



SHOCK  
ABSORPTION



ANTI-STATIC



ANTI-NAIL  
MIDSOLE



PETROL AND  
CHEMICAL  
RESISTANT



WATER  
RESISTANT



OIL  
RESISTANT



### VortiGard™ Composite Toe Cap • EN ISO 20345:2022

Composite Toecap is light-weight and non-magnetic. The impact resistance can reach 200 joules from falling or rolling objects. The compression resistance can reach 15kN.



### VortiGard™ Kevlar Plate Protection • EN ISO 20345:2022

Kevlar midsole plate is flexible and non-metallic. The penetration resistance can reach 1100 newtons from nail or other sharp objects. The flex resistance can reach to  $1 \times 10^6$  flexion cycles without visible cracking.



### LeatherQua™ Cow Leather Upper • EN ISO 20345:2022

High quality full grain smooth cow leather with thickness 1.6-1.8mm. It is treated with water resistant coating to protect feet from raining workday. The tear strength of upper leather can reach to 120 Newtons.

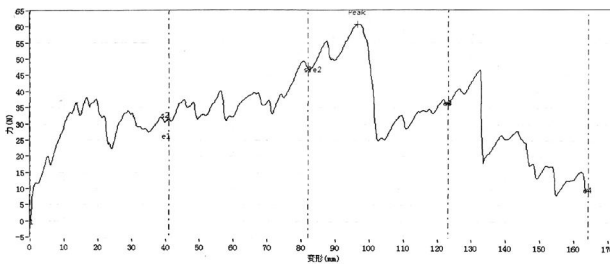


### QuantumHold™ PU/Rubber Outsole • EN ISO 20345:2022

PU/Rubber outsoles are manufactured with Germany Fully Automatic Injection Technology. The midsole is  $45 \pm 5$  degree hardness PU, which is soft and shock absorption. The outsole is natural rubber with 5%-10% nitrile, which is abrasion resistant, slip resistant, oil resistant and heat resistant.

## Sole Bonding Strength Test

- EN ISO 20345:2022, 5.3 (Between Upper & Sole)
- Average Test Result  $5.8 \pm 5$  (N/mm)



### Upper, Lining & Bonding Strength Test Result

|                                   |                        |
|-----------------------------------|------------------------|
| Leather Tear Strength $\geq$      | 120.0 Newtons          |
| Leather Tensile Properties $\geq$ | 15.0 N/mm <sup>2</sup> |
| Lining Tear Strength $\geq$       | 15.0 N/mm              |
| Bonding Strength $\geq$           | 4.0 N/mm               |

| ✓ Protection With Slip Resistant (SR)                                                                                                                  | Result                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Test Requirement : Forward Heel Slip $\geq 0.31$ ( Test methordL ISO 13287:2019)<br>Backward Forepart Slip $\geq 0.36$ ( Test methordL ISO 13287:2019) | PASS                                                         |
| Standards : EN ISO20345:2022(5.3.5) , Test floor: Ceramic tile, Lubricant: Sodium lauryl sulphate                                                      |                                                              |
| ✓ Protection With Anti-Static                                                                                                                          | Result                                                       |
| Test Requirement : Anti-static 100K $\Omega$ -1000M $\Omega$ , Test Voltage: 100 $\pm 2$ V DC, Test Period: 1 Minute                                   | PASS                                                         |
| Standards : EN ISO 20345:2022 (6.2.2.2) Dry Humility (30 $\pm 5$ ) & Wet Humility (85 $\pm 5$ )                                                        |                                                              |
| ✓ Protection Resistant to Fuel Oil (FO)                                                                                                                | Result                                                       |
| Test Requirement : Change in Volume and Change in Hardness (Outsole) is No More Than +12%(*)                                                           | PASS                                                         |
| Standards : EN ISO 20345:2022 (6.4.2)                                                                                                                  |                                                              |
| SAFETOE Standard Package Instruction (Average 42# for Reference)                                                                                       |                                                              |
| Shoes Weight : 1.2-1.3 KGS /Pair                                                                                                                       | Carton Weight : 13-14 KGS /Carton                            |
| 1 Pair / Color Box , Dimensions : 32 $\times$ 24 $\times$ 12CM                                                                                         | 10 Pair / Carton , Dimensions : 62 $\times$ 49 $\times$ 33CM |



### User Instructions:

- 1.) RECOMMENDED TO USE : Onshore Drilling Rig, Offshore Drilling Platform, Oil Field Site, Pipeline Station, Oil Refinery etc.
- 2.) LIMITATION TO USE: It is very important that footwear selected must be suitable for the right workplaces. The protection against risks or hazards which are not mentioned in this document is not warranted.
- 3.) FITTING & SIZE: All footwear are marked with standard size on tongue label. Some are with different size comparison, such as EU size, UK size, US size etc. Please wear footwear in a suitable size.

Footwear which are too loose or too tight may not provide optimum level of protection.

- 4.) STORAGE: Keep the footwear in its original packaging, under ordinary temperature, non-humidity conditions and in clean, covered and ventilated premises.

- 5.) CLEANING: Clean footwear regularly by high quality cleaning treatments recommended as suitable for the purpose. Don't use caustic or corrosive cleaning agents.