

# TurtleSkin WaterArmor

## The TurtleSkin Advantage

- **Protection up to 2800 bar or 40,000 psi**  
TurtleSkin WaterArmor offers increased protection to UHP operators at all pressures at specific flow rates.
- **Tough Material that's easy to maintain**  
Covering the WaterArmor system is a rugged outer layer that offers chemical resistance, and is easy to clean with soap and water.
- **Lightweight suit protects without tiring operator**  
TurtleSkin's patent for the tightest weave ever achieved with an aramid fiber allows WaterArmor to provide the highest levels of protection while remaining light and comfortable.
- **TurtleSkin WaterArmor has been CE type approved.**  
Certificate no. 00101317
- **Hinged Panel design for greater flexibility**  
WaterArmor's patented fabric system bends with the body, while each panel moves independently, allowing for flexibility and comfort.
- **Built-in knee pads for added comfort**  
turtleSkin WaterArmor's chaps have cushioned built-in knee pads which protect knees from both UHP jet streams and hard concrete.
- **Open back keeps operator cooler longer.**  
Waterjetting is demanding, physical work. WaterArmor's design allows extensive protection to the front of the operator while the open back gives increased air circulation, keeping the operator cool.

## Modular design

TurtleSkin WaterArmor chaps, gaiters, upper torso and arm protection are all sold separately, so you only buy what you need.

1. Torso
2. Gauntlet
3. Chaps
4. Gaiters

## Proven Performance

WaterArmor saved an operator in a recent accident when he swiped his foot at 36,000 psi (2,500 bar) with a rotating lance. There was no penetration to the backside of the gaiter.

Only the toe panel needed to be replaced after the accident, saving both time and money.



Only first layer had any penetration.



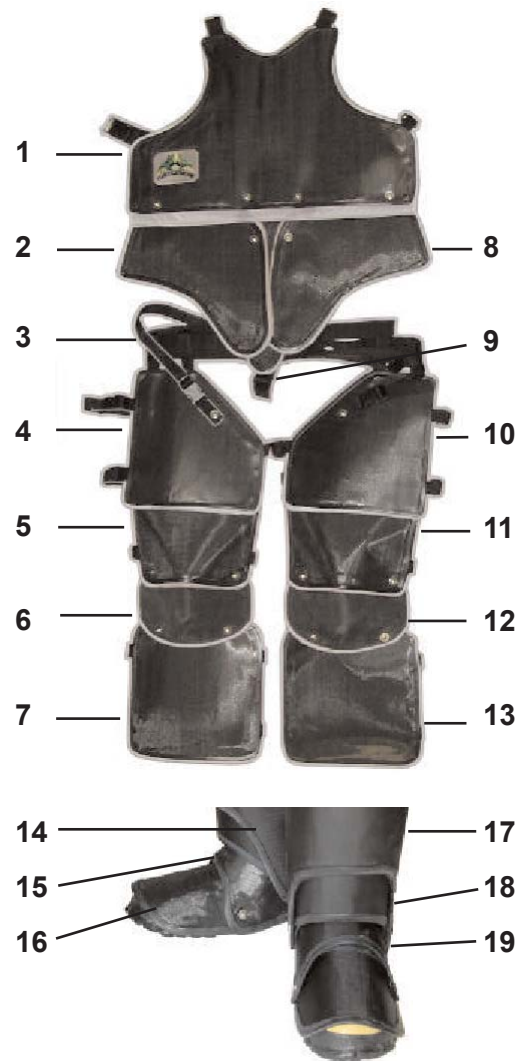
Close-up of backside shows no penetration.



## Replacement Panels Keep your suit safe longer

If any panel becomes damaged or worn, it can be easily replaced with simple tools. This can save costly delays, as well as the expense of an entire new suit.

Item		Order No.
1	Vest Panel	V1
2	Right Waist Panel	WR
3	Belt	B1
4	Right Hip Panel	HR
5	Right Thigh Panel	TR
6	Right Knee	KR
7	Right Shin	SR
8	Left Waist Panel	WL
9	Groin Guard	G1
10	Left Hip Panel	HL
11	Left Thigh Panel	TL
12	Left Knee	KL
13	Left Shin	SL
14	Right Gaiter Shin	GSR
15	Right Metatarsal	RM
16	Toe	T
17	Left Gaiter Shin	GSL
18	Ankle	A
19	Left Metatarsal	LM



## One Size Fits All

Patented design lets you lengthen or shorten thigh panels on chaps to fit any operator, whether tall, short or in between.



Adjustable overlap on thigh panels

## TurtleSkin Safety Gloves

Although no safety glove can withstand a direct waterjet blast, TurtleSkin Safety Gloves offer the highest level of protection against punctures, cuts and abrasions without sacrificing comfort or dexterity.



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## Performance Levels

The protective performance of WaterArmor depends on multiple factors such as pressure, water flow, nozzle diameter and construction, distance between jet and protective equipment and contact time (swipe

speed of the jet). Under extreme circumstances (high pressure, high flow, close distance and low speed) WaterArmor may not provide full protection.

<b>TEST RESULTS:</b>				
NO penetration occurred beyond protective system with waterjet travelling at 8 feet/second (2.4 meters/second), no closer than 3 inches (7.62 cm) at these conditions:				
Pressure PSI (bar)	Flow Rate GPM (lpm)	Orifice ID Inches (mm)	0° Nozzle, Single Orifice: Material	Efficiency Factor $\left( \frac{\text{GPM/ \# of orifices}}{\text{orifice ID inches}} \right)$ √ Pressure PSI
40,000 (2,800)	5.5 (21)	0.035 (0.889)	Sapphire	22.4
36,000 (2,500)	5 (19)	0.035 (0.889)	Sapphire	21.5
20,000 (1,400)	11 (42)	0.051 (1.295)	Tungsten Carbide	29.9
10,000 (700)	16 (61)	0.073 (1.854)	Tungsten Carbide	30



certificate no. 00101317



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