ECS-2 Body Cooling System

ECS-2 Body Cooling System is designed to remove body heat of an operator working in protective suit and high heat environment. The system circulates water around the body through flexible tubes uniformly distributed around the body. These tubes are held against the body by a stretchable woven fabric. The water is circulated in the flexible tubes by a batteryoperated pump. In the water circulation loop is an ice containing reservoir which acts as heat sink. A constant flow of water in the tubes around

PVC tubing

Pump

Ice container

the body creates a cool micro environment which removes metabolic heat of the body while working.

An ice reservoir bottle of two liters can provide an endurance of 40-60 minutes at 35° C. The system has two main components- Tubing Suit and the Reservoir & pump Unit.

Tubing suit. The tubing suit is a liquid conditioning garment with a hood, shirt and a trouser. It is comfortably worn under different types of protective suits. The garment is engineered for a controllable cooling for maximum endurance. The suit and trousers can be in two or one piece. A fire resistant fabric of the suit can also be offered.

Cooling Rate	480W @ 350mL/min.	
Wearing Weight	With liquid Filled 0.9 to 1.1 kg	
Tubing	PVC	
Interconnection	1/8 flow CPC connectors.	
Color	To customer choice	
Fabric	50/50 Kermel /FR Viscose OR	
	users requirement.	

Modular and fully body coverage.

The suit's design can be altered to meet any specialized requirment.

Sizes : X-Small, Small Medium, Large, X-large



Protective

Suit

Reliable interconnections with special CPC quick disconnects and shut off valves to stop any spillage on disconnection.



IUDE JUIT JIZING CHART		
Size	Height(ft)	Weight(lbs)
X-small	Up to 5' 5"	Up to 120
Small	5' 4"- 5' 8"	120-145
Medium	5'7" - 5'11"	145-165
Large	5'10"- 6' 2"	165-190
X-large	6' 1"- 6' 5"	190-235

TUBE SUIT SIZING CHART

Reservoir and pump unit: The Reservoir and pump unit consists of a pump (driven by four (D-type) batteries, one ice bottle, insulated pouch, harness, interconnection for water and wired remote control box. Each ice bottle is equipped with a quick disconnect cap to facilitate rapid bottle change. The



Standard accessories

- Spare bottle.
- Spares kit.
- Batteries.
- Carry bag.

Optional accessories

- Re-charger 220 VAC
- Car battery charger

wired remote control box has ON/OFF and HI/LO setting to adjust the cooling rates. The insulated pouch, made from heavy duty nylon contains different compartments. The unit can be fastened around the legs and connected to tube suit. The different components have fallowing specifications:-

Ice bottle	2 OR 1 liters capacity
Life span	1000 hours
Flow rate	350 ml/min
Weight	3.2 Kg
Pouch	Nylon with insulation

Product quality. The system is manufactured to a high standard of workmanship. Conformance to the specifications is ensured for all procured parts. A qualified and trained staff is responsible to perform the assembly. After assembly, each system undergoes comprehensive in-house testing and inspection before shipping to clients.



Capital Services System

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