

... for homeland security professionals

Cut-Tex[®] PRO

The Ultimate Cut Protection[™]

Only by **PPSS** 

Cut-Tex® PRO

- Cut-Tex® PRO is a high performance cut resistant fabric developed by UK based PPSS Group.
- Cut-Tex® PRO is being manufactured at a ISO 9001:2008 quality standard control certified plant in the UK.
- Cut-Tex® PRO is now being used to create cut resistant clothing for law enforcement, prison, emergency services, private security, public transport and social and health care as well as other industries, such as glass handling and metal handling pressing.



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The Problem

- Numerous homeland security professionals, police officers, prison officers and security guards have suffered from severe cut wounds sometime, during physical confrontations or forced entry operations.
- From the point of the employer, injuries of this type can often lead to legal, moral and financial repercussion. From the point of the injured professional, and depending on the severity of such injury, it can often also lead to long lasting emotional scars, ongoing distress or in very serious cases even post traumatic stress disorder (PTSD).
- Most common PPE (Personal Protective Equipment) or protective clothing used by the above sectors do not offer sufficient cut protection.

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The Reality

- Attacks on frontline professionals are occurring rather frequently. One unprovoked attack on prison officers at Frankland High Security Prison in Durham, UK, left one prison officer severely injured after one of his axillary artery was slashed during the incident. He luckily survived.
- A female police officer was brutally slashed during Notting Hill Carnival in London, UK on 28th August 2011.
- There are many more reports of domestic frontline professionals being slashed or suffering from major cuts. Reports of this well documented type of assaults are readily available on the internet or security and law enforcement related publications.
- The following images are disturbing, and we apologies for any unintentional distress we may cause by displaying these images...

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The Reality

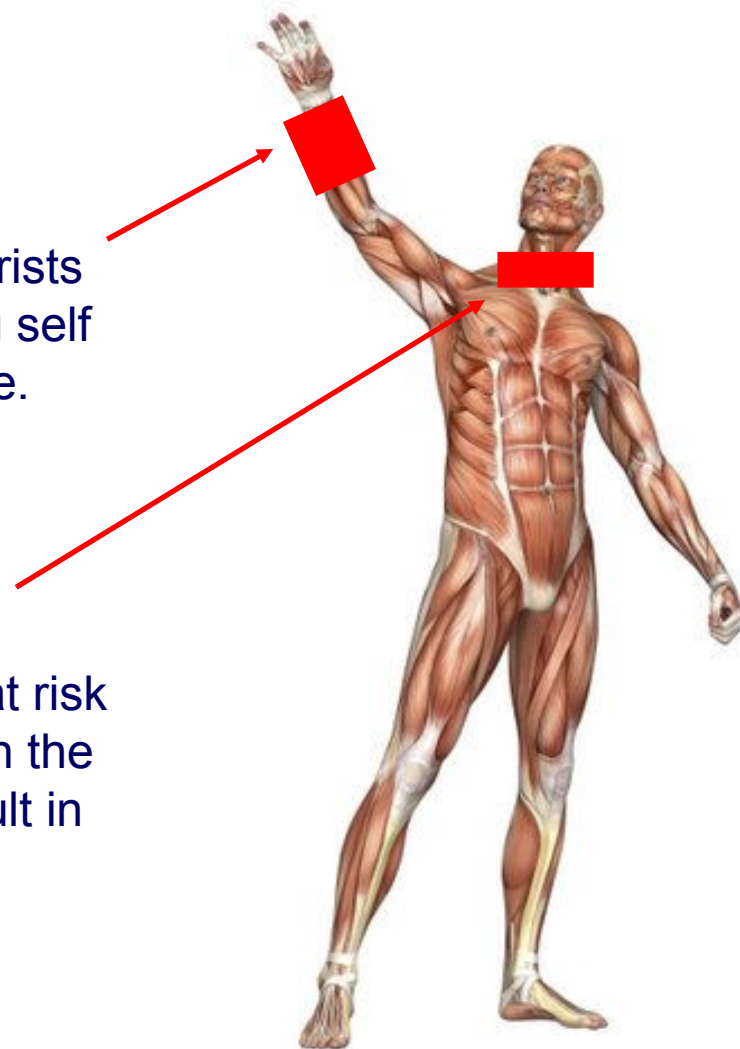


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Protecting Key Areas (1)

The radial artery can be found in our wrists which often is subject to cuts during self defence or whilst protecting our face. Such injury is classed as 'defensive injury'.

Our throat, which harbors the carotid artery is certainly among the most at risk locations of our body. A cut through the carotid artery would most likely result in death.

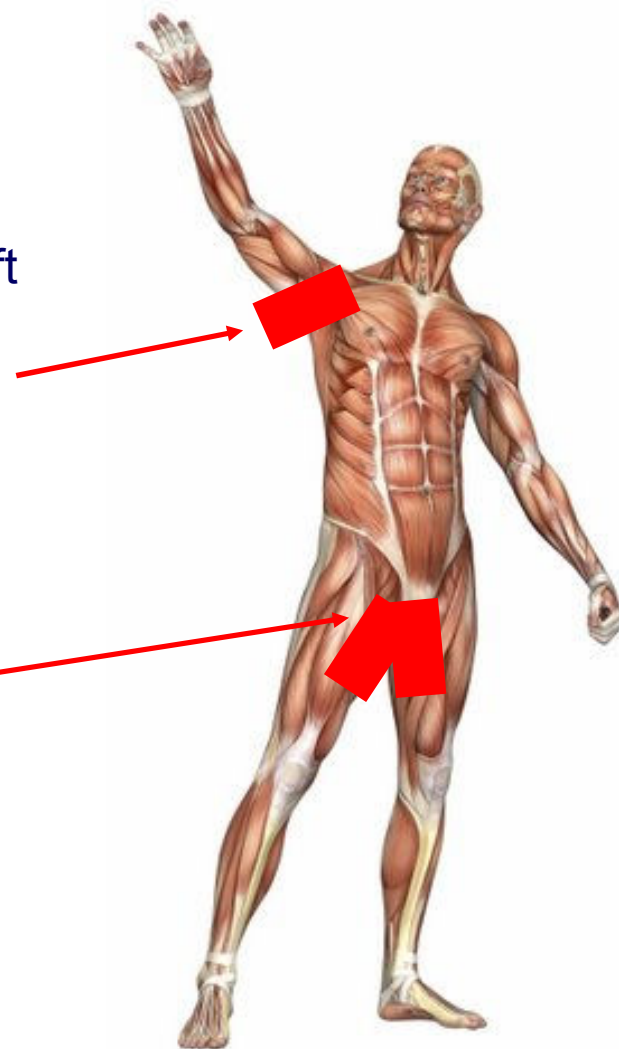


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Protecting Key Areas (2)

Many frontline professionals by instinct will lift their arms and hands during a potential hostile situation, in order to protect the face and head. A cut, injuring the axillary artery under your arms, can lead to rapid blood loss and even death.

The femoral artery is a general term comprising a few large arteries in the thigh. Cutting of the femoral artery would lead to a massive loss of blood within a very short period of time.



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The Solution

- Cut Resistant clothing, shielding these four main arteries could be made available to those professionals dealing regularly with aggressors and potentially hostile situations
- Cut-Tex® PRO cut resistant fabric allows us to design and manufacture cut resistant clothing that is non-aggressive or non-confrontational looking. We certainly want to enable those professionals to let their personality shine, use their diplomatic and interpersonal skills in order to defuse the risk of any potential escalation without giving away that protective clothing is being worn. Personal protective clothing just needs to 'be there' in the background, on stand by, ready to protect and perform when things go wrong.
- Cut-Tex® PRO cut resistant fabric is now available to selected manufacturers, allowing them to design protective clothing around specific operational risks, threats and operational duties.



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Certified Protection Levels (in words):

- ISO 13997:1999 Blade Cut Resistance level 5 (the highest possible)
- EN 388:2003 Blade Cut Resistance Level 5 (the highest possible)
- ASTM F-1790 Blade Cut Resistance Level 4
- EN 388:2003 Abrasion Resistance Level 4 (the highest possible)
- EN 388:2003 Tear Resistance Level 4 (the highest possible)

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Certified Protection Levels (graphic):

ISO 13997:1999 Blade Cut Resistance Levels

Level 1 +1.2 N	Level 2 +2.5 N	Level 3 +5.0 N	Level 4 +11.0 N	Level 5 +22.0 N	Cut Tex® PRO +27.8 N
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ASTM F-1790 Blade Cut Resistance Levels

Level 0 0-199 grams force	Level 1 200-499 grams force	Level 2 500-999 grams force	Level 3 1000-1499 grams force	Level 4 1500-3499 grams force	Cut Tex® PRO 2580 grams force
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EN 388:2003 Tear Resistance Levels

Level 1 +10 N	Level 2 +25 N	Level 3 +50 N	Level 4 +70 N	Cut Tex® PRO 398.5 Newton
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EN 388:2003 Abrasion Resistance Levels

Level 1 +100 Cycles	Level 2 +500 Cycles	Level 3 +2,000 Cycles	Level 4 +8,000 Cycles	Cut Tex® PRO +8,000 Cycles
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