Techs Outer shells

ARAMIDBLENDS

Techs®

ADVANCED FABRICS BY TEXTIL SANTANDERINA

SANTANDERINA GROUP

techs.es

Santanderina is a leading European textile group, with 10 production plants in Spain and fully vertically integrated spinning, weaving, dyeing, printing and finishing operations.

We operate completely traceable production and quality systems, certified to ISO 9001 and ISO 14001.

We manufacture a wide array of fabrics for different industries, with quality and sustainability as our key drivers.

Techs, Textil Santanderina's department for technical fabrics in the work and safetywear market, has a long experience in the development of high-end, inherently FR fabrics that are applied in multiple industries worldwide.

Constant development in close partnership with clients, end-users and fibre manufacturers gives us the possibility to introduce innovations that keep workers safe for example in the oil & gas industry, utility companies, foundries etc.

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Outer shell fabrics for fire fighter intervention suits

A fireman's intervention suit is built up out of three layers, the outer shell, the moisture barrier and the thermal barrier. The outer shell is the first line of defence, and protects not only the person, but also ensures that the two inner layers remain intact and can perform their function in the compound. This means that the outer fabric must be tough and durable, and must not melt or ignite even under the most strenuous and dangerous circumstances.

At Techs we have put our experience in the development of inherent FR fabrics to work, together with the input from clients and end users, so as to come up with a series of outer shell fabrics that guarantee safety, protection and comfort for fire fighters when it is most needed.

Inherently flame resistant
Optimum thermal protection
Breathable structure
Lightweight
Comfort and flexibility
Excellent abrasion resistance
UV Stability
Colour fastness
High durability

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Techsforce

53% Technora®

45% Teijinconex®

2% Antistatic Fiber

REF. 8485

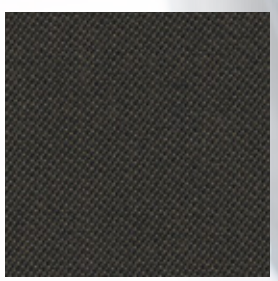
Techsforce is a classic outer shell in twill construction. The blend with a majority of para-aramid combined with a weight of 240 g/m² makes for a very sturdy and robust outer shell with great mechanical properties. Not only is it used as an outer shell fabric for intervention suits, it is also applied as reinforcement for the knee-area in other types of fire fighting garments such as those used in rescue operations or wild land fire fighting; proof enough that it can take some heavy use. Techsforce is available in Navy and Black and is a guaranteed value for money choice!

MECHANICAL CHARACTERISTICS	METHOD	VALUE
Tensile strength in Warp (N)	UNE-EN ISO 13934-1	3400
Tensile strength in Weft (N)	UNE-EN ISO 13934-1	2700
Residual Tensile strength in Warp (N)	UNE-EN ISO 13934-1	3400
Residual Tensile strength in Weft (N)	UNE-EN ISO 13934-1	2500
Tear strength in Warp (N)	UNE-EN ISO 13937-2	420
Tear strength in Weft (N)	UNE-EN ISO 13937-2	290
Abrasion (cycles)	UNE-EN ISO 12947-2	>50.000 @ 12 kPa

OTHER PARAMETERS	METHOD	VALUE
Warp shrinkage (%)	ISO 15797	< -3
	5 X 75 °C	
Weft shrinkage (%)	ISO 15797	< -3
	5 X 75 °C	
Heat resistance	ISO 17493	PASS
Resistance to wetting	EN 24920	5
Resistance to penetration by liquid	EN ISO 6530	>80%
Light fastness	Dope dyed fiber	

Color range

4558 BLUE STEEL



9345 CHARCOAL

Techsforce Gold

50% Technora®
48% Teijinconex®
2% Antistatic Fiber

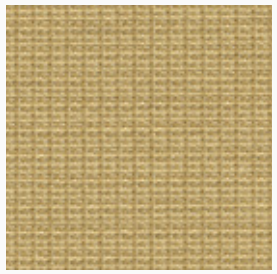
REF. 8556

Techsforce Gold is also based upon blend in which the para-aramid fibre prevails. In this case though we have added para-aramid filament yarn in the weft thereby increasing mechanical strength another notch, while being able to bring the weight down to a comfortable 220 g/m². The special broken twill construction not only gives the fabric a very nice look and feel with the filament yarn shimmering through, it also ensures outstanding performance when exposed to heat- and flame, showing no signs of heat-fatigue. With our special repellent finish the Techsforce Gold makes sure that fire fighters are well protected from spills of liquid chemicals. Techsforce Gold is avaliable in colours Gold and Black.

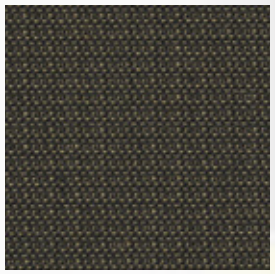
MECHANICAL CHARACTERISTICS	METHOD	VALUE
Tensile strength in Warp (N)	UNE-EN ISO 13934-1	3500
Tensile strength in Weft (N)	UNE-EN ISO 13934-1	3000
Residual Tensile strength in Warp (N)	UNE-EN ISO 13934-1	3400
Residual Tensile strength in Weft (N)	UNE-EN ISO 13934-1	2700
Tear strength in Warp (N)	UNE-EN ISO 13937-2	340
Tear strength in Weft (N)	UNE-EN ISO 13937-2	180
Abrasion (cycles)	UNE-EN ISO 12947-2	>50.000 @ 12 kPa

OTHER PARAMETERS	METHOD	VALUE
Warp shrinkage (%)	ISO 15797	< -3
	5 X 75 °C	
Weft shrinkage (%)	ISO 15797	< -3
	5 X 75 °C	
Heat resistance	ISO 17493	PASS
Resistance to wetting	EN 24920	5
Resistance to penetration by liquid	EN ISO 6530	>80%
Light fastness	Dope dyed fiber	

Color range



76965 GOLD



9345 BLACK GOLD

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Panther

65% Teijinconex®

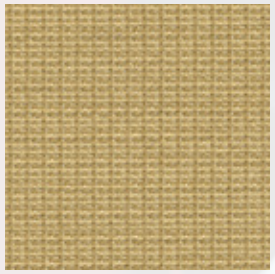
33% Twaron®

2% Antistatic Fiber

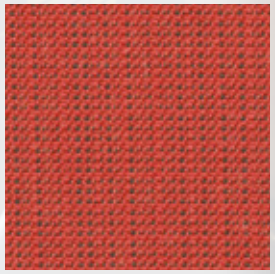
REF. 15003

Panther is a recently developed 215 g/m² outer shell fabric that offers guaranteed protection and good mechanical properties at a very affordable price-point. With its micro-ripstop in a blend of meta-aramid with a grid of para-aramid, it is a very flexible and breathable fabric whilst offering optimum protection. It is available in four standard colour ways and can be made to order in a variety of others. The fabric is made in producer-dyed fibers, so colour fastness both to light and to laundering is very high.

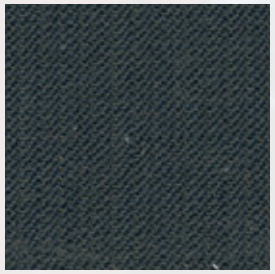
Color range



76965 GOLD



33476 RED CARBON



45346 DARK NAVY

9345 CHARCOAL

MECHANICAL CHARACTERISTICS	METHOD	VALUE
Tensile strength in Warp (N)	UNE-EN ISO 13934-1	1900
Tensile strength in Weft (N)	UNE-EN ISO 13934-1	1800
Residual Tensile strength in Warp (N)	UNE-EN ISO 13934-1	1700
Residual Tensile strength in Weft (N)	UNE-EN ISO 13934-1	1600
Tear strength in Warp (N)	UNE-EN ISO 13937-2	580
Tear strength in Weft (N)	UNE-EN ISO 13937-2	600
Abrasion (cycles)	UNE-EN ISO 12947-2	>50.000 @ 12 kPa

OTHER PARAMETERS	METHOD	VALUE
Warp shrinkage (%)	ISO 15797	< -3
	5 X 75 ºC	
Weft shrinkage (%)	ISO 15797	< -3
	5 X 75 ºC	
Heat resistance	ISO 17493	PASS
Resistance to wetting	EN 24920	4
Resistance to penetration by liquid	EN ISO 6530	>80%
Light fastness	Dope dyed fiber	

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Jackal

55% Teijinconex®

5% Twaron®

38% Viscose FR

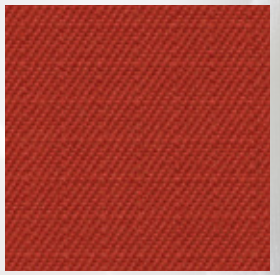
2% Antistatic Fiber

REF. 8627

Jackal fabric is the most versatile and multi-application outer shell in Tech's range. It is a 220 g/m^2 ripstop material, that is not only certified to EN469 for use in intervention suit outer shells, it is at the same time suitable and certified for wildland fire fighting garments, or rescue garments. Besides aramid fibre for mechanical strength, Jackal incorporates a proportion of Lenzing FR fibre which gives it a very comfortable touch and great moisture management characteristics. There is a broad colour variety available and the use of producer-dyed aramids ensures excellent colour performance.

Color range

77114 GOLD



31454 RED

43109 NAVY BLUE

83762 MIDNIGHT

MECHANICAL CHARACTERISTICS	METHOD	VALUE
Tensile strength in Warp (N)	UNE-EN ISO 13934-1	1000
Tensile strength in Weft (N)	UNE-EN ISO 13934-1	700
Residual Tensile strength in Warp (N)	UNE-EN ISO 13934-1	920
Residual Tensile strength in Weft (N)	UNE-EN ISO 13934-1	650
Tear strength in Warp (N)	UNE-EN ISO 13937-2	72
Tear strength in Weft (N)	UNE-EN ISO 13937-2	58
Abrasion (cycles)	UNE-EN ISO 12947-2	>50.000 @ 12 kPa

OTHER PARAMETERS	METHOD	VALUE
Warp shrinkage (%)	ISO 15797	< -3
	5 X 75 ºC	
Weft shrinkage (%)	ISO 15797	< -3
	5 X 75 ºC	
Heat resistance	ISO 17493	PASS
Resistance to wetting	EN 24920	5
Resistance to penetration by liquid	EN ISO 6530	>80%
Light fastness		High fastness dyeing

Techs® is much more

Techs® has developed a wide range of advanced fabrics with technical features and multifunctional properties for all kind of professional wear. Discover them at our web page.

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TECHSALEXANDRA®

WOOLTECHS®

PROTECHS®

ARAMIDBLENDS®

STRATUS®

VULKAN®

TECHSNX®

ULTRAWASH®

TERRA®

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Twaron® Technora® Teijinconex®

Aramids by Teijin

Be sure.

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