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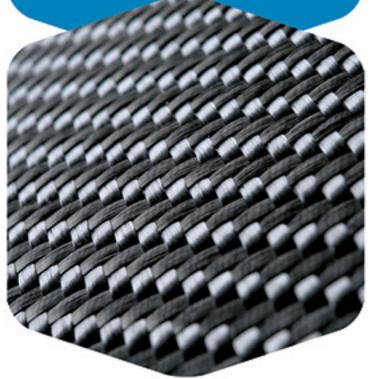




Engineering Solutions for the Best Quality

01

Customer oriented fiber selection and fabric construction design.





02

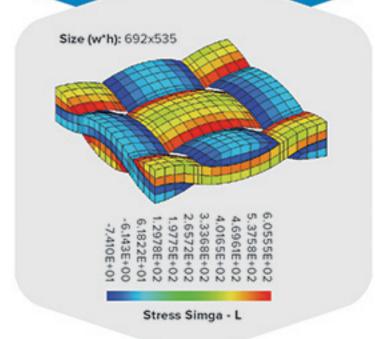
Creation of virtual geometric model of the fabric. It can be easily applied for different constructions of fabric.



Estimated Experimental 800 600 Stress (MPa) 400 200 0,005 0,01 0,015 Strain (%)

03

Fast determination of mechanical properties before fabric production with FE model.





54 years of weaving know how.

04

The estimated results are verified with experimental studies.

05

Exact fiber and fabric selection for final composite product.

06

PRODUCTS

Our company produces %100 carbon, carbon - glass and carbon-aramid mixtured industrial fabrics that are used in many areas like construction, automotive, maritime and defense industry.

100% CARBON FIBER FABRICS

Article No Ürün Kodu	Weight (gr/m²) Ağırlık	Type Tip	Thread Weft (cm) Sıklık Atkı	Thread Warp (cm) Sıklık Çözgü	Weft Yarn	Warp Yarn
TC T O CR B C0B03 375 001	150±%3	Plain	3,75±%3	3,75±%3	Carbon Fiber 3K	Carbon Fiber 3K
TC T O CR B C0D03 375 001	150±%3	Twill	3,75±%3	3,75±%3	Carbon Fiber 3K	Carbon Fiber 3K
TC T O CR B C0B03 500 001	210±%3	Plain	5±%3	5±%3	Carbon Fiber 3K	Carbon Fiber 3K
TC T O CR B C0D03 500 001	210±%3	Twill	5±%3	5±%3	Carbon Fiber 3K	Carbon Fiber 3K
TC T O CR B C0B06 375 001	300±%3	Plain	3,75±%3	3,75±%3	Carbon Fiber 6K	Carbon Fiber 6K
TC T O CR B C0D06 375 001	300±%3	Twill	3,75±%3	3,75±%3	Carbon Fiber 6K	Carbon Fiber 6K
TC T O CR B C0B06 500 001	400±%3	Plain	5±%3	5±%3	Carbon Fiber 6K	Carbon Fiber 6K
TC T O CR B C0D06 500 001	400±%3	Twill	5±%3	5±%3	Carbon Fiber 6K	Carbon Fiber 6K
TC T O UD B CTB01 375 001	320±%3	UD	1,5±%3	3,75±%3	Thermoplastic	Carbon Fiber 12K
TC T O CR B C0B12 250 001	420±%3	Plain	2,5±%3	2,5±%3	Carbon Fiber 12K	Carbon Fiber 12K
TC T O CR B C0D12 250 001	420±%3	Twill	2,5±%3	2,5±%3	Carbon Fiber 12K	Carbon Fiber 12K
TC T O CR B C1B12 375 001	530±%3	Plain	2,75±%3	3,75±%3	Carbon Fiber 12K	Carbon Fiber 12K
TC T O CR B C1D12 375 001	530±%3	Twill	2,75±%3	3,75±%3	Carbon Fiber 12K	Carbon Fiber 12K
TC T O CR B C0B12 375 001	615±%3	Plain	3,75±%3	3,75±%3	Carbon Fiber 12K	Carbon Fiber 12K
TC T O CR B C0D12 375 001	615±%3	Twill	3,75±%3	3,75±%3	Carbon Fiber 12K	Carbon Fiber 12K

HYBRID FABRICS

Article No Ürün Kodu	Weight (gr/m²) Ağırlık	Type Tip	Thread Weft (cm) Sıklık Atkı	Thread Warp (cm) Sıklık Çözgü	Weft Yarn	Warp Yarn	
TC T O HB B CAB01 500 001	175±%3	Plain	4,1±%3	5±%3	Carbon Fiber 3K, 1610 dtex Aramid	Carbon Fiber 3K, 1610 dtex Aramic	
TC T O HB B CAD01 500 001	175±%3	Twill	4,1±%3	5±%3	Carbon Fiber 3K, 1610 dtex Aramid	Carbon Fiber 3K, 1610 dtex Aramic	
TC T O HB B CGB01 500 001	250±%3	Plain	5±%3	5±%3	3000 dtex E Glass	Carbon Fiber 3K	
TC T O HB B CGD01 500 001	250±%3	Twill	5±%3	5±%3	3000 dtex E Glass	Carbon Fiber 3K	
TC T O HB B CAB02 500 001	190±%3	Plain	6,6±%3	5±%3	1210 dtex Aramid	Carbon Fiber 3K	
TC T O HB B CAD02 500 001	190±%3	Twill	6,6±%3	5±%3	1210 dtex Aramid Carbon Fiber 3		
TC T O HB B CAB01 375 001	450±%3	Plain	3,75±%3	3,75±%3	3360 dtex Aramid Carbon Fiber 12		
TC T O HB B CAD01 375 001	450±%3	Twill	3,75±%3	3,75±%3	3360 dtex Aramid	Carbon Fiber 12K	

Main products offered under TECHEL are carbon fiber and hybrid fabrics for composite use.

TECHED

Building Reinforcement

Carbon Fiber Reinforcement highly recommended technic for building reinforcement. According top American Society of Civil Engineering (ASCE) CFRO is an effective material for herar strength and ductility of seismically deficient corner of knee reinforced concrete beam-column joints.

Automotive Industry

Carbon Fiber Reinforced Plastic (CFRP) has been used in high end automotive production for many years. The core competitiveness of CFRP is its durability on crash test and low weight proerty. In Middle high segment, BMW company is the first one who use CFRP in mass production of it new electric car i-series.

Aerospace and Aircraft Industry

In todays passenger aircraft more tha 50% percent of total weight is composed of advance composites including CFRP. Latest model of Boeing 787 is highly consists of CFRP with more than 50% of its weight.

Defence Industry

Carbon, Carbon-Glass, Carbon - Aramid Farbics are highly used in Material Science of Defense Industry. Approximately %50 of todays strike and Medium Altitude Long Endurance UAV aircrafts are build by composite materials reinforced with carbon fiber.

Boat and Yatching Industry

Fiber Reinforced Plastic (FRP) is highly used in yatching industry. There are several types of fibers which are used for this purpose. Most used ones are glass aramid (kevlar), carbon and hybrid construction of these fiber.

