

Size systems description and recommended applications

	Description	Yarn properties	Observations
T63	T63 is a starch /silane / oil-based size system. Due to its special composition, all glass filament yarns which are sized with T63 have a high tensile strength. The size abrasion is reduced to a minimum and the electric static build up is very low, even in demanding conditions.	T63 textile glass filament yarns are exceptionally well suitable for all textile machine processes such as: warping, weaving on rapier and projectile looms, plying, laid scrim machines, winding and /or braiding, production of meshes for ETICS applications.	Due to its composition, T63C is not suitable to the complete heat cleaning process (thermal heat cleaning).
T64	T64 is a starch /silane / oil-based size system. Due to its special composition, all glass filament yarns which are sized with T64 have a high tensile strength. The size abrasion is reduced to a minimum and the electric static build up is very low, even in critical conditions.	T64 textile glass filament yarns are exceptionally well suitable for all textile machine processes such as: warping, weaving on rapier and projectile looms, plying, laid scrim machines, winding and /or braiding, production of meshes. The T64 size system is specifically designed to be compatible with the specific coatings employed in ETICS and cement board applications. It provides excellent alkali resistance.	Due to its composition, T64 is not suitable to the complete heat cleaning process (thermal heat cleaning).
876s	876s is a starch /silane /oil-based size system. Due to its special composition, all glass filament yarns which are sized with 876s have a high tensile strength.	876s textile glass filament yarns are suitable for textile processes and is compatible with specific resins.	Due to its composition, 876s is not suitable to the complete heat cleaning process (thermal heat cleaning).
T8	T8 is a starch /oil based size system.	Yarns sized with T8 are suitable for all textile processing procedures such as: beaming, slashing (good compatibility with starch polyvinyl alcohol), weaving on air jet, rapier and projectile looms, braiding and heat cleaning treatment.	Can be thermally heat cleaned with all conventional procedures.

	Description	Yarn properties	Observations	
	T30, T32 and 5312 are starch oil based sizing systems, especially designed for high speed air jet weaving machines and applications for which heat cleaning properties are required.	Sizing system T30, T32 and 5312 provide the yarns with the optimum mechanical protection required for high speed air jet weaving machines in both directions. The main advantages of the product are: Low level of breaks during beaming and slashing, excellent compatibility with starch polyvinyl alcohol slashing agent, regular yarn impregnation and excellent machine efficiency.	The yarns can be thermally heat cleaned with the usual heat cleaning equipments (one or two steps processes). The fabrics produced with this binder system meet the most stringent quality requirements for the printed circuit boards, especially for the quality of surface.	T30/ T32/ 5312
	TD22 and TD37 are starch-free plastic sizing systems containing silane bonding agents guaranteeing an excellent compatibility with the different resin systems (epoxy, phenol and unsaturated polyester).	Glass filament yarns impregnated with TD22 and TD37 have excellent textile properties, enabling the production of different types of textile structures (glass fabrics, tape fabrics, braided sleeves and multi-axial fabrics, warp knitted fabrics, etc.) for use in composites without the need for any thermal heat cleaning.	Weaver's beams made with direct sizing systems don't need to be slashed.	TD22/ TD37
	TD44 is a starch-free plastic sizing system containing silane bonding agents guaranteeing an excellent compatibility with the different resin systems (epoxy, phenol, vinyl ester and unsaturated polyester).	Glass filament yarns impregnated with TD44 have excellent textile properties, enabling the production of different types of textile structures (glass fabrics, tape fabrics, multi-axial fabrics, warp knitted fabrics, etc.) for use in composites without the need for any thermal heat cleaning.		TD44
	T99 is designed for applications requiring a good alkaline resistance. In addition, T99 is compatible with phenolic resins.	Glass filament yarns impregnated with T99 have excellent textile properties allowing the production of different types of textile structures.	The ZeroTwist T99 product is well and easily impregnated by the alkali- and water-resistant resins used for EIFS (like acrylic, styrene butadiene latex, styrene acrylate polymers and copolymers).	T99

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TD52/ TD53	TD52/TD53 sizing systems are special designed to provide excellent compatibility with PVC plastisols.	High tensile strength, very low fuzz generation during the unwinding process through the die used to form a round cross section and calibrate the PVC coating.	Used for VCY, but also for the polyurethane coated yarn.
T18	T18 is especially designed for the texturizing process.	T18 sizing provides the yarn with the optimum protection required for the texturizing process. The sizing confers to the yarn a high tensile strength.	Can be thermally heat cleaned with all conventional procedures.
K252	K252 products are produced by blowing a stream of air into continuous filament yarn while it is being delivered at a higher rate than being taken by the winding process. The Saint-Gobain Vetrotex texturizing effect is optimal fixed in order to allow beaming, weaving and finishing treatments.	K252 products have: – excellent weaving properties on rapier and airjet loom in both, warp and weft direction, – a maximum texturizing effect uniformity, – no weavy effect of filling: the texturizing effect has been adjusted and fixed in order to avoid any weft displacement after weaving, – no protruding loops, – a smooth woven surface, – excellent compatibility with finishing agents, – 100% metered packages for wall covering applications.	K252 products are mainly used for high quality wall covering fabrics. They are also ideal for conventional texturized yarn applications like thermal insulation.
T10	T10 is a glue/tensile/oil/silan –based size system developed for air-jet texturizing and volumizing process after strands drying at high temperature. All individual filaments are quantitatively divided through an air-jet process and this results in very quick wetting. The yarns are very well compatible with water based polymer systems, all types of resins and bitumen.	T10 products have a sufficient tensile strength and they are suitable for weaving and rope braiding.	T10 sized yarns are used for: <ul style="list-style-type: none"> Ψ Civil engineering like: <ul style="list-style-type: none"> ≥ fabrics for roofing ≥ wall coverings – Industrial applications like: <ul style="list-style-type: none"> ≥ thermal insulation fabrics ≥ ropes (asbestos replacement)

3 Applications examples



Wind power plant wings



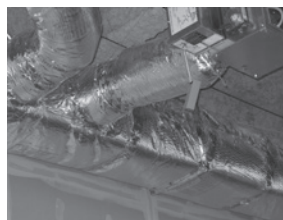
Aircraft cabin



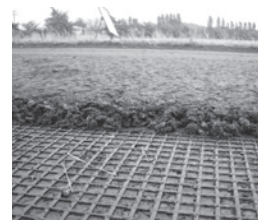
Filtration



Electric cables insulation



Thermal insulation



Pavement reinforcement