

Ahlstrom Multiaxial reinforcements are specifically designed for production of high quality laminates. They offer optimised fibre structures to provide strength in specific directions.

# Reinforcements Multiaxials

## Applications

Ahlstrom Multiaxials are specialty reinforcements suited for a wide range of production processes: hand lay-up, filament winding, pultrusion and closed moulds. Typical applications can be found in wind generator blade production and boat building.

## Product description

Ahlstrom Multiaxials are engineered fabrics made up of fibre layers laid parallel in up to four main directions ( $0^\circ$ ,  $90^\circ$ ,  $+45^\circ$  and  $-45^\circ$ ) and stitched together. Special directions between  $45^\circ$  and  $90^\circ$  are available and stitching configurations can be changed to meet the needs of a specific application. Also a chopped strand layer or different types of tissues can be added.

Ahlstrom Multiaxials are compatible with various types of resins. Multiaxials are also available as narrow tapes.

## Approvals

All Ahlstrom Glassfibre operations are certified according to ISO9001 standard. Certain products are also approved by classification standards e.g. Det Norske Veritas, Bureau Veritas, Germanischer Lloyd and Registro Italiano Navale.



Small fibers. Big difference.

## Properties

PRODUCT SPECIFICATION (some examples of our product range)				
	Product code	Weight g/m <sup>2</sup>		Thickness / mm ISO 4603
		Layers	Total	
Biaxial 0°/90°	42007	300 + 300	= 600	0.61
	42031	425 + 425	= 850	0.80
Uniaxial 0°/90°	42024L	1150+ 50	= 1200	1.09
Biaxial +45°/-45°	62006	225 + 225	= 450	0.48
	62008	300 + 300	= 600	0.60
	62013	500 + 500	= 1000	0.93
Biaxial +60°/-60°	5545	225 + 225	= 450	0.48
	5590	450 + 450	= 900	0.84
Triaxial +45°/-45°/0°	63014	300 + 300 + 300	= 900	0.84
	63032	450 + 450 + 900	= 1800	1.56
Triaxial +45°/90°/-45°	63025	300 + 300 + 300	= 900	0.84
	63030	225 + 450 + 225	= 900	0.84
Quadriaxial +45°/90°/-45°/0°	64005	195 + 390 + 195 + 390	= 1170	1.06
	64901	600 + 600 + 600 + 600	= 2400	2.00
	64010	300 + 300 + 300 + 300	= 1200	1.09

Standard Products	
Widths	Standard width 127 cm Special widths up to 254 cm are available on request
Roll lengths	50 - 100 m

### Standard Packaging

Ahlstrom Multiaxial products are wound on a cardboard tube (internal diameter 76 mm), wrapped in PE film and set on wooden, one way pallet. Each pallet is shrink wrapped. A detailed description of packaging is available on request. Other tube diameters for specific use are available.

### Storage

Multiaxial Products must be stored in a cool, dry area. The recommended temperature is between 10 and 35 °C and the relative humidity between 35 and 75 %. If the product is stored at low temperature (below 15 °C), it is recommended to condition the material in the workshop at least 24 hours before use.

This leaflet is issued without obligation. All issued specifications reflect the present status but are subject to change without notice.

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