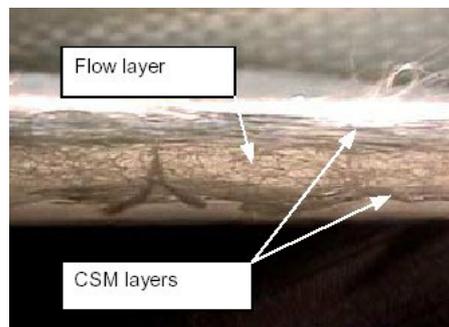


Combiflow

Ahlstrom Corporation



Ahlstrom Combiflow is a special reinforcement for closed mold processes. It consists of three layers; two layers of chopped glassfiber on the surfaces and a porous elastic layer in the middle providing an excellent resin flow. The elastic layer is marked with SP code.

PRODUCT CODE	PRODUCT IDENTIFICATION OZ/FT ²	COMBIFLOW THICKNESS MIL DIN53855	LAMINATE THICKNESS MIL
A31300	M1.0/SP180/M1.0	134	65-130
A31450	M1.5/SP180/M1.5	185	80-150
A31600	M2.0/SP180/M2.0	235	90-170
A32300	M1.0/SP250/M1.0	170	75-150
A32450	M1.5/SP250/M1.5	215	90-165
A32600	M2.0/SP250/M2.0	270	100-190

+ optionally surface tissue A80

Ahlstrom Combiflow's binder free construction gives excellent drape ability, very good resin flow and good compatibility with resins.

The products easy lay up in the mold and very high wetting capacity increase productivity and make your production more economical.

Good surface finish as well as high glass content with high mechanical properties can be reached with Ahlstrom Combiflow. Above all preforming can be omitted in most applications.

MECHANICAL DATA	UNIT	M1.5/SP180/M1.5	STD
Tensile Strength	Mpa	122	ISO 3238
Tensile Modulus	Mpa	7900	ISO 3268
Erogation at Break	%	2.3	ISO 3268
Flexural Strength	MPa	151	ISO 178
Flexural Modulus	MPa	6300	ISO 178
Fiber Content	%-w	35.4	ISO 1172
Matrix	Polyester Resin	-	-



COMPARISON TEST	UNIT	COMBIFLOW M1.5/SP180/M1.5	CFM 1.5oz/ft2
Tensile Strength	MPa	151	76
Elongation at Break	%	2.5	2.0
E-Modulus	MPa	9113	5366
Energy/Work	Nmm	5303	2709
Flexural Strength	Mpa	191	134
Flexion	%	3.4	3.1
E-Modulus	MPa	7309	5118
Energy/Work	Nmm	4185	3248
Impact Strength	KJ/m2	47.9	39.8
Shear Strength	MPa	31.1	26.5
Barcol Hardness	-	50-55	35-45
Glass Content	%-w	41.0	30.3
Number of Layers	-	3	6
Thickness mil	-	180-200	215-235

*TEST METHOD *Polyester Resin*: Viscosity 200cP *Curling System*: 1%Col%=1%MEKP *Laminate Size*: 16"X32" *Application*: Between Films Vacuum 0.6 bar *Resin Injection Time*: 8and 15mins

Packaging

	WIDTH INCH	ROLL LENGTH(yd)	PALLET WEIGHT(lb)	QUANTITY PER FCL 20' (lb)
A31300 M1.0/SP180/M1.0	50	49	386	7,720
A31450 M1.5/SP180/M1.5	50	44	457	9,140
A31600 M2.0/SP180/M2.0	50	38	530	10,600
A32300 M1.0/SP250/M1.0	50	38	326	6,520
A32450 M1.5/SP250/M1.5	50	38	442	8,840
A 32600 M2.0/SP250/M2.0	50	27	398	7,960

* Every roll is individually wrapped, 4 rolls on pallet, 20 pallets per 20'FCL

This product is specially made for exclusive sale into the NAFTA-countries and South America.

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