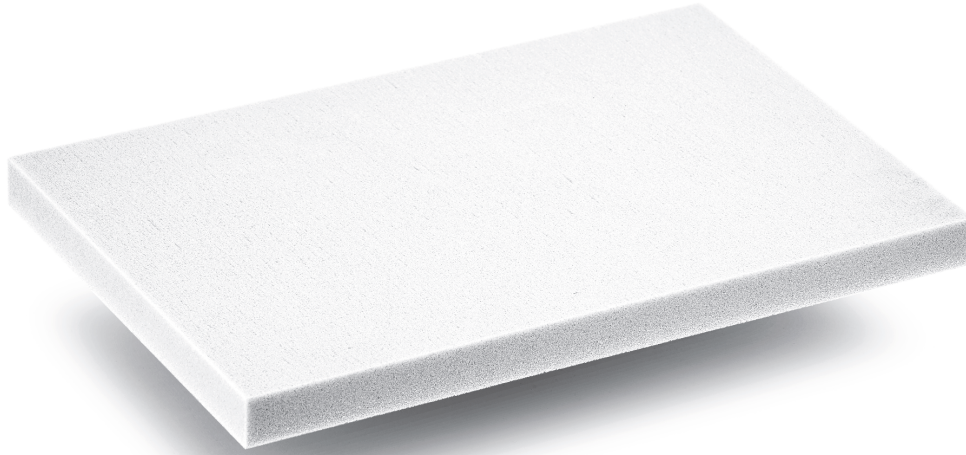


PMI



PMI (polymethacrylimide) RS foam is specially developed for use as a structural core in connection with vacuum infusion processes. It is applied in components of aviation, aerospace, sports equipment with resin injection process to reduce the weight.

PMI core makes it possible to produce sandwich components in a single step (co-curing), resulting in reduced overall production time. It is highly suitable with autoclave technologies and vacuum infusion processes, including RTM (Resin Transfer Moulding) and VARTM (Vacuum Assisted Resin transfer moulding) processes.

Its cell size is small, achieves an optimal compromise between low resin absorption and satisfactory bonding of the facings to the core.

Processing and production

PMI is especially suitable for vacuum infusion and RTM processes due to its optimized cell structure, where it can be used at temperature up to 180°C with pressure up to 0.7 MPa after heat treatment.

Thermoforming and shaping

PMI can be easily thermoformed or CNC machined to meet customers' requirements, bringing tremendous manufacturing advantages. High precision, pre-shaped and ready-to-use foam cores in complex or simple geometries can also be supplied by the Machining Department.

MECHANICAL PERFORMANCE

Type	Test Method	Units	PMI 24	PMI 30	PMI 50	PMI 75	PMI 110	PMI 200
Density	ISO845	Kg/m ³	24±3	30±3	50±5	75±7	110±10	200±15
Compressive Strength	ISO844	MPa	0.25	0.40	0.85	1.70	3.60	9.50
Tensile Strength	ASTM D638	MPa	0.6	0.80	1.68	2.30	3.70	7.00
Elastic Modulus	ASTM D638	MPa	25	38	83	108	197	380
Elongation At break	ASTM D638	%	2.8	2.4	2.6	2.8	2.8	3.0
Flexural Strength	ASTM D790	MPa	0.4	0.80	1.60	2.90	5.20	13.0
Shear Strength	ASTM C273	MPa	0.3	0.40	0.85	1.25	2.38	5.00
Shear Modulus	ASTM C273	MPa	12	15	30	48	80	160
Compressive Creep	GB/T 15048	%	≅ 2.0					/
Temperature Resistance	DIN 53424	°C	≅ 200					

Compressive creep testing conditions:

PMI 24	130 °C/0.1MPa/2h
PMI 30	130 °C/0.1MPa/2h
PMI 50	130 °C/0.3MPa/2h
PMI 75	150 °C/0.3MPa/2h
PMI 110	180 °C/0.3MPa/2h

Note: Technical data of our products are typical values for the nominal density.

PRODUCT SPECIFICATION

PMI	Size [mm]	Standard Thickness Range [mm]	Thickness Tolerance [mm]
24	2500x1250	1-60	±0.2
30	2500x1250	1-60	±0.2
50	2500x1250	1-120	±0.2
75	2500x1250	1-100	±0.2
110	2160x1100	1-90	±0.2

Note: 1-4mm thick sheet is supplied in 1/4 or 1/2 sheet size.

All heat-treated sheets supplied in sealed aluminum packaging.