



ATLASFOAM® Atlas HPE HT

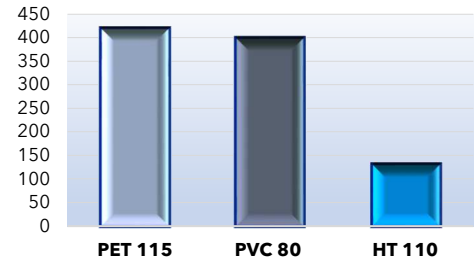
Beyond the state of the art: innovative formulation expressing excellent mechanical, chemical, thermal and technological properties, **Atlas HT** is an engineered core material optimized to best satisfy industrial processing needs, applications requirements, environmental impact target for sandwich composite structures.

In addition to lightweight and mechanical performance, **Atlas HT** offers:

PERFECT ADHESION-COHESION
SKIN-CORE
WITHOUT RESIN EXCESS

Resin uptake g/m² foam (side), plain sheet

- Resin saving 70% vs PETs & PVCs
- Lower sandwich final weight
- Improved sandwich ultimate properties



PROCESSING TEMPERATURE
UP TO 150°C

USE

- High processing temperature
- Fast reacting infusion resin system

BENEFITS

- Save manufacturing time
- Avoid waste of production
- Preserve laminate quality



according to DNV GL class programme DNVGL-CP-0084 - Type approval - Sandwich core materials

In use since 2004 as structural core by tens of customers spanning from leading international corporates to small companies in many industries: wind turbine blades, structural/ semi-structural/interior elements in yachts and ships, train floors and truck body elements, special vehicles, containers, sporting goods.



Atlas HT, HIGH SERVICE TEMPERATURE

Atlas HT is a closed cell rigid structural foam based on a high cross-linking degree interpenetrated polymer network (IPN), engineered on a polymeric blend with excellent toughness and resistance in relation to weight, outstanding resistance to static and dynamic loads and superior fatigue strength with an intrinsic capacity of energy adsorption, and deformation.

TECHNICAL PROPERTIES DATA - CUSTOMIZATION POSSIBLE UPON REQUEST

Atlas HT is an **isotropic material** and mechanical properties, including shear strength and modulus, are independent from sheet direction.

Constancy of Atlas HT mechanical properties are guaranteed by our innovative process and proved by routine testing at single production batch level; test data reported represent average production figures referring to over 10 years of product manufacturing and testing.

Property	Standard	Unit	HT 110	HT 160	HT 300
Density	ASTM D 1622	kg/m ³	110	165	300
			105-120	155-175	285 – 315
Compressive strength	ASTM D 1621	MPa	1.3	2.5	8
Compressive modulus	ASTM D 1621-73B	MPa	70	140	400
Tensile strength	ASTM D 1623	MPa	1.3	2.3	7.5
Tensile modulus	ASTM D 1623	MPa	65	130	380
Shear strength	ASTM C 273	MPa	1	1.45	4.0
Shear modulus	ASTM C 273	MPa	23	38	110
Thermal conductivity	ASTM C 518	W/mK	0.027	0.034	0.075
Service Temperature		°C	-180 +110	-180 +110	- 180 + 110
(*) Process Temperature		°C	150	160	160

(*) maximum 1 hour

STANDARD DIMENSIONS - CUSTOMIZATION POSSIBLE UPON REQUEST

Property	Unit	HT 110	HT 160	HT 300
Length	mm	2440	2440	2440
Width	mm	1220	1220	1000
Thickness	mm	5 - 300	5 - 250	5 - 200

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