



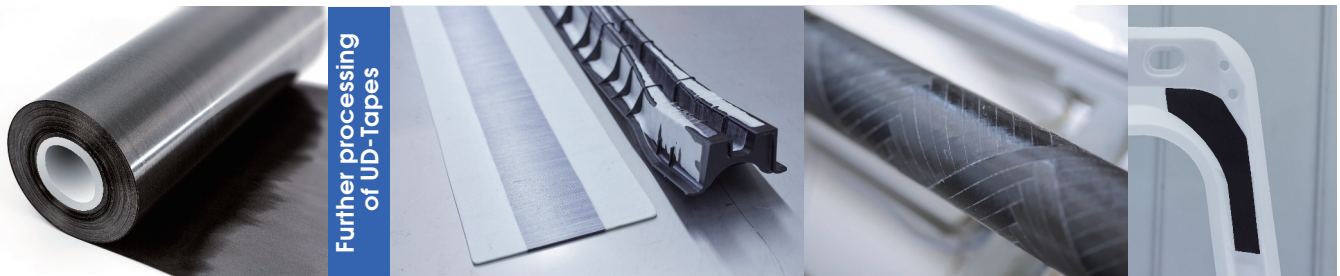
Lightweight

Polypropylene/Carbon Fiber UD Tape/Sheet

TAFNEX™ CF-PP UD

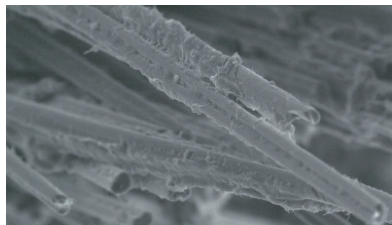
→ Good processability, Low moisture absorption

Production & Development



Further processing of UD-Tapes

SEM image of fracture surface of UD laminate test piece

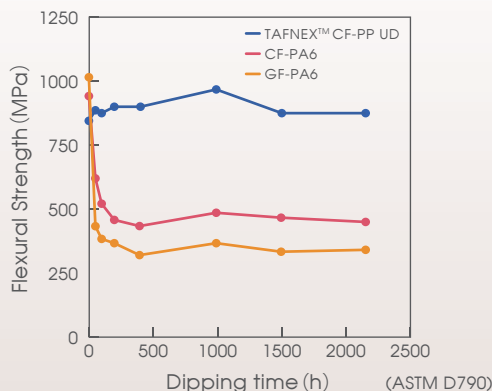


Good Mechanical properties due to improvement of bonding PP/CF interface

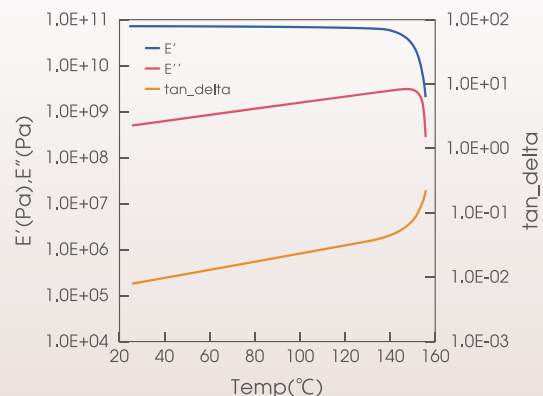
Mechanical properties of TAFNEX™ CF-PP UD

Properties	Unit	Measurement method	TAFNEX™ CF-PP UD	
V _f	%	JIS K7075	40	50
Density	g/cm ³	MCI method	1.27	1.31
Tensile strength	MPa	ASTM D3039	1200	1420
Tensile modulus	GPa	ASTM D3039	100	110
ILSS	MPa	ASTM D2344	31	30

Mechanical property changes with time due to the water dipping test



Temperature dependence of viscoelastic property



The written contents in this brochure are based on currently available information and data etc. Please be mentioned that we do not provide any warranty about the listed data and evaluation.

Issue & Solution

Unique bonding technology for carbon fibers and polypropylene
Processing and application development for cost competitive solution with CF

Application

Local reinforcement of structural parts using tape placement or injection molding
Tape winding of tubes with functionalization, Customized sheets & laminates