

Hydrogen Fuel Cell Materials

Taconic's PTFE Coated Fiberglass Fabrics for Hydrogen Fuel Cell component production offer a dimensionally stable coating carrier during the anode and cathode roll to roll coating process.

Taconic's PTFE coated fabrics provide clean release during transfer/decal lamination onto the PEM (Polymer Electrolyte Membrane aka Proton Exchange Membrane) to make the MEA (Membrane Electrode Assembly).

As Fuel Cells continue to push into the renewable energy space, researchers and manufacturers alike have turned to Taconic's PTFE coated fabric materials to reduce costs, improve production processes, and increase end-product reliability/lifespan.

Features:

- High temperature range: -73 °C (-100 °F) - +260 °C (500 °F)
- Outstanding non-stick surface/low coefficient of friction
- Superior release
- High abrasion resistance
- Chemical resistance
- Dimensional stability
- High dielectric strength
- Low electrical losses
- Flexible/conformable
- Chemically inert surface

PEM Fuel Cell Production: Benefits of PTFE Coated Fabrics for Roll-to-Roll coating

- Mechanical strength during casting roll-to-roll processing
 - Elimination of thermal shrinkage
 - No edge curling of film during casting process
- Reduced surface roughness
- Release properties of film surface
- Cost savings
 - Facilitates volume production

Gasketing fabrics and tapes for COPV manufacturing and parts:

- COPV dome protection parts
- Release fabrics for composite manufacturing molds
- Custom C.N.C. cut profiles



www.taconic-ipd.com / email: info@taconic-ipd.com

TACONIC®
Finding a better way
for 60 years!

Product Highlights

Fabrics and Films for PEM Fuel Cell Coatings/Decal Lamination:

7030-1 & 7030-1S: Single use fabric with smooth surface. Ideal when microinch roughness is important and where castings require clean and easy release. Micropinhole free.

7069: 6 mil PTFE coated fabric which exhibits exceptional release properties, heat resistance and chemical resistance. Ideal where heat transfer is desired.

Film and foil versions available: PTFE skived film, coated aluminum foils, coated PI films, and other coated films available

Tapes for COPV manufacturing and parts:

A5038: Single use fabric with smooth surface. Ideal when microinch roughness is important and where castings require clean and easy release. Micropinhole free.

A7068: 6 mil PTFE coated fabric which exhibits exceptional release properties, heat resistance and chemical resistance. Ideal where heat transfer is desired.

A05SK: Adhesive coated PTFE skived film. Other thicknesses available.

Product Number	Overall Thickness (mm)	Coated Weight (gm/sqm)	Tensile Strength Warp/Fill (N/5cm)	Tear Strength Warp/Fill (N)	Operating Temp. Min./Max. (°C)	Dielectric Strength (volts)
7030-1	0.085	180	800 / 500	15 / 10	-73 / 260	3500
7030-1S	0.085	180	800 / 500	15 / 10	-73 / 260	5000
7069	0.142	309	1300 / 1300	20 / 20	-73 / 260	3500
A5038	0.113	135	800 / 800	15 / 10	-73 / 260	2500
A7068	0.198	296	1300 / 1300	20 / 20	-73 / 260	3000
A05SK	0.175	274	280 / N/A	N/A	-73 / 260	2300

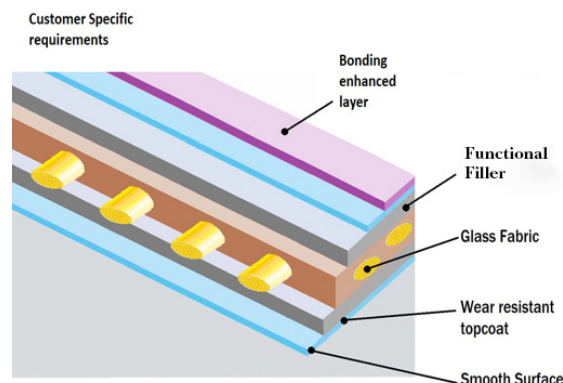
*Please note that all values are typical.

Other product thicknesses available!

Through our collaborative development processes we're helping our customers 'find a better way'.

Using our coating expertise and manufacturing infrastructure, we can coat a variety of polymers on substrates (glass, film, and carbon fiber) to meet your requirements.

We can design and coat your bespoke solutions up to 4000mm wide.



Our European Sales Team is ready to serve your needs. Please visit our website

www.taconic-ipd.com for more information.



Lester T. Russell, the acknowledged inventor of the process for applying PTFE to fiberglass fabric, founded Taconic in 1961.

The company produces advanced engineered composite materials for use in diverse markets. Taconic is dedicated to quality, innovation and environmental safety.

Our talented R & D, engineering and multi-lingual sales support network assures success in solving our customers' application challenges around the globe.



www.taconic-ipd.com / email: info@taconic-ipd.com

TACONIC

*Finding a better way
for 60 years!*