

Rubber to PTFE Bonding

The Best of Both Worlds

Polytetrafluoroethylene, more commonly referred to as PTFE is widely known as a non-stick or slippery material. This can make it challenging to bond it to other materials, including elastomers. Because of this many companies shy away from suggesting PTFE bonded parts to customers even though an application may benefit from the characteristics a bonded seal would provide.

Unlike others, Hi-Tech Seals has embraced the challenge of creating rubber to PTFE bonded parts and implemented a tried and true method. The method we have developed offers a durable and long-lasting bond. These components offer the necessary lubricity for an application while retaining the elasticity of the elastomer.

The PTFE can be used as an inert barrier between aggressive chemical media in applications where an elastomer is prone to attack. Where needed, the PTFE can also be used as an anti-extrusion ring. Bonding rubber and PTFE components into one part can also simplify the installation process as there are less loose components.

We can bond a wide range of rubber materials to PTFE, including nitrile, hydrogenated nitrile, EPDM, fluorocarbon, and silicone. Just as important as the rubber you choose is selecting the right PTFE for your application. The PTFE can be virgin or come modified with various fillers that augment the properties of the material to perform in specific way.

Curious if a rubber to PTFE bonded part would improve your application's performance? Contact a representative for more information on application dimension, capabilities, specific benefits, and more. Our experience in bonding rubber and PTFE could be the solution you need.

