Stiction: The air cylinder problem that wouldn't go away -- just did. You encounter problems like stiction every day.

They’re the kind of problems that have been around so long, people just assume they’ll always be here.

Problems like collar buttons that pop off, tires that go flat, fishing lines that get all tangled up – and on and on.

Nobody devotes much time to solving problems like these. They’re just part of life.

Take stiction. It’s been around since the discovery of friction. And one of the places it’s made itself right at home is in air cylinders.

Just what is stiction? It’s that notorious affliction that causes air cylinders to stick at the start of a stroke – resulting in erratic breakaway motion.

Technically, it’s the difference between static friction and moving friction when the static friction is higher.

The Airpel Air Cylinder does away with any perceptible stiction. And reduces running friction to exceedingly low levels. This gives it the unique ability to impart super smooth motion – motion smoother than any other air cylinder. Even at very low pressures. Even at very slow speeds. Even with very short strokes.

Even after standing idle for years!

How do you account for this remarkable performance?

The Airpel incorporates a unique construction to become an instrument-quality air cylinder. It uses a precision fit graphite piston which slides freely – without lubrication – inside a Pyrex® glass cylinder. This makes it ideal for forces from a very few grams to 30 lbs. or more.

In fact, Airpel is particularly well-suited to applications requiring smooth motion at ultralow pressures – and to moving lightweight objects or delicate loads at slow or high speeds.

But this air cylinder is no weakling. It can be used to provide brute forces, too – operating under extreme temperatures, at very high speeds and cycle rates, with no degradation in performance.

It also runs cleaner than typical air cylinders because it contains no oil. What’s more, it
has no rubber or plastic seals to abrade, wear out, or harden with time.

And because all exposed surfaces (except pivot model bushings) are stainless steel and nickel, Airpel is extremely clean and corrosion resistant.

**Airpel Anti-Stiction Air Cylinders are the lowest friction and smoothest running unitized body air cylinders available today.**