ADVANTAGES

Conform to Any Shape

The inflatable rubber construction of AirPicker® and AirGripper™ end-effectors allows a multiple number of shapes to be handled with one model.

Multiple Sizes Handled with One Gripper

The large expansion of Firestone end-effectors allows for multiple part sizes to be handled with just one size model. The diameter of an AirPicker® end-effector can grow by as much as 1.86 times the deflated diameter, while an AirGripper™ end-effector can grip around an object that is only 40% of the deflated diameter.

Delicate Handling

By controlling the amount of pressure within the bladder, Firestone end-effectors can handle delicate objects with the soft touch of rubber and air. The holding force is distributed over a greater surface area than a mechanical gripper, resulting in a soft and secure touch even with heavy loads.

High Load Capacity

The wide contact area associated with an AirGripper™ and AirPicker® end-effector results in a higher load capacity. A mechanical gripper only contacts the small area with its "fingers". The greater contact area results in a firmer grip and higher load carrying ability.

Non-marring Contact

The soft touch of the rubber and air allows for glass and plastic objects to be handled without marring their surface. This has been proven in applications handling freshly molded test tubes, glass bottles, and photosensitive copier drums.

Wide Size Range

Our standard AirPicker® end-effector line can handle objects with an inside diameter as small as 0.33 inches (8.5mm), and as large as 4.13 inches (105mm). Our standard AirGripper™ end-effector line can handle objects ranging from 0.2 to 1.8 inches (5 to 45mm) in outside diameter.

No Lubrication Required

The absence of bearings or moving parts means that no lubrication is required for a long durable life.

Low Cost

Firestone AirPicker® end-effectors typically cost less than comparable mechanical grippers.

Long Life in a Dusty Environment

The AirPicker® and AirGripper™ end-effectors do not use seals or bearings, which results in a more durable gripper in dusty environments.