

Apache pigs will perform as designed for pipeline cleaning, batching of products, or displacement. However, urethane components are subject to deterioration under certain conditions of heat and humidity.

General:

- A. Extremes of temperature and humidity will hasten the deterioration of urethane components. Shelf life will be maximized when the temperature is maintained below 27 degrees Celsius and relative humidity less than 60 percent.
- B. Urethane components should not be stored in direct sunlight.
- C. Urethane components become brittle when stored in extreme cold temperatures. They should be warmed to the 10 to 27 degrees Celsius range before use.
- D. Components will take a “set” if deformed over a period of time. They should be stacked so that deformations will not occur. This is especially applicable to pig cups.
- E. When a shelf inventory is maintained, use a “first-in, first-out” usage system.

Assembled Pigs:

- A. The ideal storage for pigs is on a stand, with a stand supporting the pig weight.
- B. Brush or blade pigs should be stored standing on end. Storage on the side with blades, springs or urethane cups supporting the weight will cause deformations of cups and blades.

Pig Components:

- A. Pig cups can be stacked, as long as the weight is not enough to distort the lower cups.
- B. Urethane discs can be stacked.
- C. Three ribbed blades and plow blades can be stored on their side.

Long Term Storage:

- A. Urethane parts which have been stored for six months or greater should be examined for physical properties before placing in service. Components losing their physical properties will soften. Additionally, the urethane will darken in color and begin to flake or crumble. Discard the part if this occurs.
- B. A check for hardness can be estimated with a sharp tool. When pressed into the urethane material, the amount of penetration will be minimal on a good component. A durometer guide for measuring non-metallic hardness will give a precise indication. A cup or disc component with a hardness below 70 Shore A should be discarded. Other urethane components are formed to a hardness of 70 Shore A. Consult the factory for further information.

Cleaning:

Clean pig as soon as possible after removal from the pipeline. In applications of high concentrations of hydrogen sulfide (H₂S), immediate cleaning is highly recommended.

Removing Paraffin:

- A. If the pig is heavily packed with paraffin, much of it can be removed by scraping immediately after removing from the trap.
- B. Submerge scraper in water bath heated to 70 degrees Celsius for no more than one hour. When the bulk of the paraffin has been removed, clean remainder with high pressure water jet.

Removing Liquid:

Clean with high pressure water jet.

Cleaning With Steam:

Steam cleaning is acceptable for cleaning metal body parts and spring assemblies ONLY. However, 85 degrees Celsius is the maximum temperature to which urethane should be exposed. A maximum of 30 minutes at this temperature is recommended.

Cleaning With Solvents:

Diesel fuel or kerosene are acceptable cleaning solvents. Urethane components may be immersed in or wiped with either one.