



# CARE AND FEEDING OF S.U.N. PIGS

**WHILE ITS NOT NECESSARY TO FEED A S.U.N. PIG, AND S.U.N.'S MDI URETHANE IS VERY DURABLE, THERE ARE CERTAIN THINGS THAT YOU SHOULD KNOW FOR PROPER CARE AND MAINTENANCE OF THE PIG IN ORDER TO PROLONG ITS LIFE.**

## CLEANING THE PIG:

To extend the life of a S.U.N. pig, it is recommended that the pig be cleaned after a run. Storing a pig with product residue left on the pig promotes the deterioration of the urethane when the pig is stored for long periods of time. The pig can be cleaned with a power-washer and water, and does not need to be disassembled for cleaning.

## ENVIRONMENTAL FACTORS:

Long-term exposure to sunshine, temperature extremes (both heat and cold), and humidity will cause deterioration in the urethane. If the pig is to be stored for long periods of time, it is best to store it in a building or in a covered location, to limit harsh environmental exposure.

## NORMAL WEAR AND TEAR:

Because of its unique design, its all polyurethane components, and the lighter physical weight of the standard Super Pig, the scraper cups will normally wear in an even pattern. It is, however, typical for the leading and trailing cups to wear slightly faster than the two interior cups. This type of wear is normal and is caused by the resulting differential pressures across the pig as it is run in the line. In order to maximize the service life from a set of standard scraper cups, periodically rotate the first and fourth cups with the interior cups on the pig.



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## CUP WEAR INSPECTION:

To determine if a cup, or a set of cups, needs to be replaced, measure across the diameter of the cup's trailing edge. If the measurement is less than one percent (1%) of the oversize of the pipeline I.D. that it is used in, the cup should be replaced. To properly size a Super Pig for line operations, the Super Pig scraper cups should be approximately three percent (3%) over the nominal I.D. of the pipeline.

Another method of determining if a scraper cups need to be replaced is to measure the trailing edges of the cups at various points around the circumference. If the measurements between the cups vary by fifty percent (50%) or more, the cups should be replaced. This method of inspection is best applied when one or more cups have been changed out from the original set due to damage.

Uneven wear on one side of a cup is also an indication that the cup should be replaced. This type of wear is usually caused by the pig nosing down during its run due to high line pressure pushing the pig. This problem can usually be corrected in a solid post pig (under 16" pig) by drilling by-pass holes in any or all of the cups from the second through fourth positions, or in hollow post pigs (16" and above pig) by drilling by-pass holes in the face of the post. The number of holes, the size of the holes, and the cups that the holes are drilled in, are a matter of experimentation. Drilling the by-pass holes will change the pig from a pushed weight to a pulled weight.

## POST, SPACER, RETAINER INSPECTION:

These other parts of the Super Pig are not subject to the same type of wear as a scraper cup, but can fatigue after long term use. Inspection of these parts on a routine basis is recommended. Always check for cracks and tears in the polyurethane component parts when inspecting or redressing the pig. Replace the part if any signs of cracks or tears are present. The clamp and bolt that hold the retainer in place, keeping the pig together, should also be inspected on a regular basis.

It should be replaced if the fastening nut and head are rounded off, if the nut is loose fitting, or if the strap is badly corroded, torn, deformed, or bent up from many changes. It should also be noted that during pigging operations, it is not unusual for the Super Pig post to elongate slightly because of dynamic loading and stress. After the run, the pig will "shrink" back to its original shape. If, however, after long-term use, the pig does not return to its normal shape, it may be necessary to take up the slack space by shimming with a disc(s), a tube spacer, or replacing the post.

