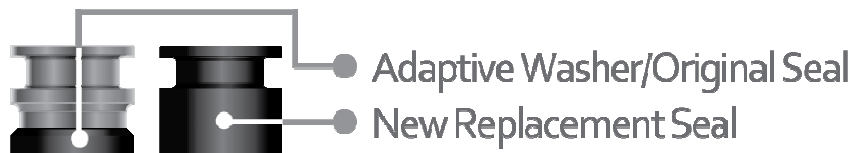


Better Side|Seals

bettersideseals.com



US PATENT # 9,433,955

When using cup washer or replacement side seals:

Assemble the wet/fluid end by installing all o-rings and screens. Prior to installing the side seal into the housing, it is necessary to make sure that both the mixing chamber sides and the side seals are polished using 2500 wet/dry paper on a flat polished steel surface. It is best to use a circular pattern while polishing to avoid micro-scratches in one direction which could lead to premature scoring.

Shutting down at the end of the day:

At shut down, when the proportioner is parked, the pressure is below 250 psi. This includes inside the check valve and side seal housings. To prevent the excess pressure from causing the fluid to leak out of the gun over night, it is important to drain the pressure from the gun completely by closing off the manifold control valves and activating the gun to dispel the rest of the pressure in the gun. Actuating the trigger once or twice is all that is needed.

Allow the foam to react and develop as normal, drill out the mixing chamber. **It is not necessary to squirt extra grease into the fluid end at the end of the day. This can lead to problems at the start up the next day spraying resumes.** It is recommended that the gun be disassembled at the end of the week to inspect the side for scratches or fractures that will form from higher temperature materials and higher pressures. These fracture lines can be sanded out with the 2500 wet/dry paper then put back into use. This will also prevent catastrophic failure resulting in cross contamination or clogged air lines.

Greasing Requirements:

When using open cell foam, a pattern change does not appear as quickly as with closed cell foam. Approximately every 20 minutes, it may be necessary to drill the mixing chamber. If it is not necessary to drill the chamber, it is advised to do it anyway, and give another shot of grease into the wet/fluid end assembly to prevent residual fluid from crystallizing with the lithium grease, which is what causes the scoring to begin with. **There is no such thing as too much grease!**

When using closed cell foam, the spray pattern change is more visible and should be drilled as needed. Once the mixing chamber is drilled, give another shot of grease into the wet/fluid end assembly to prevent residual fluid from crystallizing with the lithium grease, which is what causes the scoring to begin with. **There is no such thing as too much grease!**

If you are using a 2020 mixing chamber, it is advised that only enough grease be used to lubricate the mixing chamber. This is to avoid clogging the side inlet ports of the mixing chamber.

A pair of side seals can be used from job to job and can last from two – three months, if the above procedures are used. This can reduce overhead expenses for mixing chambers and side seals by 80% - 85%.

Periodic cleaning:

In the event of a drained drum that results in a pressure imbalance, it is best to set up the new drum with the transfer pump and bleed out the air in the lines prior to resuming spraying operations. While bleeding the fluid lines, remove the check valves and screens, spray with gun cleaner and compressed air. Repeat for the side seal housings in the event that some cross contamination did occur. While the side seals are out of the gun, use the opportunity to ensure that there is not any visible scratches. This is to prevent a chemical imbalance during spraying and any chemical “trash” in the bottom of the drum that may have been sucked up as the fluid level was depleted at the bottom of the drum.

Fresh grease should be injected into the gun to allow for the gun cleaner to be pushed out with the grease.

Other materials:

I have had other contractors use the replacement side seals in the Graco Fusion gun to apply Polyurea while using a 2929 tip and spraying 2500psi static, 2100psi – 2200psi dynamic. At these pressures and heating the material to 140°F - 160°F puts extra stress on the side seals. The side seals need to be cleaned and checked **every day** to prevent failure. These side seals work well when used as outlined above.