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13<sup>th</sup> October 2008

## Ref: Technical visit (09/10/08) - Ø95.0mm pots

The purpose of the visit was to assess 'intermittent sealing' problems with the above mentioned pots.

## Pot details:

The on hold pots have forming dates of 17/06/08 and 08/09/08. On examination some pots have a rough appearance on the 95.0mm cut diameter as well as a defined bead of plastic on the underside of the rim – **NB**: This raised bead is positioned in the centre of the rim and in some cases does not appear to be even around the diameter. The rim has a nominal thickness of 0.85 but when measured to include the raised bead the thickness increases to 1.02 which means that the rim is only contacting the machine cup ring on this very small point contact (e.g. a bead of 0.2mm)

In our opinion this feature on the underside of the rim is not ideal and could therefore be a contributing factor to the sealing problems

**Filling machines:** This pot can be used on 2x \*\*\*\*\*\* machines although during our visit only m/c No. \*\* was running.

Cup ring Ø OD	Cup ring Ø ID	Set temp °C	Actual temp °C
93.40	88.70	H1 - 249	H1 - 235
		H2 – 249	H2 - 240

Comments:

ALL cup ring faces where in a poor condition with visible damage

Heat seal faces are FLAT and in good serviceable condition with self levelling feature Heat seal temp is considered adequate for the combination of PP pot and PET lidding

Pots from m/c No. \*\* that had been rejected due to seal failure where examined in an attempt to identify the cause of the problem. The seal failures showed no consistent pattern with light/patchy seals in various areas around the rim. The pot is not a good fit in the cup ring which with a 2.35mm wall thickness only provides minimal support for the rim during sealing. The (customer) informed us that another pot runs through the same machine with no problems – **NB**: Samples of this pot show NO raised bead on the underside of the rim

Machine No. \*\*

Cup ring Ø OD	Cup ring Ø ID	Set temp °C	Actual temp °C
93.20	89.40	H1 - 245	H1 - 180
		H2 – 245	H2 - 190

Comments:

ALL cup ring faces where in a poor condition with visible damage Heat seal faces are FLAT and in good serviceable condition Heat seal temp was not set for PP pots/PET lidding

The pots are an even slacker fit in these cup rings and the wall thickness is thinner @ 1.90mm The (customer) reports more problems when running on this machine

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## Actions/observations:

- 1. Customer to re-machine the top face of all cup rings on m/c No. \*\* (ETA 21/10/08) and reevaluate the suspect pots
- The \*\*\*\*\*\*\* pot tooling requires investigation as to the cause of the raised bead which for this particular application appears to be detrimental to achieving a 100% seal (can this be removed?) NB: The \*\*\*\*\*\*\* pot does not have the raised bead and according to the (customer) this pot runs with no issues
- 3. At present the (customer) uses a .050 Poly with heat seal lacquer. Trials using a Polyester coex would be helpful and greatly assist when sealing to this pot. The Poly co-ex has a 15.0 gsm sealing layer that is far easier to seal than heat seal lacquered polyester

Best regards,

Alan Ogden