

## **CAN-O-MAT mini-seam technology offers appreciable cost reductions for endmaking**

The canmaking industry is increasingly forced to reduce the production costs of cans. Lower material consumption is the main factor for a cut in the production costs of 3-piece cans. So far the established method has been to trim down the sheet gauge continually, thus reducing not only the material consumption and, in consequence, the costs of the material, but the weight to be transported by the consumer as well.

In recent years considerable progress has been made in sheet gauge reduction. The potentials to reduce the sheet gauge of can bodies have been exhausted to a vast extent whereas there still seems to exist some margin as regards sheet gauge reduction for top and bottom ends.

Contrary to the reduction of the body sheet gauge, where axial and panelling resistance must be taken into account, a reduction of the sheet gauges for the top and bottom ends requires a closer observation of process-related, technical aspects.

In order to maintain its stability, thinner material usually means harder material, or, to put it differently, a transition from single reduced material (SR material) to double reduced material (DR material). This harder material is more difficult to shape and tends more easily to form wrinkles in the seam. These difficulties must be compensated by minimising the seam: mini-seams are the result.

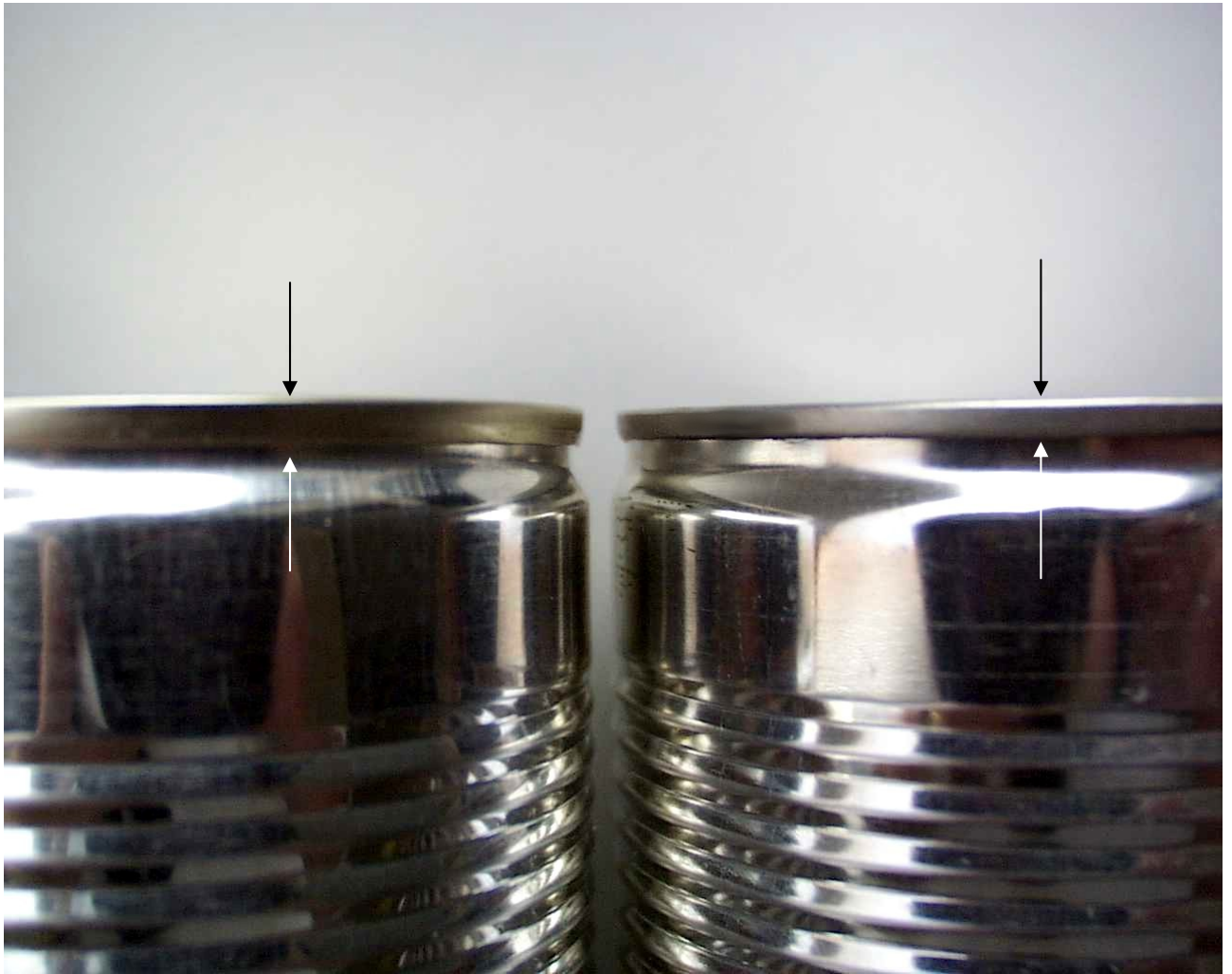
According to Sefel mini-seams are seams of type OIII with a seam height of 2.4 mm, so far used for cans with diameters of up to 73 mm, and type OII with a seam height of 2.6 mm, so far used for cans with diameters of up to 99 mm. Apart from material savings thanks to sheet gauge reduction there are further material savings due to the smaller blanks required for mini-seams.

An Arabian canmaker has converted the production of his 73-mm cans to mini-seams. The cans are made on a CAN-O-MAT supplied by Cantec, with rail seamers to form the mini-seam. Production on the line was started successfully at the end of 2002.

This line is a good example of the savings potential:

The reduction of the sheet gauge for the top and bottom ends from 0.20 mm to 0.17 mm lowers material consumption by 15 %. The smaller blanks now needed for the mini-seams add a further saving of 2.65 % so that total savings of 17.65 % could be achieved for the ends.

CAN-O-MAT seaming technology with mini-seams thus offers canmakers optimum conditions to benefit from the above mentioned savings potential for the production of ends.



**Standard seam**

**Miniseam**