Blanket Brand C, model I

Data Indentation and gauge loss characteristics of samples #6 and #7 are reproduced again:

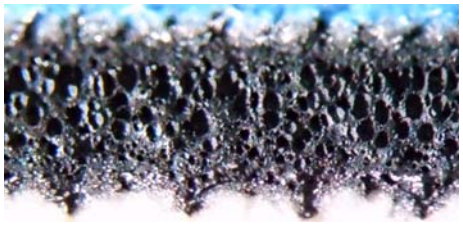
Parameter\Sample	#6	#7
I_1 - Indentation at 1st compression cycle (µm)	163	201
I_5 - Indentation at 5th compression cycle (µm)	130	164
$G_{L@60}$ - Gauge Loss @60 kPa (D_{04}-D_0) after the 4th compression cycle (µm)	39.5	50.1
$G_{L@1060}$ - Gauge Loss @ 1060kPa (D_5-D_1) at the 5th compression cycle (µm)	6.5	13.4

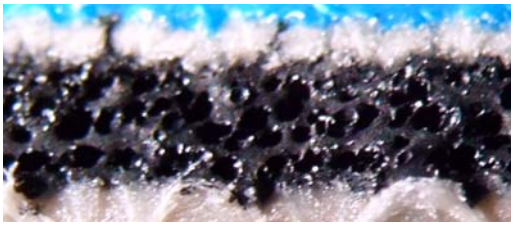
Elongation = f(T) graphs on page 2 contain further useful data for “in service” blanket gauge loss trend prediction as shown on the additional magnified graphs.

Comparing above graph rows one may fairly expect that blanket thickness of Item #6 will stabilise quickly after an initial ~0,04 mm blanket seating and a negligible gauge reduction of ~0,01 mm at printing pressure, while with Item #7 further gauge reduction at printing pressure is still under way.

Please compare the photos hereunder:

The photo on the left shows an open cell type compressive layer as used by the blanket model under consideration, while the photo on the right is from another blanket with closed cell type compressive layer using micro spheres.





Compression characteristics of blankets using open cell compressive layers are likely to fall into a wider range of values.

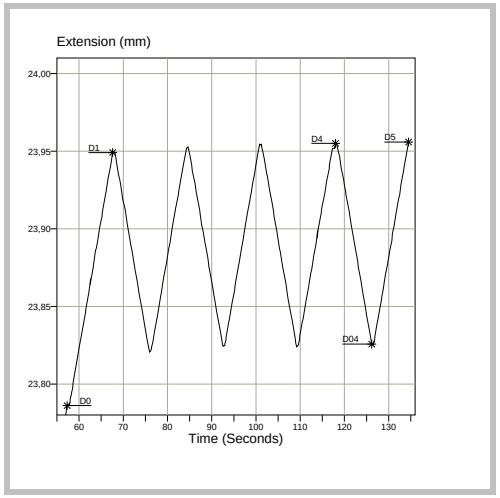
Note:

Hollow plastic micro spheres were first used by Dunlop and Day in the new concept of compressive printers blankets. During vulcanisation some spheres blow-up into larger holes and the rubber dough is thus transformed into a closed cells type of foam.

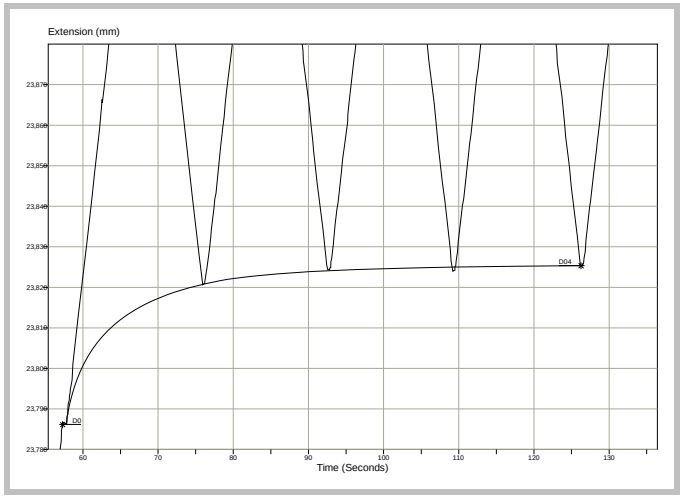
The original use of micro spheres having been subjected to patent during 20 years, other manufacturers willing to enter the increasingly important compressive blanket market segment had to develop alternate compressive layer solutions.

Salts mixed into the rubber dough were a common solution. In a similar way as micro spheres, during vulcanisation these salts release gases creating a foam structure. However foams created with salts have open cells and respective blankets could be expected to have higher gauge loss during use.

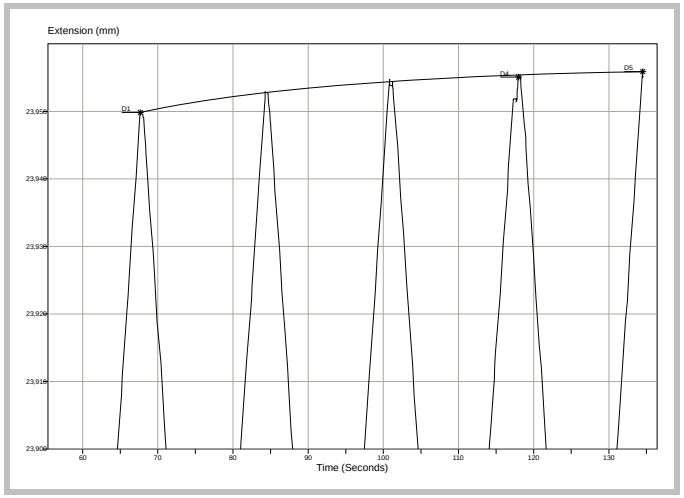
Another option for compressive layers was patented by Continental where micro spheres with positive internal pressure are used instead. Low blanket gauge loss should be expected from this type of structure.



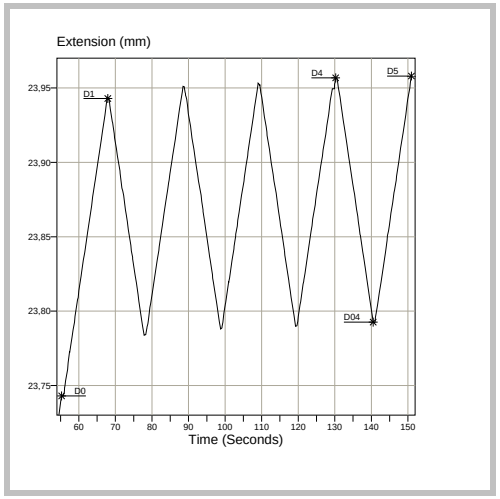
Item#6-Extension=f(T)



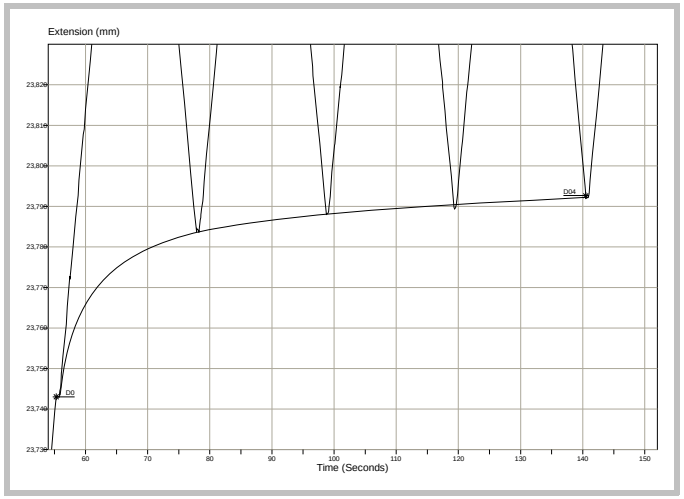
Item#6-Gauge Loss trend @60kPa



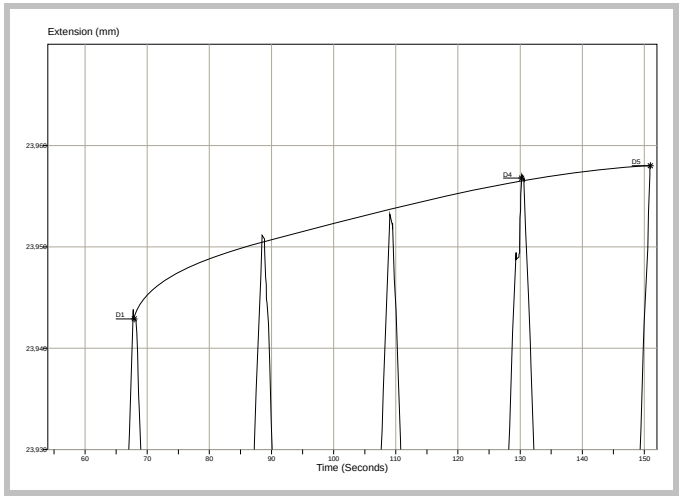
Item#6-Gauge Loss trend @1060kPa



Item#7-Extension=f(T)



Item#7-Gauge Loss trend @60kPa



Item#7-Gauge Loss trend @1060kPa