

Back extrusion for shampoo characterization



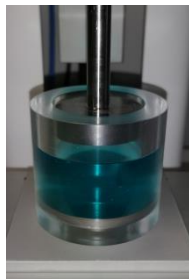
USE

The disc plunger performs a compression test which extrudes the product up and around the edge of the disc. This test measures the consistency of viscous products, like shampoo.



METHOD

Shampoo is poured inside the extrusion cell in order to allow liquid to rise without overflow. The three steps process include a 10mm compression at 1mm/s followed by a 10s relaxation. The final step is 50mm of traction at 1mm/s.



EQUIPEMENT



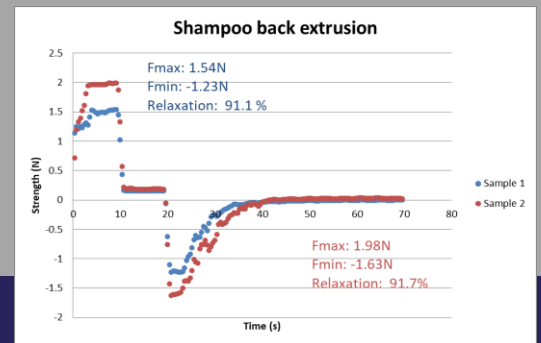
TX-700



Extrusion cell
(back & forward)



Software
(optional)



RESULTS

Using either the computer software or the TX-700 integrated software, it is possible to determine F_{max} , F_{min} and the relaxation of the product via a CRT (compression-relaxation-traction) method.

In the application above, both products have about the same relaxation which shows the elasticity. However, F_{max} is 28.5% higher for one sample. Consequently, it is much more consistent. There is 32.5% difference between the two F_{min} showing that adhesion power are neither the same.

The TX-700 is capable to differentiate the properties of the 2 samples and gives us a quick and easy technic to link the feelings of the testers to real experimental values.

