

## Firmness determination of two different deodorants (24h/72h)



### USE

Cylindrical probes are used to make penetration test on hard samples such as deodorant sticks. Doing this, we can determine the firmness of the stick.



### METHOD

In this test, the deodorant stick is puncture on the side we put under the armpit. Indeed, it's on this side that the texture has to be optimal. So the penetration is made by a 2mm cylindrical probe at a rate of 0.5mm/s. The penetration depth is 5mm.



### EQUIPEMENT



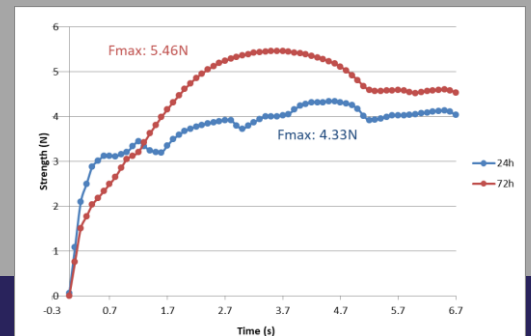
TX-700



Cylindrical probe 2mm



Software (optional)



## RESULTS

The association of a 2mm cylindrical probe with the TX-700 allows us to determine the firmness of a solid sample. Thanks to the device, it is possible to differentiate multiples types of deodorant based on their response curve.

Maximal strength ( $F_{max}$ ) corresponds to the firmness of the product. By using the TX-700, it is possible to adapt the formulation to the desired firmness in order to optimized the stick properties such as the in and out capability or its application capacity.

With the TX-700, it is also possible to make quality controls on this kind of product.

