

V-Screen fabric

The V-Screen fabric combines the characteristics of stainless steel and synthetic fibres. When using this fabric the user achieves high register accuracy when printing finest structures.

The V-Screen fabric is woven with a liquid crystal polyacrylate fibre, consisting of a copolymer of p-hydroxyl benzoic acid and oxynaphta acid.

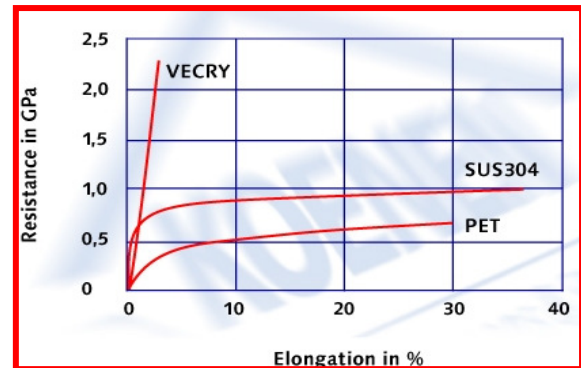
The V-Screen is about twice as strong as stainless steel and three times as strong as polyester. The tension is a tenth compared with these materials. The material elasticity is twice as high as with stainless steel.

The optimum conditions for V-Screen must be determined by testing for the respective application. No changes compared with standard stainless steel screens are generally required.

Product characteristics of V-Screen:

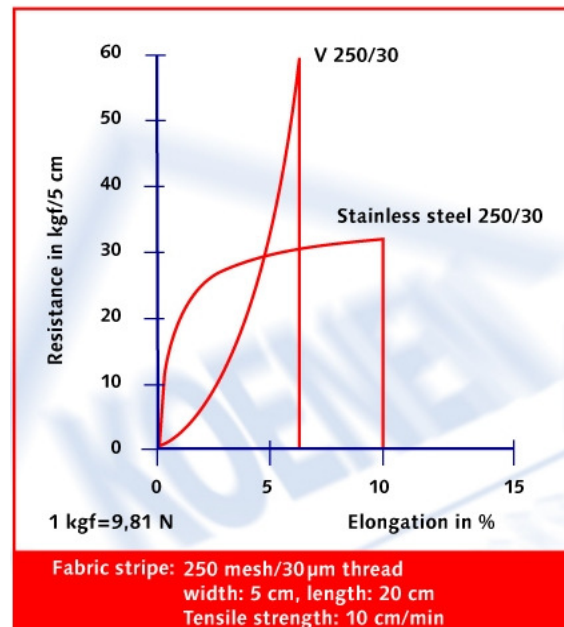
- High strength with low tension; can be tensioned with > 30 N/cm
- High elasticity, low tension loss
- No yield limit; the strength curve rises steeply up to the yield limit with little tension (*decisive characteristic for printing accuracy*).
- High register accuracy
- Large open screen area
- Long service lives
- Good abrasion resistance
- Good chemical resistance
- The UV-light reflection at 400 nm is less so that sub-radiation is reduced and higher resolutions can be achieved
- Excellent paste removal capabilities; (*since the fabric is very thin and the thread has a surface with Lotus flower effect*)

Stress-strain characteristics:



- 30 µm threads from V-Screen (VECRY)
- Stainless steel (SUS304)
- Polyester (PET)

Tensile strength analysis:



- V-Screen fabric: V 250/30
- Stainless steel wire fabric: VA 250/30

*Subject to technical changes