BURSTING STRENGTH

Fabric Bursting Strength:

Bursting strength is a method of measuring strength in which the material is stressed in all the directions at the same time and is therefore more suitable for materials such as knitted fabrics, lace or non-woven.

Fabrics used in parachute, filters, sacks and nets are simultaneously stressed in all the directions during service. In service, a fabric is more likely to fail by bursting than by a straight tensile fracture;

Example: The stress present at elbows and knees of clothing. During a test a fabric fails across the direction which has the lowest breaking extension

- Tensile test is unidirectional and thus suitable for woven fabrics where definite warp and weft direction strength is measured.
- In case of knitted or nonwoven fabrics, where no definite alignment of yarns/fibres is there, multidirectional force is required.
- Some fabrics (even woven also) stressed in all direction during use (parachute, filters, sacks, nets etc.)
- These types of fabrics more likely to fail by bursting in service than it is to break by a straight tensile fracture.
- Fabric fails across the direction which has lowest breaking extension. Because in all the directions the fabric undergo the same extension. This is not necessarily the direction with the lowest strength.