



Across Direction	Direction of the side of the blanket as intended to be applied perpendicular to the direction of rotation ⁽¹⁾ .
Around-the-cylinder Direction	Direction of the side of the blanket as intended to be applied in the direction of the rotation ⁽¹⁾ .
Blanket Dimensions	Defined by Length , Width and Thickness .
Compressibility	Extent to which a material is compressed in test for compression and recovery ⁽²⁾ . Defined as Deflection/ Indentation on the 5 th cycle of a Compression Test .
Compressive Loss	Deflection/ Indentation decrease from the 1 st to the 5 th compression of a Compression Test .
Damping Capacity	Capability to dissipate energy in motion of any type ⁽²⁾ . Hysteresis Energy/ Elastic Energy ratio describing the balance between the transformation of compressive energy into Heat and Elastic Deformation Energy, respectively.
Deflection	Thickness reduction of a sample (full area) when compressed up to a specific pressure, following a Compression Test .
Deflection 2k	Thickness reduction of a sample (full area) when compressed up to 2.060 kPa, following a Compression Test .
Deflection k	Thickness reduction of a sample (full area) when compressed up to 1.060 kPa, following a Compression Test .
Effective Length (Gauge Length ⁽²⁾)	The distance along the sample dimension upon which extension calculations are made ⁽²⁾ . Distance between the grips in an Elongation & Tensile Test .
Elastic Energy	Elastic deformation energy at the last compression stage of a Compression Test ⁽²⁾ .
Elongation	Length increase of a blanket under longitudinal stress , expressed in percent of the initial length at 500 N per 50 mm width ⁽¹⁾ or in mm. <i>This result may be linked to the blanket behaviour during its dressing operation on the blanket cylinder.</i>
Extension	An instantaneous Grips/ Platen distance value during a mechanical test.
Gauge Loss	Blanket thickness reduction from the 1 st to the 5 th compression of a Compression Test , measured at the same pressure.
Gauge Variation/ Uncertainty	Thickness values difference, measured at a given pressure, on the 4 th decompression and on the 5 th compression, following a Compression Test .
Hardness	Measure of a material's resistance to localized plastic deformation ⁽²⁾ .
Head Speed	Grips/ Platen relative movement velocity.
Hysteresis (loop)	The closed curve representing the successive stress-strain status of the material during a cyclic deformation ⁽²⁾ , following a Compression Test . Refer to the Load = f(Machine Extension) Graph - 4 th decompression and 5 th compression.
Hysteresis Energy (Elastic Hysteresis ⁽²⁾)	Difference between strain energy required to generate a given stress in a material and elastic energy at that stress ⁽²⁾ . Heat involved at the last cycle of a Compression Test .



Hold Time	Time period at constant load, as required by Elongation & Tensile Test .
Indentation	Depth of impression in a sample (indenter seats fully inside the sample area) when compressed up to a specific pressure, following a Compression Test .
Indentation (k)	Depth of impression in a sample (indenter seats fully inside the sample area) when compressed up to 1.060 kPa, following a Compression Test .
Indenter	Hard flat body with parallel faces, usually a circular metal disk.
Length	Dimension in the around-the-cylinder direction ⁽¹⁾ .
Load Cell	A transducer which converts a value of force into a proportional electrical signal ⁽²⁾ .
Load Reaction	Blanket time response on a Compression Test - 4 th decompression plus 5 th compression. Refer to the Load = f(Time) Graph.
Machine Extension	Extension .
Mounting (Extension)	Elongation (L-L ₀ or E%) <i>which may be linked to the blanket behaviour during its dressing operation on the blanket cylinder.</i>
Pre-load	A test segment where the crosshead moves to load the sample to a specified value before a test starts. Data is (usually) not captured during the pre-load segment. ⁽²⁾
Rupture	Structural failure (even partial) of the test sample with a corresponding load reduction reading on the Load = f (Machine Extension) Graph at the end of the Elongation & Tensile Test .
Strain	Change per unit length in a linear dimension of a part or sample, usually expressed in % strain, based on original length of the sample ⁽²⁾ .
Strain Energy	Measure of energy absorption characteristics of a material under load. It is equal to the area under the stress-strain curve, and is a measure of the toughness of a material. ⁽²⁾
Stress	Load on a sample divided by the area through which it acts ⁽²⁾ .
Tensile (rupture)	Full Elongation & Tensile Test length increase (from initial length to length at rupture).
Tensile Strength	Force per unit width required for breaking a blanket under longitudinal stress in the around-the-cylinder direction ⁽¹⁾ .
Test Marker	Label placed at a chosen position on the resulting test graphs for tester software calculation purposes and ulterior analysis.
Test Pressure	Maximum pressure used in a Compression Test .
Thickness	Sample gauge (direction perpendicular to the sample surface area).
Width	Dimension in the across direction .

**Whip Reaction**

A comparatively large blanket gauge recovery as test equipment moving head inverts the direction of its movement and an initial (and relatively small) load reduction occurs, during the [Indentation Test](#).

Window

A defined axis range on specific Graph areas:

- Time Range on Compression [Load Reaction](#) Graphs - Load = f(T);
 - Machine Extension Range on [Hysteresis](#), [Elongation](#) and [Tensile](#) Graphs - Load = f(ME);
 - Machine Extension Range on [Gauge Loss](#) and [Yield](#) Graphs - ME = f(T).
- (Other axis ranges depend on particular test procedure prescriptions.)

Yield (Yield Point Elongation⁽²⁾)

Difference between the elongation of the sample at the start and at the finish of discontinuous yielding (*the area in which an increase in [strain](#) occurs without an increase in [stress](#)*)⁽²⁾. Sample [length](#) increase when applied a 500 N constant load for 10 min, during an [Elongation & Tensile Test](#). *This result may be related to the register and dimensional stability behaviour of the blanket on the press during its printing life.*

Young's Modulus (Modulus of Elasticity⁽²⁾)

Rate of change of [strain](#) as a function of [stress](#). The slope of the straight line portion of a stress-strain diagram.⁽²⁾ Tangent modulus of elasticity is the slope of the stress-strain diagram⁽²⁾ taken at the maximum slope by the Materials Tester software. It is the highest slope of the Load = f([Machine Extension](#)) Graph of an [Elongation & Tensile Test](#).

Zero Point Load

[Pre-load](#).

⁽¹⁾ Based on ISO 12636.

⁽²⁾ Based on www.instron.us/wa/glossary.