



## SHORT SPAN COMPRESSION TESTER "SCT" SCM-1 model



This testing equipment is used to measure the compressive strength of paper and cardboard samples by the SCT method (0.7mm short distance compression between jaws). The test is performed using a 15 mm wide paper or cardboard specimen and it is compressed until failure occurs.

# SHORT SPAN COMPRESSION TESTER “SCT” model SCM-1

## APPLICABLE STANDARDS:

ISO 9895 - TAPPI T826 - DIN 54518 - SCAN P46 - BS 7325 - AS/NZ 1301.4SO RP...

## GENERAL INFORMATION

The Short Span Compression Tester SCM-1 is designed to perform SCT compression tests, it is considered an important property and can be used to predict the performance of corrugated cardboard sheet used in the manufacture of Corrugated cardboard. International standards specify this method for determining the compressive strength both in the machine direction of the fibers and in the transverse direction on paper and cardboard.

High quality tester designed to measure the compressive strength per unit length (kN / m) of a sample of liner or medium paper weighing up to 400 g / m<sup>2</sup>. A rectangular paper sample of a minimum length of 120 mm and a fixed width of 15 mm is placed between the open jaws. Then press the grips closing button and the compression test is carried out at a speed of 3 mm / min.

## TEST DESCRIPTION

Once the sample is placed between the jaws, they close and the test starts, once it is finished, the detected force value can be read on the display. The value is expressed in kN / m or lb / in.

After performing each test, the pneumatic jaws are separated and the equipment is ready to start a new test. After making a series of measurements (up to 20 according to standards) in each of the two directions of orientation of the fibers in the paper:

**MD** = Machine Direction (Longitudinal sense)

**CD** = Cross Direction (Cross direction)

Incorrect or out of range measurements can be removed to avoid statistical errors. The ratio between MD (longitudinal direction of machine) and CD (transverse direction) is shown after completing the two series of tests.

The maximum Compression force of the SCT test is expressed directly in kN / m or lbs / in. The equipment also automatically calculates the Average Values and, if the optional software is available, it also allows obtaining the Maximum and Minimum values, both in the MD (Longitudinal Direction) and in the CD (Transverse Direction).

**NOTE:** We recommend acquiring the test software Data Collection Module SHORT COMPRESSOMETER "SCT" with indication of the Maximum - Minimum - Average - Standard Deviation Values. If other statistics are required, such as GAUSING BELLS - BAR GRAPHICS - TOLERANCE COMPARISON, we recommend the MANAGEMENT Module with Basic Statistics software, or we also have the most complete statistical package including TENDENCY GRAPHICS and SPC, we recommend the LYNX System.

- **Touch screen control and reading results**
- **Measurement range 0 to 300 N**
- **Reading on Touch Screen Display with 0.02 N resolution**
- **Selectable units: lbs / in or kN / m**
- **Free distance between jaws: 0.7 mm +/- 0.05 mm**
- **Test speed: 3 ± 1 mm / min.**
- **Grips clamping force: 2300 ± 500 N**
- **RS-232 interface**

## SPECIFICATIONS

- **Measurement range:** between 0 and 300 N
- **Reading on digital display:** resolution of 0.02 N
- **Free distance between jaws:**  $0.7 \pm 0.05$  mm
- **Jaw length:**  $30 \pm 0.5$ mm
- **Height of the jaws:**  $25 \pm 0.5$  mm
- **Length of samples:** from 100 to 150 mm
- **Width of samples:**  $15 \pm 0.1$  mm
- **Test speed:**  $3 \pm 1$ mm / min.
- **Grips clamping force:**  $2300 \pm 500$  N

## FORCE MEASURE

- **Selectable Units:** lbs./in or kN/m

SHORT SPAN COMPRESSION TESTER SCT - SCM-1 model							
Model	Rang N	Resolution N	Jaws length mm	Gap between grips mm	Dimensions W x D x H /mm	Weight kg	Compressed Air Inlet KPa
SCM-1	300	0,02	30	0,7	375x510x270	35	600

**POWER SUPPLY:** 110V/60Hz or 220V/50Hz single-phase

**DIMENSIONS OF TRANSPORT PACKAGING:** 550 x 730 x 620 mm (Width x Depth x Height)

**GROSS WEIGHT:** 60 Kg (Wooden packaging with phytosanitary treatment)



## STANDARD SUPPLY CONTENT:

- \* Short Span Compression Tester SCT - SCM-1 model