

# CURL TESTER

## PAPER AND BOARD - DETERMINATION OF CURL

## INTERNATIONAL STANDARD ISO 11556

### TECHPAP CURL TESTER - AN INSTRUMENT CONCEPT TARGETED AT THE ACCURATE DETECTION AND MEASUREMENT OF CURL

- The Curt Tester performs **static and dynamic measurements** of a sample to investigate the kinetics and relaxation phenomena of curl for a short time scale.
- The sample can be tested at **different climate conditions** with a RH accuracy of 1% or lower.
- The instrument is based on the **ISO 11556** standard: "Paper and Board - Determination of curl using a single vertically suspended test piece".

### The Device

#### Why is curl sensing necessary?

The finished production of paper and board may have curl defects which are not immediately apparent upon visual inspection. For certain curl defects to be shown it may be necessary to expose the sample to a change in humidity (either higher or lower humidity). This type of humidity change is very common with storage centers, in warehouses, during shipping or in almost any paper or board application. Humidity can also change in paper or board during printing or converting processes or simply when being used for its intended purpose. Therefore, it is crucial to know the tendency for a product to curl or twist as soon as possible so that paper machine adjustments can be made to manage the propensity of curl to occur and to maintain quality of the reel.

#### Application Domains

- All types of paper and board production including copy papers, coating base-papers, single or multiply board, specialty paper, etc...
- Improved control of the production processes
- Development of new products and research for existing products
- Benchmarking of production for quality control

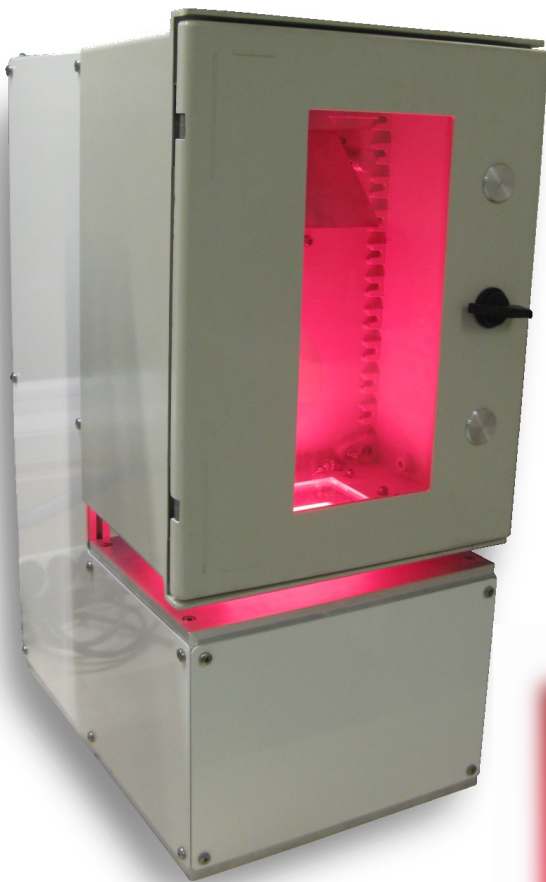


Figure 1: Curl Tester Chamber



Figure 2: Test Sample Inside the Test Chamber



Figure 3: Air Humidity Generator

 **techpap**  
innovation for **paper**

TECHPAP SAS

BP 251 - 38044 Grenoble cedex 9 - France

Tél. +33 (0)4 76 51 74 75 - Fax +33 (0)4 76 42 05 04

[www.techpap.com](http://www.techpap.com) - [techinfo@techpap.com](mailto:techinfo@techpap.com)