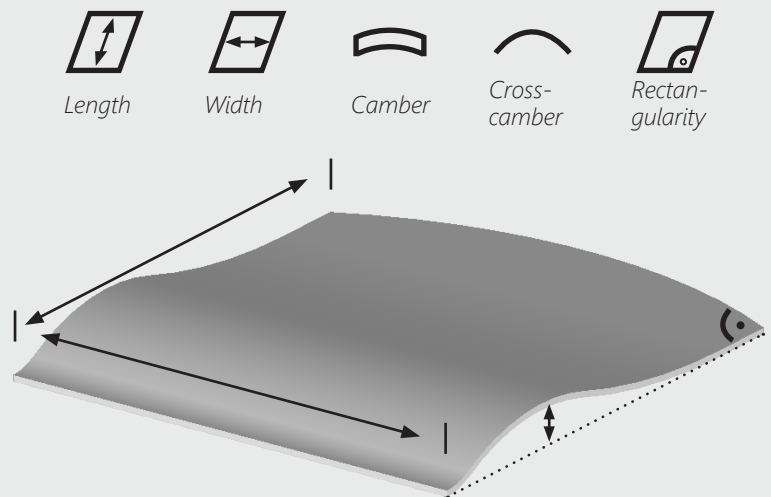


imess SQ

Optical Measurement Tables
for Sheets and Blanks



The measurement tables of the **imess SQ** series checks the geometry of sheets and blanks. The state of the art systems are easy to use and secure repeatable measurement results. The software is developed by imess and can thus be adjusted according to each customer's individual demands



Connection to the Customer's PLC and IT

The systems are PC based which offers several interfaces which transfer measurement data such as nominal characteristics or identifications like the staff number.



Password protected Parameter

Some program settings must not be changed by every operator. Therefore, the system has different operator levels with different rights.



Test Plan

Nominal values for characteristics can be set within the software interface. Prior to the measurement start the respective measurement item can be selected on the main screen which accelerates the entire measurement process.



Statistics

The measurement results are documented and stored in an Excel-readable format. In addition, statistical evaluations such as deviation or the number of good and poor parts are shown on screen.



Graphical and Tabular Depiction of Results

Various result depictions can be shown in the software, amongst others histograms and trend graphics.



Service and frequent Maintenance

The imess team is available for you in case of issues or advice plus the systems can be frequently maintained to ensure proper settings and calibration.



Width



Camber

Variant A

In order to reach a rather high measurement, the table is fitted with a granite frame. Furthermore, the surface provides an even guiding of the material with low temperature reaction and long durability. With both a linear encoder and telecentric camera technique the sheet width is determined with high accuracy. Optionally, the table can be equipped with further sensors to measure the camber cut, too.



Take a look:

www.imes.com/vertrieb/SQBreiteGranit.mp4
**Variant B**

This variant positions the sheet on a stable granite plate as well. After placing the sheet towards the stops, the sensor of the width measurement is moved manually to the edge. At the same time, the camber measurement is conducted at the stop side. Both measurement values are depicted in the software graphically and numerically.



Take a look:

www.imes.com/vertrieb/SQ-Granit.mp4
**Variant C**

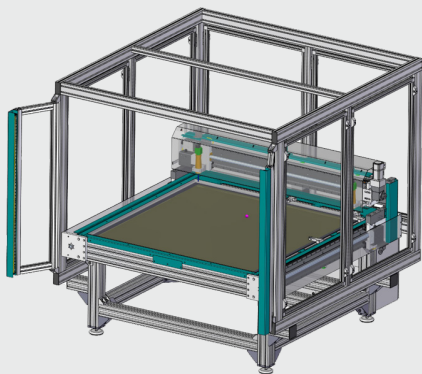
The construction similar to a drawing table offers an easy positioning of the sheet strip. The sensor moves automatically towards the edge. The width is determined with the measurement values and an actual nominal value comparison is conducted. The evaluation of the results is documented and can be transferred to the customer IT.



Take a look:

www.imes.com/vertrieb/SQ.mp4


Width



Variant A

Guides and linear encoder are integrated in the portal frame. The camera, on the other hand, is fixed onto a horizontal traverse to position it freely. The positions of the detected sheet edges are handed over to the software. Measurement values are subsequently calculated and visualised quickly.



Take a look:
www.imess.com/vertrieb/SQ2D.mp4



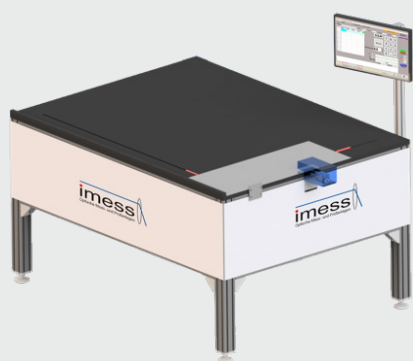
Length



Width



Rectangularity



Variant B

The sheet can be positioned easily and fast. Two optical sensors then move towards the sheet edges. In addition, a mechanical feeler can be moved to measure the rectangularity.



Length



Width



Rectangularity



Tailored Blanks

The system checks the contour of free form blanks in only a few steps. Merely the 2D drawing is needed for a start. The software changes it to a nominal contour which is used to evaluate the measurement data.

Upload of
DXF-File
into the Software

Converting
to nominal
contour

Moving along
the test items
contour

Comparison
of actual and
nominal contour

**Width**

Measurement Tables for Paper, Fibre Mats and similar Fabrics

The simple, compact measurement table is suitable to measure the width of fines such as paper, cloth or small sheets. The sample is placed onto a glass plate and shows the measures within a camera frame due to bright backlight. The software evaluate the image and saves the width.



Take a look:

www.imes.com/vertrieb/SQ-1L.mp4**Cross
camber**

Measurement Tables for Cross Camber

The system is currently in development.

