Sample cutter

A round sample cutter is the classical sample cutter for measuring the fabric square weight. By mounting 4 cutters on the circumference a 90°-rotation is enough for cutting a round sample.

The size of a sample is 100 sq cm from which by the help of an industrial scale the fabric square weight can easily be determined.

$$\textbf{fabric sample weight}\ \left[\frac{\text{g}}{\text{sqm}}\right] = \textbf{sample weight}\ [\text{g}] \times 100$$

If the fabric width is known the weight of the running meter of a product can be determined by the help of the fabric sample weight.

$$\textbf{weight of running meter}\ \left[\frac{\text{g}}{\text{lfm}}\right] = \textbf{width}\ [\text{m}] \times \textbf{fabric sample weigth}\ [\text{g/sqm}]$$

Areas of application

Measurements of fabric sample weight are one of the most frequently applied tests in the textile industry. Besides the width the fabric sample weight is a main criterion for a textile product and is therefore very often deployed in the following process steps:

- embroidery
- weaving
- manufacturing of fleece
- control of raw materials
- lamination
- dressing
- final inspection of goods

Technical data

The round sample cutter with its compact dimensions and the robust steel-case with four inner blades cuts a sample of 100 sq cm within seconds (fleece, paper, leather, textile, cork ...). A quarter rotation is thereby enough to determine the fabric sample weight. We recommend an industrial scale with a weighing range of 0 – 200 g and a resolution ± 0,01 g.

Picture 1 – Round sample cutter

Sample cutter	Ord.No. ZB-RPS01e
Measurement	165 x 115 mm
Material	cast steel
Weight	about 1,7 kg
Handling	manual
Cutting blades	4 pieces in stainless steel
Cutting depth	max. 5 mm
Accessories	1 cutting underlay
Package item	1 piece

There are also spare parts such as cutting blades and cutting underlays available at Flexuma GmbH.