L&W Autoline Grammage measures the grammage or basis weight of paper samples.

**Why measure grammage?**
Most paper is bought and sold in accordance with its mass per unit area, and therefore the grammage has great significance both to the consumer and the producer in defining price. The expectation is that higher grammages have higher strength and are therefore more expensive. The grammage is also used to calculate the index parameters of many strength properties, making the proper measurement of grammage critical for the correct calculation of these indexes.

**Measurement results**
With accurate and reliable measurement results, grammage specifications can be tightened in order to optimize production and lower costs.

**BENEFITS**
- Conform to industry standards, by using a sample size of 100 cm²
- Precise sample cutting
- Fast and high precision testing
- Wide measuring range

**FEATURES**
- High precision punch
- Industry standard scale
- Automated sample collection
- High resolution (0.001 g)

**Testing procedure**
The procedure is close to manual measurement of grammage. A 100 cm² test piece is punched out of the sample strip by a pneumatically actuated punch. The design makes punching very smooth, and the punch has three steering rods, making it extremely sturdy. When the sample strip is being advanced, the opening in the die is covered to prevent debris from earlier destructive testing from sticking in and around the opening. The circular test piece drops through a guide tube down into a compact container, resting on a balance where it is then weighted. The sample container that rests on the balance is automatically emptied (no operator involvement) to prevent overfilling and to make better use of the working range of the balance.
### Technical Specifications

**– L&W Autoline Grammage, code 638**

#### Measurement

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<tr>
<th>Method</th>
<th>Punching 100 cm² sample and weighing on a balance</th>
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</table>
| Range  | Grammage: 20–800 g/m²  
Basis weight: 6–100 lb/1000ft² |
| Results| Grammage calculated into different units |

#### Installation Requirements

| Power | 10 W (max. 15 W) |
| Air pressure | min. 400 kPa (max. 1 MPa) |
| Air consumption | 66 Nl/min (average 4.5 Nl/min) |
| Dimensions | 0.2 × 0.6 × 0.7 m  
8 × 24 × 28 in |
| Net weight | 51 kg (112 lb) including balance |
| Standards | BS3432, CPPA D.3, DIN53104, ISO536,  
SCAN P6, TAPPI T410 |