

## VolScan Volume Profiler



Arrow Scientific, expert in food quality evaluation, has announced a new test method from Stable Micro Systems (UK) for the baking industry.

Rating: Not Rated Yet

**Price**

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Manufacturer

**Description** The VolScan Profiler is a laser-based instrument that allows manufacturers to measure automatically the volume of a baked product. This gives vital information relating to the inherent qualities of the product, which in turn affect consumer perception of the finished product. Higher volume tends to be associated with a more aerated crumb and superior texture. With the VolScan Profiler, bread manufacturers can control production more rigorously and rapidly eliminate inconsistency, resulting in greater consumer satisfaction and increased profitability.

Bread manufacturers must subject each batch of flour to test baking, to ensure that all bread is made to a uniformly high quality. Insufficient loaf volume at the test stage indicates either very weak or very strong flour, or an imbalance of enzyme activity. This information is then used to modify the dough mix, so that the finished product is capable of being properly handled by automatic slicing machines, and of being packed into standard sized bags. The VolScan Profiler can help to speed up this process, so that the optimum dough mix can be achieved rapidly and efficiently.

The VolScan Profiler works by mounting the loaf at each end and parameters such as flour weight, bread type and shape are recorded by the software. The bread is then automatically weighed and a laser measures the contours of the product at given intervals while it rotates. Previous methods to calculate dough volume include seed displacement, in which the amount of rape seed or pearl barley packed around the loaf in a standard container is measured. This method is time consuming and unreliable due to seed clumping, moisture absorption and potential crushing of the product. Conversely, the VolScan Profiler offers manufacturers a non-contact assessment, the results of which can be obtained in under sixty seconds.

Once the VolScan Profiler has completed its test, bread volume, length, maximum width, maximum height, height of the maximum width and width of the maximum height measurements are instantly archived. This then automatically calculates the volume yield of the bread. The data may be viewed in 2D or 3D, to allow visual comparisons with previous archived measurements. Controlled, repeatable analysis not only provides unambiguous quality assessment standards but also offers precision in physical characterisation.

The VolScan Profiler is just one of Arrow Scientific' wide range of texture analysis fixtures that are designed for use in the bakery sector. Others include the Dobraszczyk Roberts dough inflation system and the Bread V Squeeze rig for bread springiness. All Stable Micro Systems' products can be custom-made according to individual specification.