Scoring and Evaluation of Artisan Bread

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The perfect baguette—hearth-baked and crisp, a golden crust with toasty aroma—when sliced, crumbs cascade, foretelling the cracker crunch and moist interior that your teeth will soon encounter. In a single bite, you enjoy the delicious finale of the breadmaking process, which at bakeries such as the King Arthur Flour bakery in Norwich, VT, begins long before customers reach for the bread basket and butter.

Breadmaking, from grain in the field to milling, mixing, fermentation, shaping, scoring, and baking, is a long series of separate but interdependent activities. Each is necessary to create great bread and happy eaters.

The Role of Scoring

Scoring bread doesn't involve points, goals, hat tricks, or three pointers, as in sports. Rather, it is the act of making light razor cuts on the surface of proofed loaves just before baking. Scoring has a long history of use with hearth-baked breads. According to legend, in the days when loaves from many households were baked in communal ovens, scoring was used for identification: an edible name tag of sorts. However, the cuts and resultant marks, while beautiful, actually have a vital functional role beyond assigning ownership.

The functional role of scoring, as it relates to hearth-baked doughs, is key to optimal "oven spring." Oven spring is the rise that occurs during the early minutes of baking. Hearth-baked doughs are higher in total hydration (relative to pan loaves, bagels, and other categories of leavened doughs) and are baked directly on hot masonry at high temperatures. Without scoring, loaves will not spring predictably or rise to their full potential. Scoring enables and guides loaves to their maximum expansion (Fig. 1). Failure to rise and expand in the oven diminishes the visual appeal of finished loaves. A poorly risen loaf with a constricted interior structure (what bakers call "alveolar structure") will also be dense and have a poor crust texture (Fig. 2). In this case, the desired, open-structured baguette, which is light for its size and crisp, becomes a dense dough tube in the absence of cuts—still edible, but not what bakers strive for.

Scoring skill takes time to develop and years to master. The light touch (and cuts) required for some loaves must be traded for deeper cuts in other types of loaves. After countless loaves and many years at the oven, bakers continue to learn the nuances of their trade.

Scoring Tips

Proofing. In contrast to pan loaves, which may be proofed very fully before baking, for hearth-baked loaves it is best to load them for baking while they retain some strength. The proofing loaves should be loaded before they are so delicate that they

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will collapse when scored. If cuts don't open as anticipated consider a reduced final proof.

Steam. Steam plays a critical role in oven spring. Baking in a moist environment allows the loaf to expand and stretch to its full potential. A dry oven is a straight jacket of sorts, binding the loaf by drying the crust prematurely and restricting expansion. A properly steamed oven, in combination with good scoring, enables bread to spring to its fullest potential and most open interior.

Evaluation of Hearth-Baked Breads

To the eyes of a customer, what comes out of the oven is simply bread. Good bakers are more than eaters, however; they are also good scientists. They examine inputs (mixing, fermentation, shaping, and baking) as well as results, looking for ways



Fig. 1. Open interior structure, good volume, and beauty of a scored baguette.

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Fig. 2. Tight interior structure, poor overall volume, and poor visual appearance of an unscored baguette.

to improve or for confirmation of quality methods and systems. They know that each baguette, miche, or panettone is more than just a loaf; it is a daily scorecard that rates the baker and the entire bakery. Evaluation is a constant and rigorous

As with hand skills, mixing, and even formula work, bread evaluation is a learned skill. It begins with visuals and proceeds to touch, flavor, and texture.

Key Evaluation Points

The King Arthur Flour bakery evaluation model for bread and flour contains many categories, ranging from extensibility to handling, cuts, flavor, and crumb structure. Key points for evaluation of hearth-baked bread include the following.

Aspect. Is the loaf light for its overall size, or does it feel heavy for its length and circumference? Did the loaf expand well in the oven, with cuts (see earlier discussion of scoring) that opened well? Is the crust deeply colored and appropriate to the class of product? A baguette that is baked until it is a darkly burnished color or a ciabatta that is baked to a golden color are not necessarily examples of success. The baguette should be golden, and the ciabatta should be darkly burnished.

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Crumb Structure. Is the interior of the baguette filled with marble-sized holes, or is the structure more closed and dense? The bakery standard values a variably open crumb with translucent cell walls that bind a thin, crisp crust. Crumb structure varies by class of product. For example, sandwich loaves should have a closed structure that holds in condiments, whereas rye loaves also should be more tightly structured. These standards vary from bakery to bakery, according to the preferences of bakers, customers, and class of product.

Flavor. Flavor is more than what we taste. In fact, it is the sum of all parts. Bread evaluation begins with its visual aspect and continues on to the structure of a slice and then to flavor and texture, which all combine to form the eating experience.

Balance. A well-made bread is a balance of competing aspects. Sour flavors, the by-products of bacterial fermentation (in the case of naturally leavened products), contrast with malty notes. Dark crust flavors resulting from Maillard reactions are balanced by gentler flavors in the interior of the loaf, and additions such as olives and herbs or dried fruits and toasted seeds are all used and guided to proper proportions by the baker. This balance is evident to the eye and on the palate.

Texture. Texture is the contrasting experience of crisp crust and moist interior. Texture may be smooth, as in the case of brioche, or entirely crisp, as with puff pastry and cheese crackers.

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