

OXYLATOR

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Oxygen Induction

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Oxygen induction during the mixing process

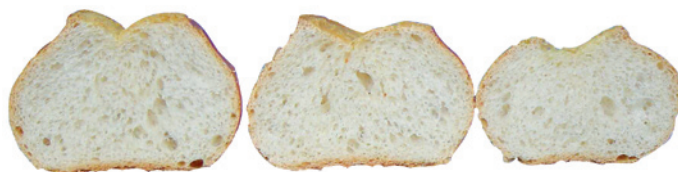
The OXYLATOR was developed to achieve the ideal value of 60% oxygen content during the mixing process. The KEMPER 3-Zonen Principle already supplies a noticeable contribution to increasing the oxygen input, through the optimised alignment of the mixing tools, but is limited due to the oxygen content being just around 21% in ambient air.

The process operates through a 'Water Mist' principle: The complete water requirement is sprayed under pressure, during the blending phase, using Microjets. The water mist ensure an even distribution over the flour and a considerably increase oxygenation of the flour / water suspension and an optimal mixing environment. The result is an improved blending process, the mixing phase sets in earlier, the flour absorbs more water, the dough development is ideal and the product quality is optimised, especially with long term processing through a retarder proofer.

Advantages

- Possible to increase the dough absorption by approx. 2% with the same dough consistancy
- Reduction of baking additive by up to 50% with improved dough characteristics
- No additional commodities required, as the oxygen is produced through a generator
- Greatly improved Freeze / Thaw Stability with frozen dough pieces
- Possibility to process doughs immediately, as they are more malleable and not so wet
- Fast Return On Investment

Stabilisation of the Gluton Membrane through oxygen



Slit Rolls
4% Baking Additive
Standard

Slit Rolls
2% Baking Additive
with oxygen

Slit Rolls
4% Baking Additive
without oxygen

Straight

Pre-proofed frozen

Pre-proofed frozen

Influence of oxygen to the Freeze/Thaw Stability with wheat dough (3/4 Proof)



The **OXYLATOR** was developed together with the BILB Institute, Bremerhaven.