

## Re-work, residual bread & residual dough processing

Produce the best baked goods - with your masterly skills and our technical and technological know-how in process engineering and automation.

The proven W&K process and plant technology for processing residual bread and dough with the addition of water has been successfully used for years by artisanal bakeries and in industrial bakery production. Continuous further development through the use of technical innovations and improvements of the processes are applied to optimize the processing.

### Re-work as a recipe component has many advantages:

- More intensive flavour due to the caramelised roasting agents contained in the product
- Sustainable resource utilisation
- Better freshness due to optimised water absorption, especially when using micronisation
- Malleable doughs for better machine movement
- Economic advantages due to savings on swelling flour/baking agent as well as increased use of water and lower flour consumption



Re-Work system in a large bakery.

Better taste & sustainable use of food resources through the use of modern process technology and automation.

Thanks to its modular appliance structure, W&K Automation GmbH offers its customers both solutions for single-shift operation with classic manual filling and fully automatic system solutions.

We plan the machinery and process individually based on your requirements and the raw materials used. Starting with feeding of raw materials into a bunker with integrated breaker or small shredder in product transport, through the recipe-controlled filling and mixing process with adjustable mixing unit, to inline homogenization via the Microcut.

After the manufacturing process, the product is stored and dosed in the appropriate containers and product lines, which are specifically designed for the „Re-work“ product.

Our control concept covers the complete process from the raw material feed and temperature-controlled water metering to the metering system at the extraction point of your dough factory. This gives you traceability of the raw materials and our modern technology supports your consistent quality in production.



Calculation example with and without residual bread:

Recipe without Re-work	Recipe with 5% Re-work
<ul style="list-style-type: none"> <li>• 100 kg flour</li> <li>• 60 l water</li> </ul>	<ul style="list-style-type: none"> <li>• 95 kg flour</li> <li>• 15 kg Re-Work (mash) (1 t bread: 2 t water) ca.55 l water</li> </ul>
<hr/> 160 kg dough from 100 kg flour	<hr/> 165 kg dough from 95 kg flour






Further explanations on Re-work processing can be found on our website.



## W&K-Automation GmbH

We are one of the world's leading suppliers of Sourdough, Poolish and Re-work systems and liquid handling. In addition, we offer our customers solutions in process technology and automation. With our systems we can cover all relevant steps of dough production: Starting with silo technology, through pre-dough production and recipe control to kneading technology.

Our capabilities include:



Pre-dough / Sourdough



Re-work processing



Hammermills



Water Dosing Systems



Controls & Automation



Process & Engineering



Yeast dissolver



Customized planning and development

## Our customers

Our customers are medium-sized and large bakeries. Thanks to our expertise in the fields of liquids and automation technology, we also take on projects in other food sectors, such as chocolate factories or breweries.

What distinguishes us is that we usually enter into long-term partnerships with our customers and can support them in the design and implementation of new projects such as W&K solutions.

## Our network - Your advantage

We cooperate permanently with specialized partners in tank manufacturing, piping, stainless steel welding, etc. This guarantees high quality in planning and execution. These resources make large projects at home and abroad feasible for us. Our customers know this structure and appreciate the advantages.

