

## Case Study No 11

# CALIBRATION OF FROZEN PRODUCTS

<b>Subject</b>	Plant for calibration (size reduction) of frozen fruits, berries and vegetables.
<b>Industry</b>	Semi-processed foods.
<b>Objective</b>	Frozen products are processed to an exact size for further processing in the food industry to ensure consistent quality in the final product.
<b>Product</b>	Various fruits, berries and vegetables directly from frozen storage. The products are sent for further processing without prior thawing. The frozen products are processed to different sizes depending on the product requirements.
<b>Gericke Technology</b>	<p>A Gericke NBS 300/450 Nibbler shreds the frozen products. The calibration size can be changed with different serrated screen inserts.</p> <p>The advantages compared to conventional cutting machines include:</p> <ul style="list-style-type: none"><li>• Greater performance</li><li>• More accurate calibration</li><li>• Reduced noise emissions</li><li>• No blade wear</li><li>• No blade damage</li><li>• Reduced risk of injury</li></ul>



The replacement of cutting machines with the Gericke Nibbler has increased calibration accuracy with significantly higher material throughput and reduced noise emissions. The operating time of the nibbler exceeds that of the cutting machines significantly by far.

## Significantly greater production security

There is neither danger of accidents as it frequently occurs with cutting machines nor do the paddles or the serrated screen insert wear.

The frozen goods can be processed directly from the freezer without requiring prior thawing.

This simplifies processing and increases product quality.



The Gericke Nibbler shreds the frozen produce with paddles and serrated screen inserts. The products are shredded by shearing and cutting forces.

The installation of a Gericke Nibbler has several advantages for operators. Noise emissions are significantly reduced compared to cutting machines. Operators can work without hearing protection even with deep-frozen products.

The simple construction and quickly removable serrated screen insert mean that cleaning is fast and easy. Gericke nibblers do not have sharp components. The risk of injury during cleaning is therefore extremely low.

Gericke Nibblers are successfully used as shredding machines in many different applications:

- Recycling of rework (e.g. cake manufacture)
- Shredding for filter cakes
- Granulation of dried products
- Increase of specific surface (e.g. chocolate blocks)