Task:

Application field: Food

Material: Frozen potato wedges, frozen croquettes

Feed size: 30-80 mm

Feed quantity: 500 g (for each sample)

Material specification(s): hard, containing water

Customer requirement(s): homogeneous sample, < 0.5 mm

Subsequent analysis: Determination of fat content, net calorific value

Solution:

Selected instrument(s): Knife Mill Grindomix GM 300

Configuration(s): Cutting container of plastic incl. knife holder, autoclavable, 5 litres for GM 300; Gravity lid of plastic with overflow channels GM 300, autoclavable; Standard lid of plastic GM 300, autoclavable; Standard knife GM 300 made of stainless steel, autoclavable

Parameter(s): Revolution speed
Pre-grinding: 3500 rpm
Fine-grinding: 5000 rpm

Time: 1:30 min. (complete grinding time for wedges, 1:00 min for croquettes)

Achieved result(s): Homogeneous sample, < 0.5 mm, temperature of samples after grinding -1 °C
Remark(s): Sample frozen potato wedges: Pre-grinding for 30 sec (5 sec interval) at 3500 rpm, direction impact with standard lid; fine-grinding for 1 min at 5000 rpm, direction cut with gravity lid
Sample frozen croquettes: Pre-grinding for 30 sec (5 sec interval) at 3500 rpm, direction impact with standard lid; fine-grinding for 30 sec at 5000 rpm, direction cut with gravity lid

Recommendation: The Knife Mill Grindomix GM 300 is suitable to homogenize the sample material under the above mentioned conditions.

Pictures of the sample

Fig. 1: Original sample potato wedges
Fig. 2: Original sample croquettes
Fig. 3: Potato wedges after grinding in GM 300
Fig. 4: Croquettes after grinding in GM 300