Instant Maize Meal process technology.
Innovative Instant Maize Meal process.
Prepared within minutes.

Maize meal is the staple food of the population of southern Africa. Traditional preparation of the maize meal is time-consuming and energy intensive. People have been trying unsuccessfully for years to reduce the cooking time while achieving the same results. Now, Bühler’s innovative Instant Maize Meal process can drastically shorten cooking times, while maintaining taste, texture and mouth feeling of the traditionally prepared dish.

In many parts of southern Africa, maize meal is the single most important source of nutrition. Maize meal, also known as ‘ugali’, ‘meali-meal’ or ‘pap’, depending on the region, is eaten up to three times a day. The average annual per capita consumption is 85 kilos. That equals a market demand of 16 million tons of maize meal per year.

The preparation of maize meal is extremely time-consuming and energy intensive: Maize meal must be cooked for at least a half hour. As African cities rapidly grow, the demand for quick and simple convenience food increases.

Bühler’s innovative Instant Maize Meal process reduces the cooking time from half an hour to just a few minutes. The process technology makes it possible to variably control the cooking time for the maize meal from two to five minutes.

The reduced cooking time is achieved by gelatinizing the starch in the maize. Steaming and flaking the maize grits changes the cooking properties in a natural way without adding other ingredients. This proven technology is also used for producing cereal flakes.

Another advantage of Instant Maize Meal is the increased shelf life. By removing the germ, the instant maize meal can be safely stored up to one year.

The characteristics of the end product (appearance, taste, texture and mouth feeling) remain the same as traditionally prepared maize meal.

Advantages of “Instant Maize Meal”
– short cooking time
– low energy consumption
– same product characteristics
– long product shelf life

Advantages of Bühler process technology
– variably controlled cooking time
– high process efficiency
– optimal food safety
– maximum yield
Innovative Bühler technology.
Process with consistent end product quality.

From maize kernel to Instant Maize Meal
The innovative production process in seven steps:

1 Cleaning
Product intake and cleaning

2 Degerming
Degerming, crushing and breaking

3 Conditioning
Dampening and tempering

4 Steaming
Partial gelatinization through steaming

5 Flaking
Changing the degree of gelatinization with the flake thickness and, therefore, the required Instant Maize Meal cooking time

6 Drying
Drying and cooling the flakes for better water absorption

7 Grinding
Grinding the flakes and adding vitamins, nutrients or minerals

The patented Instant Maize Meal process was honored with the International Foodtec Gold Award 2012 at the Anuga Foodtec 2012 trade fair.