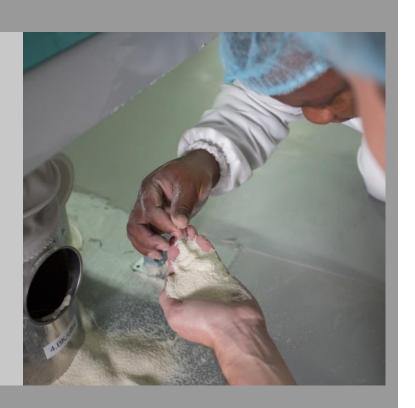
Adding Value to Maize Products.

- Instant Maize Meal
- Cereal Based Porridge

Stefan Lutz





Agenda

1 Instant Maize Meal

2 Cereal Based Porridge



Agenda

- 1 Instant Maize Meal
- 2 Cereal Based Porridge



Instant Maize Meal. Consumer expectations.

- Reduction of cooking time
- Authentically texture and elasticity
- Taste and mouth feel must be the same as traditionally produced maize meal







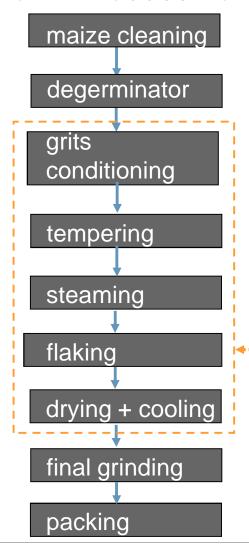
Instant Maize Meal. Facts.

- Maize meal is a staple food in Sub-Saharan Africa
- It is eaten up to three times per day
- Today's maize meal is processed in traditional maize mills
- Traditional maize meal cooking time is around 25 35 minutes
- The total consumption is ~16 mio. t / year





Instant Maize Meal. Solution - Process flow

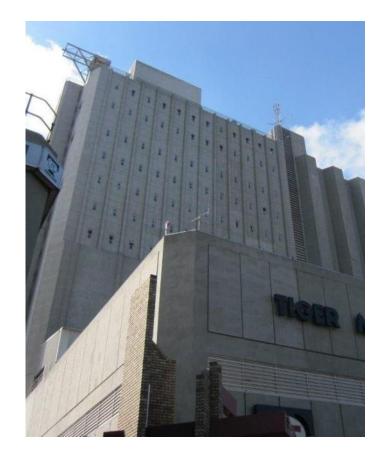




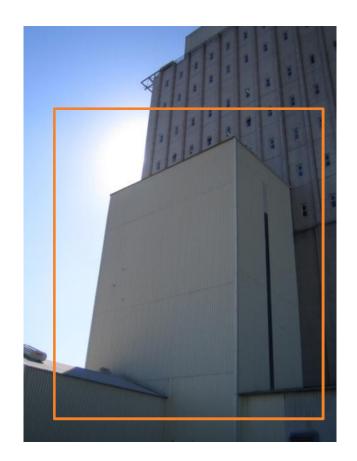
Back pack solution for existing mills



Instant Maize Meal. Back pack Solution.







after



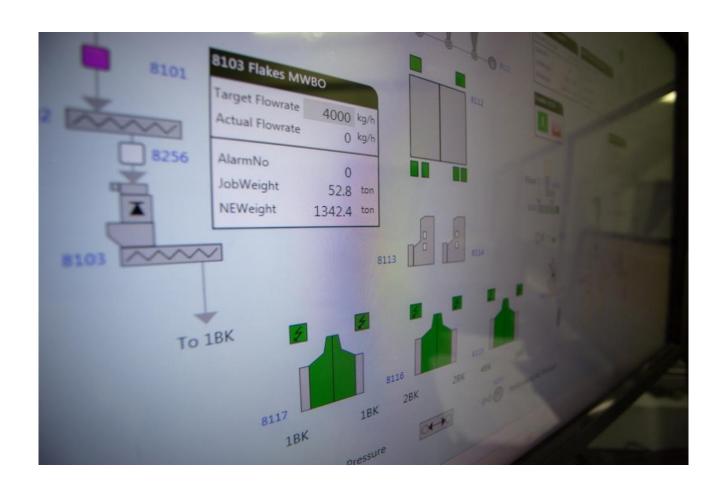
Instant Maize Meal. Flaker.





Instant Maize Meal.

Control system.





Instant Maize Meal. Summary.

- Instant Maize Meal has a cooking time of two to five minutes.
- Texture and elasticity is very similar to traditional product.
- Instant Maize Meal has an identical taste and mouth feel as the traditional cooked.
- Accepted by Consumers

Consumer benefits:

- Easy to prepare
- Less preparation time = more free time





Agenda

- 1 Instant Maize Meal
- 2 Cereal Based Porridge



Cereal Based Porridge. *Market Demand.*

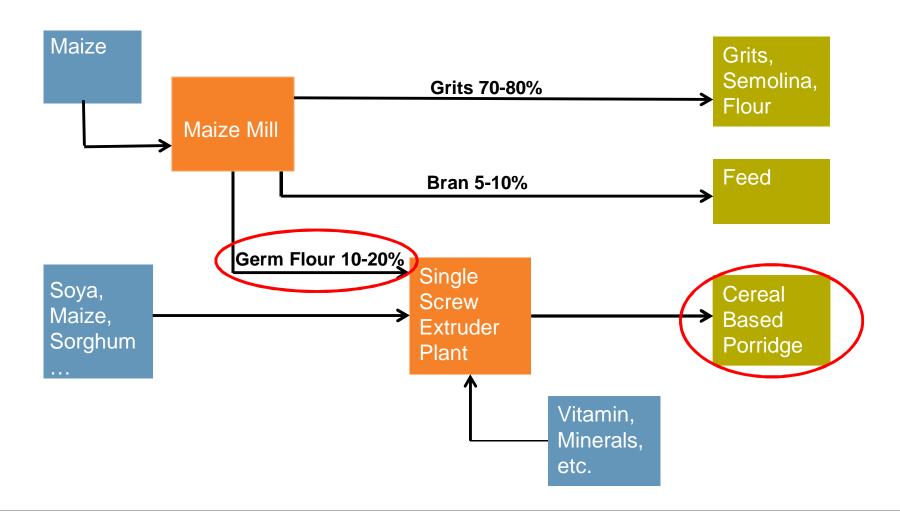
- Wide spread staple food in Sub-Saharan Africa.
- Other applications possible.
- Different variations on the market with maize, soya, sorghum, millet...
- Flavored products commercially available.
- Fortified products for various food programs and school feeding.





Cereal Based Porridge.

Market Opportunity.





Cereal Based Porridge. Key Machines.



Single Screw Extruder AHSF



Fluid-Bed Dryer-Cooler OTW-Z



Hammer Mill AHZC-655-F



High-Speed Batch Mixer AHML



Cereal Based Porridge. *Trials.*

- Trials done at Buhler.
- Positive Feedback of Consumer Tasting Session
- Texture and structure adaptable to regional food preferences and eating habits





Cereal Based Porridge. Customer Benefit.

- Production of highly nutritious foods for human consumption
- Use of local grains and by-products from maize mill
- Improve economics and adding value for maize mills



Alternative pictures see following slide



