



A 100 Ecoline

Aroma system

Standard according to Communauté Européenne (CE)

ISERNHÄGER
Die Backkultur® 



System performance – short description

Standard configuration of system:

- 3-walled stainless steel tank with water bath covering, navigable and ready for plugging in
- heating medium water for the careful warming up of the product (no burning solid possible)
- anchor agitator for the complete mixing of all ingredients, with wall scraper, powerfully dimensioned
- unloading via ball valve
- programmable logic controller (PLC) for times and temperature including display (HMI)

	<u>Minimum</u>	<u>Maximum</u>
Production capacity per charge with TA300 (flour-water-ratio 100:200):	60 kg	100 kg
AromaStück® system per day with 2 charges per day	120 kg	200 kg
Rye quantity to be processed per day (10% use flour of flour)	400 kg	667 kg
Bread quantities per day (Rye bread 10% addition, BA 150 = flour-bread-ratio 100:150)	600 kg	1000 kg

Typ of predough

- AromaStück® (hot soaker dough)
- one stage

Availability of predough

- 48 hours (when cooled down immediately at the end of production)

The information above concerns reference values, which can vary according to the flour quality.



Price composition of the offer

Aroma system A100 Ecoline

Operating instructions

Price ex works (ready for plug-in):

from current price list

Options in the offer

Transport incl. transport insurance

on enquiry

Baking technical operation and coaching per day

from current price list

Aroma StartGut® Bio

from current price list

Specifications see details in the offer



Short description of manufacturing

The production will be explained in the following using the example of a Type A 100 Ecoline system at maximum capacity. For other charges the quantities added have to be adapted in relation to the previous values. Please take a look at minimum and maximum charges.



Water	67 Liters
Rye flour	33 kg
StartGut®	0,660 kg
Temperature	65 °C
Fermentation time	3 hours.

Mix rye flour and AromaStück® StartGut.



Put water into the fermenter.



Add mixture of rye flour and AromaStück® StartGut and start the fermenter.



Heat up AromaStück® to 65°C and hold this temperature for 3 hours.



Fill AromaStück® into buckets immediately when it is ready and keep it at a cool place (below 8°C).

You can find the video for the production online:





Charge instructions IsernHäger AromaStück®

Basic recipe

1 part rye flour
2 parts water (TA 300)
0.02 parts AromaStück®-StartGut®

Example

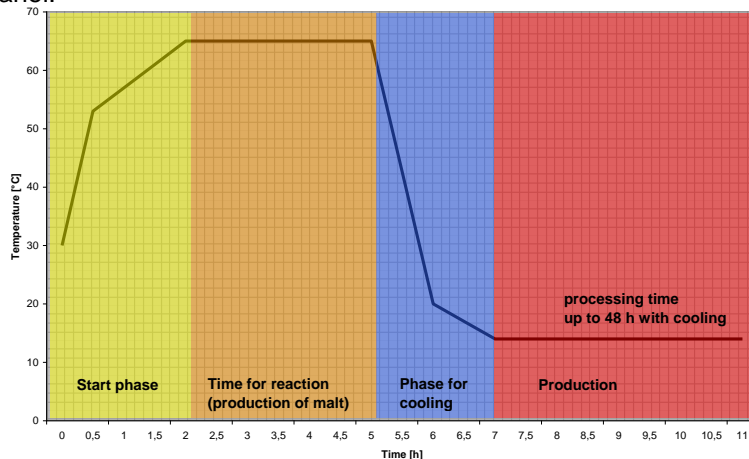
33 kg rye flour
66 kg water
0.66 kg AromaStück®-StartGut®

Procedure

- mix rye flour (and other dry matter contents with AromaStück® StartGut®)
- Add water into the system
- Add the AromaStück® StartGut® - rye flour mixture and start the system
- Enter recipe parameters into the control panel.

Start the program with the following parameters: Temperature = 65° C and time = 3 hours.

- The AromaStück® will then automatically be heated up to 65° C and the temperature is maintained for three hours.
- When processing coarse grist or whole grains, the AromaStück® needs to be heated up to 85° C after the three hours for 15min.
- The DO for this is 400. For this purpose enter 85° C as second temperature on the control panel
- After a temperature of 14° C has been reached, the processing time limit is 24 hours.
- If cooled under 8°C the processing time limit is 48 hours



Addition quantities

The following addition quantities are guidelines. You can modify them according to the taste profile you are striving for. Addition quantities on AromaStück® (flour referring to flour):

Special bread rolls	3 - 12 %
White bread, baguette	10 - 15 %
Mixed wheat bread	8 - 12 %
Rye and wheat mixed bread	6 - 10 %
Rye bread	6 - 10 %
Wholemeal bread	10 - 20 %

Rye mixed bread with 8% AromaStück®

2.4 kg AromaStück® is used with 10 kg of whole flour (of dough). For this you reduce the flour quantity given in the recipe by 0.8 kg (corresponds to 8 %) and the water quantity given by 1.6 l. All other ingredients also remain here unchanged. The addition of malt can possibly be reduced. Because the AromaStück® causes a good brown crust, reduce the final baking temperature by 10 - 20°C.



Background of technology of AromaStück®

With this new procedure technology rye flour and water (TA 300 = flour-water-ratio 100:200) are stirred after addition of a AromaStück® StartGut® in this system for 3 hours at 65 °C. By this means a malty-sweet tasting, brown AromaStück® is won. In doing so an increased maltose formation is effected through specific enzymatic reactions. The heating up process effects an intensive rising and binding of water.

AromaStück® with flour and grains

In the same way the AromaStück® can also be charged with grains and flour. Here it is important to bring the temperature up once to 85°C after the reaction time. Thus a good binding of water is guaranteed specifically with whole grains or very coarse flour.

How is the maltose formation achieved?

By the addition of AromaStück®-StartGut® a maltose formation is achieved that is always even.

This StartGut® is especially adjusted to the respective harvest requirements. It is a natural malt product, which at the given temperatures effects an increased enzymatic reduction to simple carbohydrates.

What is to be observed in use?

AromaStück® should not be added to the doughs in hot condition. It is favorable to immediately cool the ready mass down to room temperature.

Then the AromaStück® can be used for a production day. Cooled (below 8 °C) it can be used for 48 hours.

What does adding AromaStück® effect?

- Rounds off taste and clear taste profile through maltose formation
- Saving in malt products (ingredients)
- Improvement in keeping fresh by good advance pasting up of the starch
- Pleasant browning of the baking products by the natural malt content
- Individual taste controlling of the whole bread range (your new USP)
- Neutralization of acid tips

Sourdough:
Mild aromatic flavour
up to
strong sourish taste



Doughs:

- new recipes
- diversity
- inimitable (USP)



Pictures of products

Fig. shows the AromaStück® for AromaHäger® with DO 300



prior to heating

after heating to 65° C

Fig. shows an AromaStück® made from rye flour T 1150 with DO 300



prior to heating

after heating to 65° C

Fig. shows an AromaStück® made from Aroma wholemeal with DO 400



prior to heating

after heating to 65° C



Detailed description of the offer

Aroma plant A 100 Ecoline

- Operating conditions:
suitable for the production of AromaStück® and scalding plant with a minimum dough yield (TA = flour-water-ratio 100:200) 300
Work volume: 100 kg
Minimal quantity: 60 kg
Product temperature max. 85 °C
Heat up time approx. 120 min. (35°C - 65°C)
- Measurements/connection:
Total volume about 120 l
Fill in height 1205 mm, height 1270 mm, width 1025 mm, depth 790 mm
Weight: 160 kg
Electrical connection 3Ph/N/PE, 400/230 V~ 50 Hz, plug CEE 16 A
- Construction type:
cylindrical, 3 walled, with water bath covering
Compact system, ready to plug in,
navigable (2 guide roller and 2 fixed roller for heavy loads)
flat lid, possible to open complete for filling and cleaning
agitator drive on the bottom of the fermenter
- Material:
1.4301 for all medium touching parts
1.4301 for all construction parts
- Equipment:
Elaborate anchor agitator, with stator and rotor with wall scraper
drive power of agitator 0,75 kW
handhold to move the fermenter easy
level sensor and temperature sensor
Stainless heating cartridges 4 kW, with dry running protection, safety shutdown in case of water lack,
nozzle for filling with water with manual ball valve,
nozzle for ventilation
Unloading valve DN 65, outflow height 400 mm
Programmable logic controller (Mitsubishi-Compact-PLC)
for time and temperature regulation
with 5 freely programmable recipes for time and temperature
Touch panel, monochrome, display language English or German
Lid monitored according to safety category 3 (EU)
- Transport box:
wooden package for ground transport



Operating instructions

- Execution:
one printed version, German and official national language
- Contents:
Operating instructions
CE Declaration of Conformity
Service plan



Detailed description of options

Transport incl. Transport insurance

- Transport free yard/DDU
- Transport insurance

Baking technical operation and coaching

- by IsernHäger technologists with expert training for bread and small bakery products, consist of:
- 1 day, production accompaniment with application of the converted recipes, control of results, possibly final adjustment of the recipes, finally departure
- all prices are with additional travel costs, overnight stay costs and out of pocket expenses. The offer refers to a daily working time of 8 hours. Each additional day costs according to our newest price list.

Aroma StartGut® Bio

- Premium Aroma StartGut® Bio (in Bioland quality)
- Packaging unit 8,0 kg
- Guaranteed remaining shelf life of 90 days
- The prices are subject to shipping and handling costs (S&H) costs

StartGut® certified according to



According to IsernHäger company standard, technical modifications reserved.



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