

MAGNACOOOL TEST RESULTS

COOLING TIME

WEIGHT

MOISTURE

COOLING TIMES

What we tested

250g cooked vienna rolls and pre-baked baguettes.

What we did



We cooled two batches of the product, one in the traditional way of leaving to cool, and one with the Magnacooler.

VIENNA ROLLS



BAGUETTES



Minutes	Traditional Cooling °C	Cooled with the Magnacooler °C
0	91.1	90°
2	88.2°	81°
4	83.1°	70°
6	76.78°	61.4°
8	70.46°	52°
10	66.3°	48.8°
12	61.6°	43°
14	60.1°	38.5°
16	57.8°	34.2°
18	55.4°	Products being packed. Racks and trays returned to production area 
20	52°	
22	49.1°	
24	47.3°	
26	43.4°	Products on the road for delivery 
28	41.7°	
30	41.2°	
32	40°	
34	38.9°	
36	37.3°	
38	36.1°	
40	34.9°	

Magnacooler reaches core temp. 35°C approx. **17** mins

The Results

Tests showed that the Magnacooler allows faster product cooling.

The quicker your product is cooled, the less bacteria develops and the longer your product stays fresh!

Still cooling!

Traditional cooling reaches core temp. 35°C after **40** mins

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BAGUETTES



Minutes	Traditional Cooling	Cooled with the Magnacooler	
	Rack A (°C)	Rack B (°C)	Rack C (°C)
0	91.7°	90°	90°
5	85.1°	60°	70°
10	79.2°	47°	50°
15	73.2°	35.6°	42.5°
20	63.6°	28.2°	33.5°
25	56.6°	Products being packed. Racks and trays returned to production area	
30	49.2°		
35	45°		
40	41.8°		
45	39.6°		
50	37.5°		
55	35.7°	Products on the road for delivery	
60	34.4°		

Magnacooler reaches core temp. 35°C after 15-20 mins

Still cooling!
Traditional cooling reaches core temp. 35°C after 60 mins

The Results

Tests showed that the Magnacooler allows faster product cooling.

The quicker your product is cooled, the less bacteria develops and the longer your product stays fresh!

MAGNACOOOL TEST RESULTS

COOLING TIME

WEIGHT

MOISTURE

WEIGHT TEST

What we tested

250g cooked vienna rolls and pre-baked baguettes. Weight before cooking was 300g.

What we did

We weighed two batches of the product every minute using traditional cooling and cooling with the Magnacooler.

VIENNA ROLLS



BAGUETTES



Minutes	Traditional Cooling		Cooled with the Magnacooler	
	Rack A	Rack B	Rack A	Rack B
1	257g	257g	266g	260g
2	259g	259g	263g	263g
3	256g	256g	260g	264g
4	259g	259g	262g	260g
5	258g	258g	262g	262g
6	251g	251g	263g	262g
7	258g	258g	258g	263g
8	248g	248g	261g	258g
9	252g	252g	259g	259g
10	252g	252g	260g	260g
11	258g	258g	257g	258g
12	255g	255g	260g	256g
13	254g	254g	259g	260g
14	255g	255g	259g	260g
15	256g	256g	258g	258g
16	256g	256g	261g	260g
17	257g	257g	258g	260g
18	253g	253g	259g	259g
19	254g	254g	262g	258g
20	253g	253g	263g	257g
21	257g	257g	261g	259g
Average weight	255g	255g	260g	260g

The Results

The baguettes/rolls that were cooled traditionally lost on average more weight than the products which were cooled by the Magnacooler; Moreover, the weights of the products cooled by a Magnacooler are slightly more even.

Retaining the weight of your product means that less ingredients are needed to compensate for any loss in cooling, ultimately saving you money!

Products lose less weight with the Magnacooler

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COOLING TIME

WEIGHT

MOISTURE

WEIGHT TEST

What we tested

250g cooked vienna rolls and pre-baked baguettes. Weight before cooking was 300g.

What we did

We weighed two batches of the product every minute using traditional cooling and cooling with the Magnacooler.

VIENNA ROLLS



BAGUETTES



Minutes	Traditional Cooling		Cooled with the Magnacooler	
	Rack A		Rack A	Rack B
1	256g		293g	272g
2	253g		295g	273g
3	251g		295g	272g
4	256g		294g	270g
5	255g		291g	269g
6	275g		272g	266g
7	234g		270g	268g
8	257g		291g	272g
9	253g		273g	269g
10	260g		284g	269g
11	255g		273g	266g
12	253g		273g	269g
13	256g		269g	269g
14	253g		295g	269g
15	254g			272g
16	250g			269g
17	254g			
18	254g			
19	258g			
20	254g			
21	257g			

The Results

The baguettes/rolls that were cooled traditionally lost on average more weight than the products which were cooled by the Magnacooler; Moreover, the weights of the products cooled by a Magnacooler are slightly more even.

Retaining the weight of your product means that less ingredients are needed to compensate for any loss in cooling, ultimately saving you money!

Average Weight

255g

283g

270g

Products lose less weight with the Magnacooler

MAGNACOOOL TEST RESULTS

COOLING TIME

WEIGHT

MOISTURE

MOISTURE CONTENT

What we tested

250g cooked vienna rolls and pre-baked baguettes.

What we did

We measured the moisture content (hygrometry) of two batches of the product, one cooled in the traditional way, and one with the Magnacooler.

VIENNA ROLLS



BAGUETTES



Traditional Cooling	Cooled with the Magnacooler	
Rack A	Rack B	Rack C
0.941 Aw	0.946 Aw	0.943 Aw

The Results

Tests prove that the Magnacooler improves the moisture content (Aw) of your products.

Temperature = 23°C

Aw = Water Activity

Retaining the moisture helps keep the flavour of your product and creates a longer shelf life.

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BAGUETTES



Traditional Cooling	Cooled with the Magnacooler	
Rack A	Rack B	Rack C
0.964Aw	0.966 Aw	0.969Aw

Temperature = 23°C

Aw = Water Activity

The Results

Tests prove that the Magnacooler improves the moisture content (Aw) of your products.

Retaining the moisture helps keep the flavour of your product and creates a longer shelf life.