

AMW200

MICROWAVE TEMPERING OVEN

The AMW200 allows deep frozen foods such as meat, poultry, fish, fruits, vegetables, cheese, butter, etc... to be tempered or defrosted (butter) quickly.

The AMW200 DUAL is equipped with two sliding tables, making it possible to minimise unloading/reloading time, and a yield increase of roughly 15%.

The optimal distribution of the microwaves in the cavity, thanks to the multiple microwave power inlets and the turntable, allows perfect homogeneity of the final temperature throughout the product.



KEY BENEFITS

- **PROFITABLE:** save money by avoiding drip losses
- **FAST:** very short treatment time, less than 10 minutes, high production flexibility
- **USER FRIENDLY:** rolling tray for loading / unloading, pneumatic door movement, HMI with 12" colour touch screen
- **HOMOGENEOUS:** excellent temperature homogeneity thanks to turn table, microwave power inlets above and under the product
- **RELIABLE:** no need for regular maintenance, except daily cleaning
- **HYGIENIC:** no bacteriological growth, complies with all hygiene regulations and standards,
- **FLEXIBLE:** can be used for tempering packed (cardboard or plastic film) or unpacked food
- **COMPACT:** small footprint
- **CONNECTED:** USB and ethernet connection for remote control



AMW200 Dual

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TEMPERING CAPACITIES

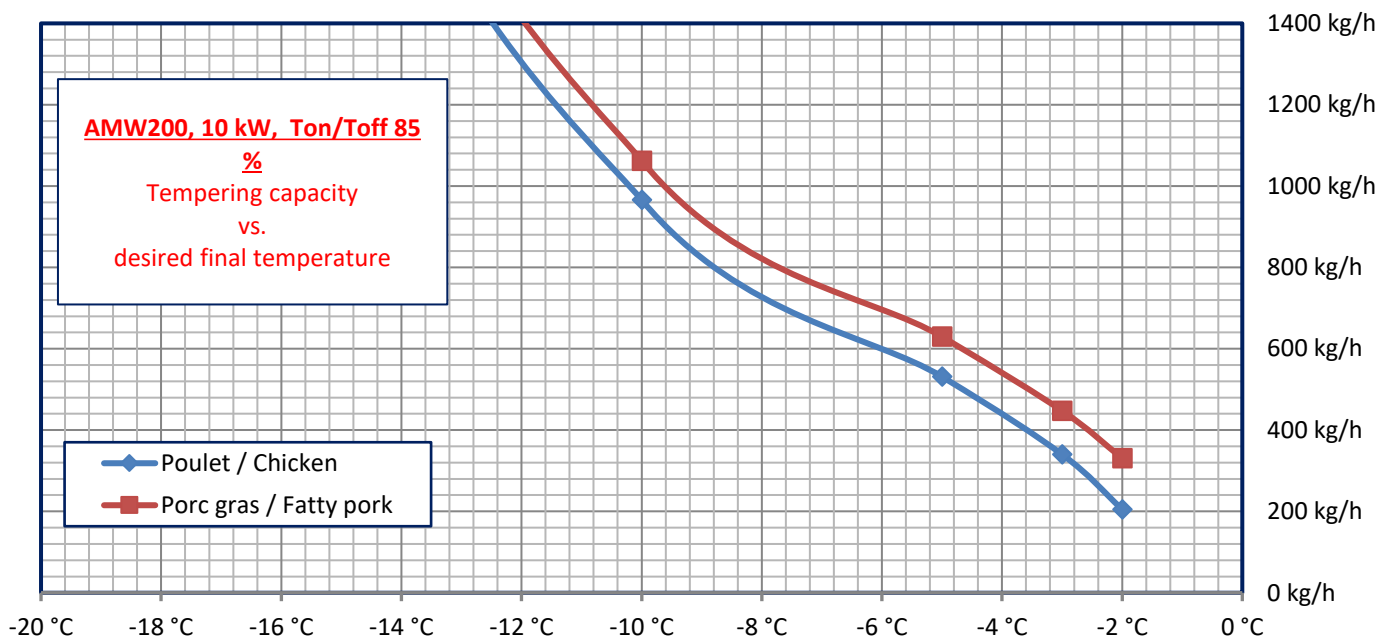
The AMW 200 has a tempering capacity between 250 kg/h and 400 kg/h from an initial -18 °C to final temperature of -4 °C / -2 °C, which is the optimum temperature for processing: dicing, grinding, cutting, slicing...

This capacity is variable and depends: on the final required temperature, on the product type (meat, fish, vegetables, fruit, butter etc.), its shape and its fat concentration. The charts on the following pages show the figures.

The data in the charts below are calculated operating the AMW 200 at 10 kW microwave power with optimum t_{on}/t_{off}^1 , for blocks with regular size and weight (25 kg, 600 mm x 400 mm x 150 mm) and for an initial temperature around -18 °C.

The maximum microwave power which can be used in tempering is limited by the products and not by the AMW. Recipes power vs. time must be chosen according to the compromise between capacity and homogeneity of heating.

TEMPERING CAPACITY VS. DESIRED FINAL TEMPERATURE



Example: Chicken $\approx$ 570 kg/h from -18 °C to -5 °C or $\approx$ 370 kg/h from -18 °C to -3 °C

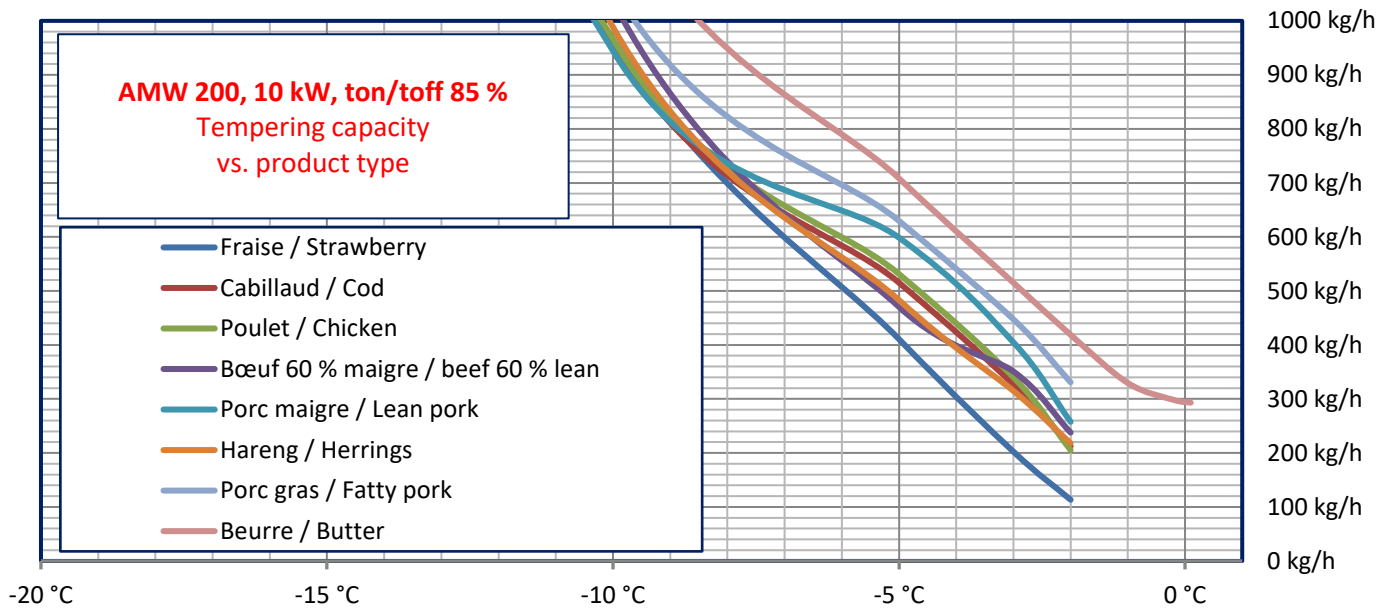
Example: Fatty pork $\approx$ 625 kg/h from -18 °C to -5 °C or $\approx$ 450 kg/h from -18 °C to -3 °C

¹Microwave utilization within 1 hour including loading/unloading and door opening/closing. The optimum is 85 %.

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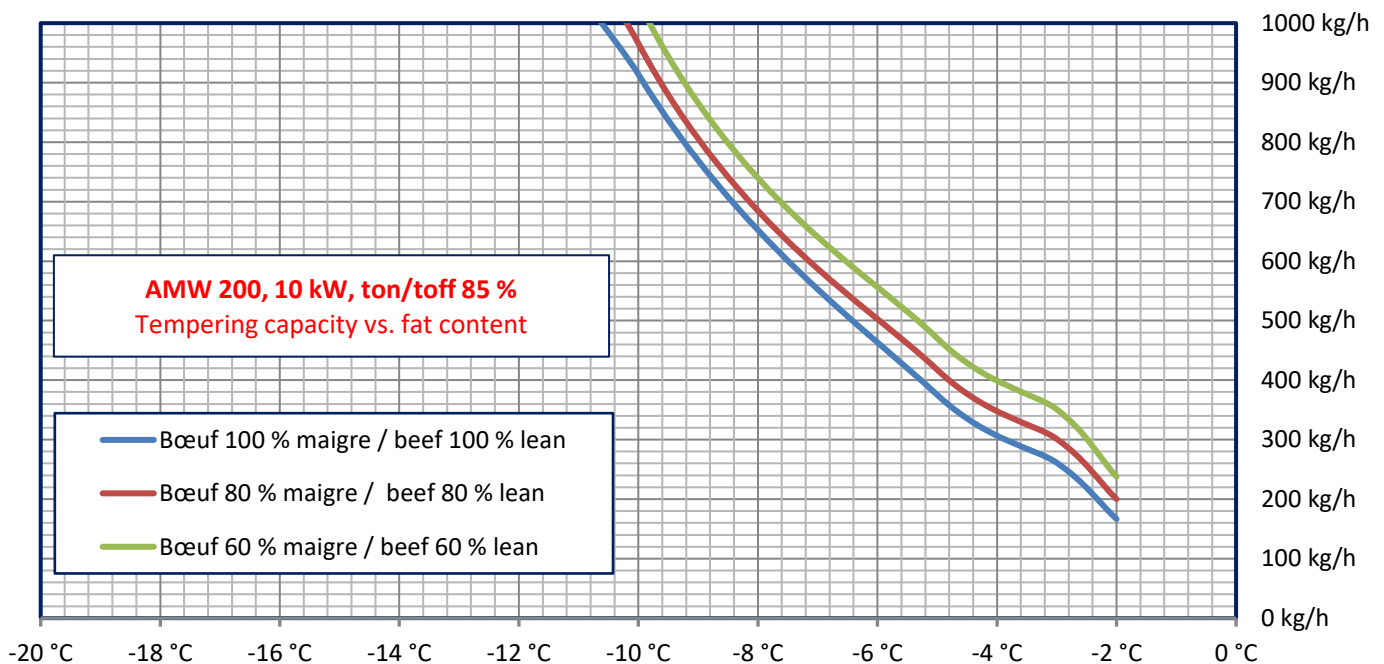
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TEMPERING CAPACITY VS. PRODUCT TYPE



Example: Fatty pork $\approx$ 540 kg/h at -4°C or beef 60 % lean $\approx$ 400 kg/h at -4°C

TEMPERING CAPACITY VS. FAT CONTENT



Example: capacity $\approx$ 350 kg/h for beef 60 % lean or 260 kg/h for beef 100 % lean from -18 °C to -3 °C

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EXAMPLES OF PROCESSED BLOCKS



Beef

25% fat, 50 kg (2 x 25 kg)
400 kg/h from -18 °C to -4 °C/-2 °C



Pork shoulder

10 to 15 % fat, 50 kg (2 x 25 kg)
270 kg/h from -18 °C to -3 °C/-1 °C



Chicken breasts

30 kg (2 x 15kg)
300 kg/h from -18°C to -4°C/-2°C



Strawberries

10 kg blocks (3 x 10 kg)
300 kg/h from -18 °C to -3 °C/-1 °C



Rhubarb

10 kg blocks (3 x 10 kg)
300 kg/h from -18 °C to -3 °C/-1 °C



Broccolis

40 kg (2 x 20 kg)
310 kg/h from -18 °C to -3 °C/-1 °C

Other examples:

- **Poultry filets - 40 kg (2 x 20 kg),**
 - 500 to 540 kg/h at -6 °C/-4 °C
 - 280 to 320 kg/h at -4 °C/-2 °C
- **Game (doe) - 40 kg (2 x 20 kg)**
 - 320 to 360 kg/h at -4 °C/-2 °C
 - 250 to 290 kg/h at -3 °C/-1.5 °C

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KEY SPECIFICATIONS

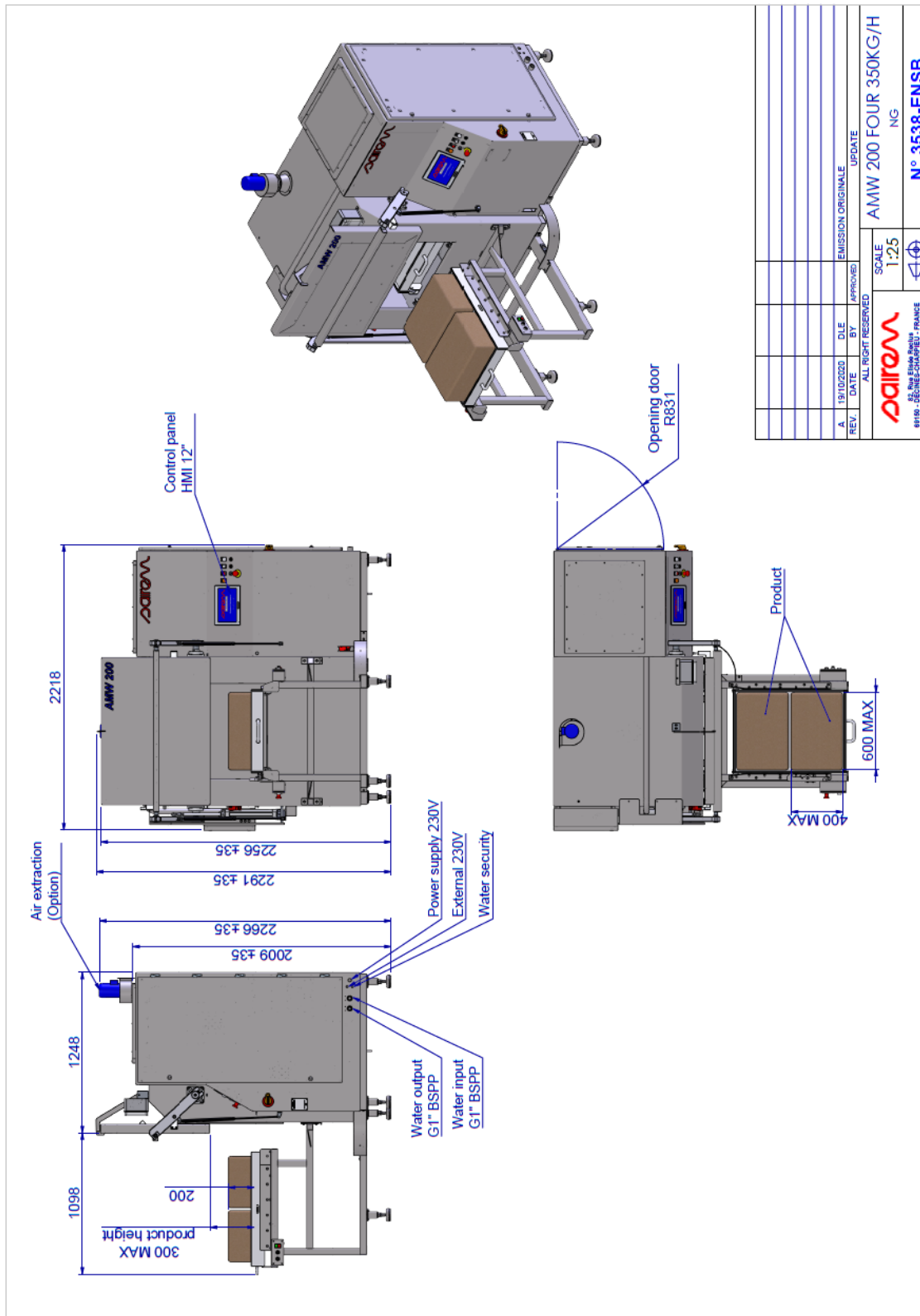
Reference	AMW200	AMW200 DUAL
Construction	• Cavity: 304 L stainless steel, microwave door with $\frac{1}{4} \lambda$ choke, pneumatically driven sliding door, turn table with automatic stop, touch screen, MW distribution above and below • Microwave generator: integrated, IP54, interchangeable microwave power supply with quick connectors for easy maintenance, high reliability	
Tempering capacity	• Depends on final temperature, product, fat content	
Sliding table(s)	• 1 sliding table of 840 x 620 mm • 2 sliding tables of 840 x 620 mm	
Tables specifications	• Table in polyethylene, sliding mechanism consists of rollers with position locking. • Load per sliding table: 2 blocks • Max block size 600 x 400 x 250 (height) mm, 30 kg maximum per block	
Microwave frequency	• 915 MHz (other frequencies are available according to specific regulations of each country)	
Microwave power	• 10 kW maximum, adjustable from 2 kW to 10 kW	
HMI and PLC	• 12" digital touch screen, remote control, multi lingual, control of microwave power and time, 50 programmable recipes, oven status, faults history etc. Microwave start, door opening/closing push buttons installed on each side of the sliding table, emergency stop etc...	
Safety	• Microwave leakage detector and emergency stop	
Power	• 400 V, 3-phase, no neutral + earth 50/60 Hz, 18 kVA at full power	
Cooling water	• Recirculated water, flow min. 18 l/min with differential pressure min. 3 bar, inlet temperature 18 °C to 22 °C, max power to dissipate 5 kW; 3/4" GF. • Optional: air/water chiller	
Compressed air	• Min. 6 bar, consumption 20 l/min during 10 s (for door opening/closing). Average 0.7 l/min	
Cleaning	• With low or high-pressured water jet for cleaning inside the AMW, evacuation under the AMW	
EC standards	• 89/392, 91/368, 73/23, 89/336, 92/31, 519-6 CEE/EWG EN55011 (specific)	
Dimensions (W x H x D)	• 2218 x 2266 x 2346 mm	
Weight	• 1250 kg	

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MAIN DIMENSIONS

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