Commercial Kitchen Equipment Database

HKI CERT GROSSKÜCHENTECHNIK

for the verification of energy consumption

Basic principles and requirements for registration

(As of November 2025)

HKI INDUSTRIEVERBAND HAUS-, HEIZ- UND KÜCHENTECHNIK E.V.
Amelia-Mary-Earhart-Straße 12 ● D-60549 Frankfurt a.M.
e-mail: info(at)hki-online.de ● homepage: www.hki-online.de

1. Preface

The HKI CERT GROSSKÜCHENTECHNIK database provides information on the energy consumption of commercial kitchen equipment.

This document sets out the principles and requirements necessary for entry into the database.

The database, including an optional label, serves as a platform for operators, merchants, planners and other interested parties to acquire information about the energy consumption of commercial kitchen equipment.

The HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V. acts as an independent, neutral and competent body responsible for the entries in the database.

All benchmark tests are updated on a daily basis and can be accessed via the homepage of "HKI CERT commercial kitchen equipment" at http://grosskuechen.cert.hki-online.de

The database may be expanded at any time to include additional information.

The objective of this database is to contribute to ensuring high-quality, energy-efficient commercial kitchen equipment.

The database is publicly accessible. Entry is open to both HKI members and non-members.

Amendments
Compared to the August 2018 edition, the following changes have been made:
a) Date of issue updated;
b) Logo replaced;
c) Address updated;
d) Table of contents updated;
e) Preface updated;
f) Test basis updated;
g) Product requirements revised and supplemented;
h) Assessment of requirements revised and supplemented.

Previous editions
August 2018

2. Scope

The database "HKI CERT commercial kitchen equipment" applies to equipment intended for use in commercial kitchens and other food-processing establishments which, by their design, are intended for commercial use. It does not apply to domestic appliances.

On the basis of standardised requirements and uniform methods for measuring the energy consumption of commercial kitchen equipment, energy consumption is determined.

The manufacturers affiliated with the HKI Industrial Association for House, Heating and Kitchen Technology publish the determined energy consumption values and appliance data in a transparent manner, thereby documenting the performance of their products.

The results obtained from these measurement procedures enable customers, prior to purchasing a new commercial kitchen appliance, to select the model that operates most energy-efficiently for the requirements of their business.

3. Test basis

The test basis is formed by the standards applicable to the product.

E DIN EN 50730 *Professional and commercial coffee machines - Methods for measuring energy consumption and productivity*:2025-04

DIN EN 50733 *Electric forced convection ovens, steam cookers and combination ovens for professional use - Test methods for measuring the performance*:2025-10

DIN 18872-3: *Equipment for commercial kitchens - Refrigeration technology equipment – Part 3: Refrigerated display cases for food distribution; requirements and testing:*2006-06

DIN 18873-2 *Methods for measuring the energy consumption of commercial kitchen appliances – Part 2: Commercial coffee machines:*2016-02

DIN 18873-3 *Methods for measuring the energy consumption of commercial kitchen appliances – Part 3: Deep fat fryers:*2018-02

DIN 18873-4 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 4: Convection ovens*:2013-04

DIN 18873-5 *Methods for measuring the energy consumption of commercial kitchen appliances – Part 5: Tilting frying pans and stationary frying pans:*2016-02

DIN 18873-6 *Methods for measuring the energy consumption of commercial kitchen appliances – Part 6: Tilting pressure braising pans and stationary pressure braising pans*:2016-02

DIN 18873-7 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 7: Multiple deck ovens:*2012-07

DIN 18873-8 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 8: Regenerating systems*:2013-04

DIN 18873-9 *Methods for measuring the energy consumption of commercial kitchen appliances – Part 9: Cooking zones:*2026-05

DIN 18873-10 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 10: Ice machines:*2012-12

DIN 18873-11 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 11:Beverage cooler:*2013-04

DIN 18873-12 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 12: Ovens:*2013-04

DIN 18873-13 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 13: Microwave combination oven:*2013-05

DIN 18873-14 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 14: Point of use water dispenser for cooling and carbon dioxide enrichment:*2014-09

DIN 18873-15 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 15: Double jacketed boiling and quick boiling pans*: 2016:02

DIN 18873-16 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 16: Kitchen Machinery*:2026-06

DIN 18873-17 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 17: Noodle cookers*:2016-09

DIN 18873-18 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 18: Wafflebaker:* 2016-09

DIN 18873-19 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 19: Frying and grilling appliances:*2016-09

DIN 18873-20 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 20: Crepe and Poffertjes-Baker*:2016-09

DIN 18873-21 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 21: Plate dispenser (heated, in mobile design)*:2022-08

DIN 18873-22 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 22: Multifunctional cooking devices*:2025-10

4. Product requirements

The energy consumption and other optional requirements for commercial kitchen equipment are recorded in accordance with the standards listed in Section 3.

4.1. Refrigerated Display Cases for Food Distribution

According to DIN 18872-3 *Equipment for commercial kitchens - Refrigeration technology equipment – Part 3: Refrigerated display cases for food distribution - Requirements and testing*:2006-06, the following product requirements for refrigerated display cases for food distribution are determined by measurement:

DIN 18872-3:2006-06 Section		**Unit**
7	Energy consumption	kWh

4.2. Electric Forced Convection Ovens, Steam Cookers and Combination Ovens

According to *DIN EN 50733 Electric forced convection ovens, steam cookers and combination ovens for professional use - Test methods for measuring the performance:2025-10*, the following product requirements for electric forced convection ovens, steam cookers and combi-steamers are determined by measurement:

DIN EN 50733:2025-10 Section		**Unit**
8.2.1	Preheat in convection mode	min
8.2.2	Idle energy rate in convection mode	kWh
8.2.3	Water consumption under load conditions in convection mode	l
8.2.3	Energy consumption under load conditions in convection mode	kWh
8.3.3	Preheat in steam mode	min
8.3.4	Idle energy rate in steam mode	kWh

8.3.6	Energy consumption under load conditions in steam mode	kWh
8.3.6	Water consumption under load conditions in steam mode	l
D.3c 8.2.3	Load conditions in Convection Mode Time	s
D.3c 8.2.3	Load conditions in Convection Mode Number of **bricks**	pcs.
D.4b 8.3.4	Idle Energy Rate in Steam Mode Average volume fraction of water vapor after reaching T_{boil} - 3°C	%
D.4c 8.3.6	Load conditions in Steam Mode Number of **bricks**	pcs.
D.4c 8.3.6	Load conditions in Steam Mode Time	s
D.4c 8.3.6	Load conditions in Steam Mode Average Volume Fraction of the Water Vapor after reaching T_{boil} - 3°C	%

NOTE: As soon as a test method for gas-powered appliances becomes available, the scope will be extended accordingly.

The national standard DIN 18873-1 *Methods for measuring of the energy use from equipment for commercial kitchens - Part 1: Convection steamers*:2012-12 conflicts with DIN EN 50733 *Electric forced convection ovens, steam cookers and combination ovens for professional use - Test methods for measuring the performance*:2025-10. A transitional period until 31 March 2028 applies to product requirements for combination ovens determined by measurements in accordance with DIN 18873-1 *Methods for measuring of the energy use from equipment for commercial kitchens - Part 1: Convection steamers*:2012-12. Entries based on DIN 18873-1 *Methods for measuring of the energy use from equipment for commercial kitchens - Part 1: Convection steamers*:2012-12 will remain in the database after expiry of the transitional period.

4.3. Commercial Hot Beverage Dispensers, Professional and Commercial Coffee Machines

4.3.1. Commercial Coffee Machines

According to *DIN 18873-2 Methods for measuring the energy consumption of commercial kitchen appliances - Part 2: Commercial coffee machines:2016-02*, the following product requirements for commercial coffee machines are determined by measurements:

DIN 18873-2:2016-02 **Section**		**Unit**
5	Energy loss of commercial coffee machines per day	kWh
5	Energy loss of commercial coffee makers in optional energy-saving operating modes per day	kWh
6	Output rate espresso	Cups/hour

6	Output rate cappuccino	Cups/hour
6	Output rate café crème	Cups/hour
6	Output rate hot water	Cups/hour
6	Output rate filter coffee	Cups/hour
7	Energy loss of milk refrigeration systems per day	W
7	Energy loss of milk refrigeration systems per day and per litre of milk container capacity	W
	Connected load as indicated on the rating plate	kWh

NOTE
Please see manufacturer's documentation for information on complete output capacities.

4.3.2. Professional and Commercial Coffee Machines

According to E DIN EN 50730 *Professional and commercial coffee machines - Methods for measuring energy consumption and productivity*:2025-11, the following product requirements for professional and commercial coffee machines are determined by measurements:

E DIN EN 50730:2025-11 Section		**Unit**
6.2	Ready machine energy	kWh
6.3	Energy per cup: 2 espressos	kWh
6.3	Energy per cup: café crème	kWh
6.3	Energy per cup: coffee and milk (direct hot milk)	kWh
6.3	Energy per cup: coffee and milk (steam wand hot milk)	kWh
6.3	Energy per cup: hot water	kWh
6.3	Energy per cup: powdered beverage	kWh
6.3	Energy per cup: direct hot milk	kWh
6.3	Energy per cup: steam wand hot milk	kWh
6.4	Energy consumption in energy-saving mode	kWh
6.5	Productivity for café crème	cups/hour
6.5	Productivity for 2 espressos	cups/hour
6.5	Productivity for powdered beverage	cups/hour
6.5	Productivity for hot water	cups/hour
6.5	Productivity for direct hot milk	cups/hour
6.5	Productivity for steam wand hot milk	cups/hour

The national standard *DIN 18873-2 Methods for measuring the energy consumption of commercial kitchen appliances - Part 2: Commercial coffee machines:2016-02* conflicts with *E DIN EN 50730 Professional and commercial coffee machines - Methods for measuring energy consumption and productivity:2025-11*. A transitional period until 30 April 2028 applies to product requirements for commercial hot beverage dispensers determined by measurements in accordance with *DIN 18873-2 Methods for measuring the energy consumption of commer-*

cial kitchen appliances - Part 2: Commercial coffee machines:2016-02. Entries based on *DIN 18873-2 Methods for measuring the energy consumption of commercial kitchen appliances - Part 2: Commercial coffee machines:2016-02* will remain in the database after expiry of the transitional period.

4.4. Deep fat fryers

According to *DIN 18873-3 Methods for measuring the energy consumption of commercial kitchen appliances - Part 3: Deep fat fryers:2018-02*, the following product requirements for deep fat fryers are determined by measurements:

DIN 18873-3:2018-02 Section		**Unit**
6.2	Energy consumption preheating cycle	kWh
6.3.2	Energy efficiency preheating cycle	%
7.2	Energy consumption keep-warm cycle over 2 hours	kWh
7.3.2	Energy consumption keep-warm cycle over 2 hours per kilogram of frying oil	kWh/kg
8.3	Energy consumption frying cycle	kWh
8.4.4	Production rate per hour	kg/h
8.4.5	Energy consumption frying cycle per kilogram of frozen French fries	kWh/kg
9.1	Total energy consumption Note: The specified value includes a utilization factor for weighting.	kWh
9.1	Total energy consumption per kilogram of frozen French fries. Note: The specified value includes a utilization factor for weighting.	kWh/kg
Amendment A (informative)	Sensible heat output	J/s (W)
Amendment B (informative)	Latent heat output	J/s (W)

4.5. Convection ovens

According to *DIN 18873-4: Methods for measuring of the energy use from equipment for commercial kitchens - Part 4: Convection ovens:2013-04*, the following product requirements for convection ovens are shown by way of measurement data:

DIN 18873-4:2013-04 Section		**Unit**
6.2	Time needed to heat up to 180 °C	min
6.2	Energy consumption during heat-up	kWh
7	Energy consumption in idle mode	kWh
8.2	Energy consumption in convection mode without steam injection	kWh

8.2	Difference in stone weight (pre-soaked / dry afterwards)	kg
9.2	Energy consumption in convection mode with steam injection	kWh
9.2	Difference in stone weight (pre-soaked / dry afterwards)	kg

4.6. Tilting frying pans and stationary frying pans

According to *DIN 18873-5: Methods for measuring the energy consumption of commercial kitchen appliances - Part 5: Tilting frying pans and stationary frying pans:2016-02*, the following product requirements for tilting frying pans and stationary frying pans are shown by way of measurement data:

DIN 18873-5:2016-02 Section		**Unit**
6.3.2	Energy consumption preheating cycle	kWh
6.3.3	Energy consumption preheating cycle per unit area	Wh/dm^2
7.3	Energy consumption keep-warm cycle over 1 hour	kWh
7.4.1	Energy consumption keep-warm cycle over 1 hour per unit area	Wh/dm^2
8.3	Energy consumption browning cycle	kWh
8.4.2	Energy consumption browning cycle per kilogram of chilled minced meat patties	kWh/kg
8.4.4	Production rate per hour	kg/h
9.3	Energy consumption water heating-up cycle	kWh
9.4.3	Energy consumption water heating-up cycle per kilogram of water	kWh/kg
9.4.5	Energy efficiency water heating-up cycle	%
10.1	Total energy consumption Note: The specified value includes a utilization factor for weighting.	kWh
10.1	Total energy consumption per kilogram of chilled minced meat patties Note: The specified value includes a utilization factor for weighting.	kWh/kg

4.7. Tilting Pressure Braising Pans and Stationary Pressure Braising Pans

According to *DIN 18873-6*: *Methods for measuring the energy consumption of commercial kitchen appliances - Part 6: Tilting pressure braising pans and stationary pressure braising pans*:2016-02, the following product requirements for tilting pressure braising pans and stationary pressure braising pans are shown by way of measurement data:

DIN 18873-5:2016-02 Section		**Unit**
10.1	Total energy consumption frying Note: The specified value includes a utilization	kWh

	factor for weighting.	
10.1	Total energy consumption per kilogram of chilled minced meat patties Note: The specified value includes a utilization factor for weighting.	kWh/kg
DIN 18873-6:2016-02 Section		**Unit**
6.2.4.2	Total energy consumption per kilogram potatoes Note: The specified value includes a utilization factor for weighting.	kWh/kg
6.2.4.3	Total energy consumption pressure steaming cycle per kilogram potatoes Note: The specified value includes a utilization factor for weighting.	kWh/kg
7.2.4.2	Total energy consumption pressure cooking cycle	kWh
7.2.4.3	Total energy consumption pressure cooking cycle per kilogram water	kWh/kg
8	Total energy consumption browning and pressure cooking	kWh
8	Total energy consumption browning and pressure cooking per kilogram food	kWh/kg

4.8. Multiple Deck Ovens

According to *DIN 18873-7: Methods for measuring of the energy use from equipment for commercial kitchens – Part 7: Multiple deck ovens:*2012-07, the following product requirements for multiple deck ovens are shown by way of measurement data:

DIN 18873-7:2012-07 Section		Unit
7	Energy consumption in idle mode	kWh
8.2	Energy consumption under load without steam injection	kWh
8.2	Mass difference of the stones (pre-soaked / dry afterwards)	kg
8.2	Water loss under load without steam injection	kg
9.2	Energy consumption under load with steam injection	kWh
9.2	Mass difference of the stones (pre-soaked / dry afterwards)	kg
9.2	Water loss under load with steam injection	kg

4.9. Regenerating Systems

According to *DIN 18873-8 Methods for measuring of the energy use from equipment for commercial kitchens - Part 8: Regenerating systems:2013-04,* the following product requirements for regenerating systems are shown by way of measurement data:

4.9.1. Regeneration appliances for tray-based meal systems

4.9.1.1. Cooling with consideration of hot meal components

DIN 18873-8:2013-04 Section		**Unit**
5.1.3	Total energy consumption	kWh
5.1.4	Energy consumption per tray	kWh

4.9.1.2. Regeneration without consideration of the cold meal components

DIN 18873-8:2013-04 Section		**Unit**
5.2.3	Total energy consumption	kWh
5.2.4	Energy consumption per tray	kWh

4.9.1.3. Active cooling and regenerating with consideration of the cold meal components

DIN 18873-8:2013-04 Section		**Unit**
5.3.3	Total energy consumption	kWh
5.3.4	Energy consumption per tray	kWh

4.9.2. Regeneration appliances for bulk systems using hot air and contact heat

4.9.2.1 Cooling

DIN 18873-8:2013-04 Section		**Unit**
6.1.3	Total energy consumption	kWh
6.1.4	Energy consumption per container	kWh

4.9.2.2 Regeneration

DIN 18873-8:2013-04 Section		**Unit**
6.2.3	Total energy consumption	kWh
6.2.4	Energy consumption per container	kWh

4.10. Cooking Zones

According to *DIN 18873-9 Methods for measuring the energy consumption of commercial kitchen appliances - Part 9: Cooking zones:2026-05,* the following product requirements for cooking zones are shown by way of measurement data:

DIN 18873-9:2026-05 Section		**Unit**
9	Total energy consumption per kilogram water	kWh/kg

4.11. Ice Machines

According to *DIN 18873-10 Methods for measuring of the energy use from equipment for commercial kitchens – Part 10: Ice machines:*2012-12, the following product requirements for ice machines are shown by way of measurement data:

4.11.1. Batch ice makers

DIN 18873-10:2012-12 Section		**Unit**
5.2.3	Energy consumption per kilogram ice	kWh/kg
5.4	Ice temperature measured at the surface	°C
5.4	Ice layer thickness at the time of energy consumption measurement	mm
5.4	Water consumption	l
5.4	Ice layer thickness at the time of water consumption measurement	mm

4.11.2. Continuous ice makers

DIN 18873-10:2012-12 Section		**Unit**
5.3.3	Energy consumption per kilogram ice	kWh/kg
5.4	Ice temperature measured at the surface	°C
5.4	Ice layer thickness at the time of energy consumption measurement	mm
5.3.2	Water consumption	l
5.4	Ice layer thickness at the time of water consumption measurement	mm

4.12. Beverage Coolers

According to *DIN 18873-11 Methods for measuring of the energy use from equipment for commercial kitchens – Part 11: Beverage cooler:*2013-04, the following product requirements for beverage coolers are shown by way of measurement data:

DIN 18873-11:2013-04 Section		**Unit**
7	Electrical energy consumption over 24 h without beverage output	kWh

7	Maximum electrical energy consumption over 24 h	kWh

4.13. Ovens

According to *DIN 18873-12 Methods for measuring of the energy use from equipment for commercial kitchens - Part 12: Ovens:2013-04*, the following product requirements for ovens are shown by way of measurement data:

DIN 18873-12:2013-04 Section		**Unit**
9.1	Total energy consumption in convection mode	kWh
9.1	Total energy consumption in radiate heat	kWh

4.14. Microwave Combination Ovens

According to *DIN 18873-13 Methods for measuring of the energy use from equipment for commercial kitchens – Part 13: Microwave combination ovens:*2013-05, the following product requirements for microwave combination ovens are shown by way of measurement data:

DIN 18873-13:2013-05 Section		**Unit**
10.1	Total energy consumption	kWh

4.15. Point of use Water Dispensers for cooling and carbon dioxide enrichment

According to *DIN 18873-14 Methods for measuring of the energy use from equipment for commercial kitchens – Part 14: Point of use water dispenser for cooling and carbon dioxide enrichment:*2014-09, the following product requirements for point of use water dispensers for cooling and carbon dioxide enrichment are shown by way of measurement data:

DIN 18873-14:2014-09 Section		**Unit**
5	Electrical energy consumption without potable water draw-off	kWh/24 h
6	Maximum electrical energy consumption with potable water draw-off	kWh
7	Output rate	l/min

4.16. Double jacketed boiling and quick boiling pans

According to *DIN 18873-15 Methods for measuring the energy consumption of commercial kitchen appliances - Part 15: Double jacketed boiling and quick boiling pans:*2016-02, the following product requirements for double jacketed boiling and quick boiling pans are shown by way of measurement data:

DIN 18873-15:2016-02 section		**Unit**
8.1	Total energy consumption	kWh
8.1	Total energy consumption per kilogram water	kWh

4.17. Kitchen machinery

According to *DIN 18873-16 Methods for measuring the energy consumption of commercial kitchen appliances - Part 16: Kitchen machinery:*2026-06, the following product requirements for kitchen machinery are shown by way of measurement data:

4.17.1. Planetary mixers and kneaders

DIN 18873-16:2026-06 Section		**Unit**
6.3	Energy consumption per kilogram of load	Wh/kg

4.17.2. Vegetable cutting machines with rotating cutting tool

DIN 18873-16:2026-06 Section		**Unit**
7.4	Energy consumption per kilogram of load	Wh/kg

4.17.3. Semi-automatic or fully automatic slicing machines

DIN 18873-16:2026-06 Section		**Unit**
8.2.4	Energy consumption	Wh

4.17.4. Manual slicing machines

DIN 18873-16: 2026-06 Section		**Unit**
8.3.2	Energy consumption	Wh

4.17.5. Band saw machines

DIN 18873-16:2026-06 Section		**Unit**
9.4	Energy consumption per m²	Wh/m²

4.17.6. Meat mincers, uncooled

DIN 18873-16:2026-06 Section		**Unit**
10.2.2	Energy consumption per kilogram of load	Wh/kg

4.17.7. Meat mincers, cooled

DIN 18873-16:2026-06 Section		**Unit**
10.3.2	Energy consumption per kilogram of load	Wh/kg

4.17.8. Bowl cutters

DIN 18873-16:2026-06 Section		Unit
11.4	Energy consumption per kilogram of load	Wh/kg

4.17.9. Blenders

DIN 18873-16:2026-06 Section		Unit
12.3	Energy consumption per kilogram of load	Wh/kg

4.17.10. Hand-held mixers and hand whisks

DIN 18873-16:2026-06 Section		Unit
13.2	Energy consumption in the load cycle	Wh

4.17.11. Stick blenders

DIN 18873-16:2026-06 Section		Unit
14.2	Energy consumption in the load cycle	Wh

4.17.12. Vegetable peeling machines

DIN 18873-16:2026-06 Section		Unit
15.3	Energy consumption per kilogram of load	Wh/kg

4.17.13. Cheese graters

DIN 18873-16:2026-06 Section		Unit
16.4	Energy consumption per kilogram of load	Wh/kg

4.18. Noodle cookers

According to *DIN 18873-17 Methods for measuring the energy consumption of commercial kitchen appliances – Part 17: Noodle cookers:*2016-09, the following product requirements for noodle cookers are shown by way of measurement data:

DIN 18873-17:2016-09 Section		Unit
9.1	Total energy consumption	kWh
9.2	Total energy consumption per kilogram water	kWh/kg

4.19. Wafflebakers

According to *DIN 18873-18 Methods for measuring the energy consumption of commercial kitchen appliances – Part 18: Wafflebaker:*2016-09, the following product requirements for wafflebaker are shown by way of measurement data:

DIN 18873-18:2016-09 Section		**Unit**
8.1.2	Total energy consumption in the baking cycle	kWh
8.1.2	Total energy consumption per kilogram baked dough	kWh/kg

4.20. Frying and grilling appliances

According to *DIN 18873-19 Methods for measuring the energy consumption of commercial kitchen appliances – Part 19:Frying and grilling appliance*:2016-09, the following product requirements for frying and grilling appliances are shown by way of measurement data:

4.20.1. One-sided browning method

DIN 18873-19:2016-09 Section		**Unit**
8.1.1	Total energy consumption	kWh
8.1.1	Total energy consumption per kilogram frozen minced meat patties	kWh/kg

4.20.2. Double-sided browning method

DIN 18873-19:2016-09 Section		**Unit**
8.1.1	Total energy consumption	kWh
8.1.1	Total energy consumption per kilogram frozen minced meat patties	kWh/kg

4.21. Crepe- and Poffertjes-Bakers

According to *DIN 18873-20 Methods for measuring the energy consumption of commercial kitchen appliances – Part 20: Crepe- and Poffertjes-Baker*:2016-09, the following product requirements for Crepe- and Poffertjes-Baker are shown by way of measurement data:

DIN 18873-20:2016-09 Section		**Unit**
8.1.2	Total energy consumption	kWh
8.1.2	Total energy consumption per kilogram baked dough	kWh/kg

4.22. Plate dispensers (heated, in mobile design)

According to *DIN 18873-21 Methods for measuring the energy consumption of commercial kitchen appliances — Part 21: Plate dispenser (heated, in mobile design):2022-08,* the following product requirements for plate dispensers are shown by way of measurement data:

DIN 18873-21:2022-08 Section		Unit
6.3.1.1	Total energy consumption during the heating-up phase for counter service	kWh
6.3.1.3	Energy consumption per plate during the heating-up phase for counter service	kWh
6.3.2.1	Total energy consumption during the heating-up phase for portioning	kWh
6.3.2.3	Energy consumption per plate during the heating-up phase for portioning	kWh
6.4.1.1	Total energy consumption during the operating phase for counter service	kWh
6.4.1.2	Energy consumption per plate during the operating phase for counter service	kWh
6.4.2.1	Total energy consumption during the operating phase for portioning	kWh
6.4.2.2	Energy consumption per plate during the operating phase for portioning	kWh

4.23. Multifunctional cooking devices

According to *DIN 18873-22 Methods for measuring the energy consumption of commercial kitchen appliances - Part 22: Multifunctional cooking devices:2025-10,* the following product requirements for multifunctional cooking devices are shown by way of measurement data:

4.23.1. Frying mode

DIN 18873-22:2025-10 Section		Unit
6.1.2	Energy consumption heating-up cycle	kWh
6.1.3	Energy consumption keep-warm cycle over 2 h	kWh
6.1.3	Energy consumption frying cycle	kWh
6.1.4.4.4	Production rate of French fries per hour	kg/h
6.1.4.4.5	Energy consumption per kilogram of frozen French fries	kWh/kg
6.1.5	Total energy consumption Note: The specified value includes a utilisation factor for weighting.	kWh
6.1.5	Total energy consumption per kilogram of frozen French fries Note: The specified value includes a utilisation factor for weighting.	kWh/kg

4.23.2. Browning mode

DIN 18873-22:2025-10	Unit

Section		
6.2.1	Energy consumption heating-up cycle	kWh
6.2.1.3.3	Energy consumption preheating cycle per unit area	Wh/dm^2
6.2.2	Energy consumption keep-warm cycle	kWh
6.2.2.4.1	Energy consumption keep-warm cycle per unit area	Wh/dm^2
6.2.3	Energy consumption browning cycle	kWh
6.2.3.4.2	Energy consumption browning cycle per kilogram of chilled minced meat patties	kWh/kg
6.2.3.4.4	Production rate of minced meat per hour	kg/h
6.2.4	Total energy consumption Note: The specified value includes a utilisation factor for weighting.	kWh
6.2.4	Total energy consumption per kilogram of chilled minced meat patties Note: The specified value includes a utilisation factor for weighting.	kWh/kg

4.23.3. Pressure steaming mode

DIN 18873-22:2025-10 Section		**Unit**
6.3.1	Energy consumption heating-up cycle	kWh
6.3.2	Energy consumption pressure steaming cycle	kWh
6.3.3.1	Total energy consumption per kilogram of potatoes	kWh/kg
6.3.3.2	Total energy consumption potatoes Note: The specified value includes a utilisation factor for weighting.	kWh
6.3.3.3	Total energy consumption per kilogram of potatoes Note: The specified value includes a utilisation factor for weighting.	kWh/kg

4.23.4. Cooking mode

DIN 18873-22:2025-10 Section		**Unit**
6.4.1	Energy consumption heating-up cycle	kWh
6.4.2	Energy consumption keep-warm cycle	kWh
6.4.2.4.1	Energy consumption keep-warm cycle for water Note: The specified value includes a utilisati-	kWh/kg

	on factor for weighting.	
6.4.3.2	Total energy consumption per kilogram of water Note: The specified value includes a utilisation factor for weighting.	kWh/kg

5. Assessment of Requirements

5.1. Testing Laboratory

Testing may be carried out by the following entities:

- A manufacturing company shall maintain its own suitable internal laboratory, which has either been recognised by an independent third-party body or certified as part of the company's overall certification in accordance with *DIN EN ISO 9001 Quality management systems – Requirements:2015-11*.
- An external, independent, accredited testing laboratory in accordance with *DIN EN ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories:2018-03*, where the required measurements are carried out within this laboratory by its personnel.
- An external, independent, accredited testing laboratory in accordance with DIN EN ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories:2018-03, where the required measurements are carried out or supervised at the manufacturer's premises in a suitable laboratory by personnel of the external testing laboratory.

Submission of the application for inclusion shall simultaneously constitute submission of the test results in the form of a test report in accordance with the annex to this document.

5.2. Procedure for verification

5.2.1. Application for inclusion in the database and test report

For inclusion of commercial kitchen equipment in the HKI CERT Commercial Kitchen Technology database, a test report for product testing in accordance with the current version of the standards listed in Section 3 shall be submitted to the HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V., depending on the type of appliance.

The following test reports shall be submitted to HKI:

Annex A
For the verification of product requirements for refrigerated display cases for food distribution for entry into the HKI CERT database according to *DIN 18872-3: Equipment for commercial kitchens - Refrigeration technology equipment – Part 3:Refrigerated display cases for food distribution; requirements and testing:2006-06*

Anhang B.1
For the verification of product requirements for electroc forced convection ovens, steam cookers and combination ovens for professional use for entry into the HKI CERT database according to *DIN EN 50733 Electric forced convection ovens, steam cookers and combination ovens for professional use - Test methods for measuring the performance:2025-10*

Annex C
For verification of product requirements for commercial coffee machines for entry into the HKI CERT database according to *DIN 18873-2: Methods for measuring the energy consumption of commercial kitchen appliances - Part 2: Commercial coffee machines:2016-02*

Annex C.1
For verification of product requirements for commercial coffee machines for entry into the HKI CERT database according to E DIN EN 50730 Professional and commercial coffee machines - Methods for measuring energy consumption and productivity:2025-11

Annex D
For verification of product requirements for deep fat fryers for entry into the HKI CERT database according to *DIN 18873-3: Methods for measuring the energy consumption of commercial kitchen appliances - Part 3: Deep fat fryers:2018-02*

Annex E
For verification of product requirements for convection ovens for entry into the HKI CERT database according to *DIN 18873-4 Methods for measuring of the energy use from equipment for commercial kitchens – Part 4:Convection ovens:2013-04*

Annex F
For verification of product requirements for tilting frying pans and stationary frying pans for entry into the HKI CERT database according to *DIN 18873-5: Methods for measuring the energy consumption of commercial kitchen appliances - Part 5: Tilting frying pans and stationary frying pans:2016-02*

Annex G
For verification of product requirements for tilting pressure braising pans and stationary pressure braising pans for entry into the HKI CERT database according to *DIN 18873-6 Methods for measuring the energy consumption of commercial kitchen appliances - Part 6: Tilting pressure braising pans and stationary pressure braising pans:2016-02*

Annex H
For verification of product requirements for multiple deck ovens for entry into the HKI CERT database according to *DIN 18873-7 Methods for measuring of the energy use from equipment for commercial kitchens – Part 7:Multiple deck ovens:2012-07*

Annex I
For verification of product requirements for regenerating systems for entry into the HKI CERT database according to *DIN 18873-8 Methods for measuring of the energy use from equipment for commercial kitchens – Part 8:Regenerating systems:2013-04*

Annex J
For verification of product requirements for cooking zones for entry into the HKI CERT database according to *DIN 18873-9 Methods for measuring the energy consumption of commercial kitchen appliances - Part 9: Cooking zones:2026-05*

Annex K
For verification of product requirements for ice machines for entry into the HKI CERT database according to *DIN 18873-10 Methods for measuring of the energy use from equipment for commercial kitchens – Part 10:Ice machines:2012-12*

Annex L
For verification of product requirements for beverage coolers for entry into the HKI CERT database according to *DIN 18873-11 Methods for measuring of the energy use from equipment for commercial kitchens – Part 11:Beverage cooler:2013-04*

Annex M
For verification of product requirements for ovens for entry into the HKI CERT database according to DIN 18873-12 *Methods for measuring of the energy use from equipment for commercial kitchens – Part 12:Ovens:*2013-04

Annex N
For verification of product requirements for microwave combination ovens for entry into the HKI CERT database according to *DIN 18873-13 Methods for measuring of the energy use from equipment for commercial kitchens – Part 13:Microwave combination ovens:2013-05*

Annex O
For verification of product requirements for point of use water dispenser for cooling and carbon dioxide enrichment for entry into the HKI CERT database according to *DIN 18873-14 Methods for measuring of the energy use from equipment for commercial kitchens – Part 14:Point of use water dispenser for cooling and carbon dioxide enrichment:2014-09*

Annex P
For verification of product requirements for double jacketed boiling and quick boiling pans for entry into the HKI CERT database according to *DIN 18873-15 Methods for measuring the energy consumption of commercial kitchen appliances - Part 15: Double jacketed boiling and quick boiling pans:2016-02*

Annex Q
For verification of product requirements for kitchen machinery for entry into the HKI CERT database according to *DIN 18873-16 Methods for measuring the energy consumption of commercial kitchen appliances - Part 16: Kitchen machinery:2026-06*

Annex R
For verification of product requirements for noodle cookers for entry into the HKI CERT database according to *DIN 18873-17 Methods for measuring the energy consumption of commercial kitchen appliances – Part 17:Noodle cookers:2016-09*

Annex S
For verification of product requirements for wafflebakers for entry into the HKI CERT database according to *DIN 18873-18 Methods for measuring the energy consumption of commercial kitchen appliances – Part 18:Wafflebaker:2016-09*

Annex T
For verification of product requirements for frying and grilling appliances for entry into the HKI CERT database according to *DIN 18873-19 Methods for measuring the energy consumption of commercial kitchen appliances – Part 19:Frying and grilling appliances:2016-09*

Annex U
For verification of product requirements for crepe and poffertjes bakers for entry into the HKI CERT database according to *DIN 18873-20 Methods for measuring the energy consumption of commercial kitchen appliances – Part 20:Crepe and Poffertjes-Baker:2016-09*

Anhang V
For verification of product requirements for plate dispensers (heated, in mobile design) for entry into the HKI CERT database according to DIN 18873-21 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 21: Plate dispenser (heated, in mobile design) - Part 21:2022-08*

Anhang W
For verification of product requirements for multifunctional cooking devices for entry into the HKI CERT database according to DIN 18873-22 *Methods for measuring the energy consumption of commercial kitchen appliances - Part 22: Multifunctional cooking devices*:2025-10

By signing the application, the applicant accepts the provisions of this database.

The product test shall have been carried out on a series-production appliance available on the market.

The application and the product test report shall be submitted in original form to the following address:

HKI Industrieverband Haus-, Heiz- und Küchentechnik e. V.
Amelia-Mary-Earhart-Str. 12
60549 Frankfurt am Main
Germany

For assessment and inclusion in the HKI CERT Großküchentechnik database, the application and the test report shall contain the following information: :

- Applicant
- Name of manufacturer
- Manufacturer's address
- Website
- Email address
- Type designation
- Equipment / features
- Nominal connected load [kW]
- Rated load [kW]
- Year of testing
- Testing body
- Optional: Additional requirements
- Optional: Image file (png, jpg)
- Optional: Manufacturer's comments (e.g. explanation of equipment/features or specific operating conditions))
- Capability for connection to an interface for power optimization in accordance with *DIN 18875 Equipment for commercial kitchens – Interface for power optimization*
- Product requirements (in accordance with Clauses 4.1 to 4.23)

5.2.2. Entry in the database

Following successful assessment and evaluation of the submitted documentation, the manufacturer and the corresponding appliance type shall be entered in the database without undue delay. The manufacturer shall receive confirmation of the entry. Only the appliance type applied for and approved by the manufacturer shall be entered.

5.2.3. Publications

Registered products may be accessed via the search functions "APPLIANCES BY MANUFACTURER" or "APPLIANCES BY TYPE" on the publicly accessible website of HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V. (www.hki-online.de).

Operators, retailers, planners and other interested parties use this database to obtain information on the energy consumption of commercial kitchen appliances.

In addition to the manufacturer's contact details, the technical data of the registered commercial kitchen appliance are also available.

The following data are displayed in the database:

- Master data

  - Date of entry
  - Manufacturer
  - Model
  - Nominal connected load [W]
  - Year of testing
  - Testing body identification number
- Optional: Image
- Product requirements (in accordance with Clauses 4.1 to 4.23)
- Testing basis (in accordance with Clause 3)
- Equipment/features (optional)
- Requirements (optional)
- Manufacturer's comments (optional, e.g. explanation of equipment/features or specific operating conditions)
- Capability for connection to an interface for power optimization in accordance with *DIN 18875 Equipment for commercial kitchens – Interface for power optimization*

5.2.4. Amendment of Entries

An amendment of an entry shall take place if the registered commercial kitchen appliance has been supplemented, extended or modified and this affects the underlying requirements in accordance with Clause 5.

The type and scope of testing shall be determined on a case-by-case basis by HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V. in agreement with the applicant.

5.2.5. Cost contribution

The costs for the inclusion and registration of commercial kitchen appliances in this database are covered for HKI members through the membership fee. Non-members shall pay a cost contribution of EUR 600.00 per commercial kitchen appliance in the first year of registration and EUR 300.00 in each subsequent year. Non-members intending to register more than three commercial kitchen appliances are requested to contact the HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V. Discounts for non-HKI members are possible.

5.2.6. Non-conformities

If submitted product data are called into question, a one-time correction free of charge shall be permitted, for example in the case of a transmission error.

If the data entered in the database are disputed by a third party, HKI shall inform the manufacturer and request a statement. If the manufacturer confirms the submitted data, HKI is entitled to have these verified by an independent testing body by means of reference measurements. This verification, which is subject to a fee, shall be commissioned by HKI. The unsuccessful party shall bear the costs incurred.

The procedure should be completed within three months of submission of the application. During this period, the data entered in the database shall be marked with a notice indicating that verification is ongoing.

5.2.7. Withdrawal

If deficiencies in the testing are identified, the database entry shall be withdrawn and the right to demonstrate compliance via the HKI CERT commercial kitchen technology database shall lapse.

HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V. shall inform the applicant accordingly.

5.2.8. Logo

Appliances entered in the database “HKI CERT commercial kitchen equipment” at http://grosskuechen.cert.hki-online.de/ that comply with the specified product requirements may be labelled and advertised by the manufacturer using the HKI CERT database logo.

HKI Industrieverband Haus-, Heiz- und Küchentechnik e.V. shall provide the applicant with the logo (Image 1) in a common file format for use.

The logo shall only be used for appliances that are registered in the database.

Image 1 — Logo for appliances entered in the HKI CERT commercial kitchen technology database and complying with the specified product requirements