

Proposed Technologies to Include in the CEE Commercial Kitchens Initiative

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Commercial Kitchens Initiative launched in January 2006

Purpose:

To provide definitions for high performance commercial kitchen equipment that members can deliver to targeted food service market sectors; initially restaurants.



Initiative Specifications:

- Refrigeration
 - Solid Door Reach-In Refrigerators and Freezers
 - Glass Door Reach-In Refrigerators
 - Ice Machines (Cube Type)
- Cooking
 - Open-Deep Fat Fryers
- Sanitation
 - Guidelines on Pre-Rinse Spray Valves



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Committee identified additional technologies for assessment in 2006

- Sanitation
 - Commercial Dishwashers (tabled for 2007)
 - Provided feedback on ENERGY STAR efforts; awaiting information from manufacturers on idle energy rate.
- Cooking
 - Commercial Steam Cookers (specification developed)
 - Two tiers identified (1A and 1B) with no change to the energy performance and varying water consumption levels.
 - Hot Food Holding Cabinets (specification developed)
 - Two tiers identified; Tier 1 same as ENERGY STAR and Tier 2 set to 50% more efficient.



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Proposed Commercial Steam Cookers Specification (Electric)

Electric Steam Cookers			
Pan Capacity	Cooking Energy Efficiency (%)	Idle Rate (watts)	Water Consumption (gal/hr)
Tier 1A			
3-pan	≥50%	≤400	≤15
4-pan	≥50%	≤530	≤15
5-pan	≥50%	≤670	≤15
6-pan	≥50%	≤800	≤15
Tier 1B (no change in energy performance)			
3-pan	≥50%	≤400	≤4
4-pan	≥50%	≤530	≤4
5-pan	≥50%	≤670	≤4
6-pan	≥50%	≤800	≤4



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Proposed Commercial Steam Cookers Specification (Gas)

Gas Steam Cookers			
Pan Capacity	Cooking Energy Efficiency (%)	Idle Rate (btu/hr)	Water Consumption (gal/hr)
Tier 1A			
3-pan	≥38%	≤6,250	≤15
4-pan	≥38%	≤8,350	≤15
5-pan	≥38%	≤10,400	≤15
6-pan	≥38%	≤12,500	≤15
Tier 1B (no change in energy performance)			
3-pan	≥38%	≤6,250	≤4
4-pan	≥38%	≤8,350	≤4
5-pan	≥38%	≤10,400	≤4
6-pan	≥38%	≤12,500	≤4



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Proposed Hot Food Holding Cabinets Specification (Gas)

Equipment	CEE Specification	Corresponding Base Specification	Maximum Idle Energy Use (watts/cu-ft)
Hot Food Holding Cabinets	Tier 1	ENERGY STAR	40
	Tier 2	ENERGY STAR + 50%	20



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Savings Potential with Addition of Proposed Technologies

Technology	Tier 1a		Tier 1b	
	Energy Savings	Water Savings	Energy Savings	Water Savings
Gas Steam Cookers	36%	63%	36%	90%
Electric Steam Cookers	77%	63%	77%	90%

Technology	Tier 1 Savings	Tier 2 Savings
Hot Food Holding Cabinets	43%	71%



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Thank you.

For more information on CEE efforts on Commercial HVAC and Commercial Kitchens contact:

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