



# Champion

The Dishwashing Machine Specialists

October 14, 2011  
Rebecca Duff  
ICF International

Subject: Commercial Dish machine Specification Draft 3 Version 2

Rebecca,

Thank you for including us in the Draft 3 version 2 Commercial Dish Machine specification. After reviewing the draft we do have a few comments, please see below.

### Sanitation Methods

Idle Energy Rate, the definition for idle energy rate on page 2 is not consistent with the \* on page 4 which indicates that idle energy also includes the control circuitry. You may also want to expand this definition to indicate that when in idle the unit is ready wash dishes and at required temperatures, (no additional heat up time, fill or additional energy required)

### Chemical Dump machine exception

We do recognize that there are chemical as well as hot water dump machines in the market that do not have maintenance heaters in the tank. We also recognize that there are chemical and high temp machines in the market that do have maintenance tank heaters. We feel that the intent of the idle test regardless of the machine type or sanitation method is to measure the energy the machine uses while in the "ready" state and not washing. Chemical sanitizing units with maintenance heaters will maintain NSF required minimum wash temperatures while in idle mode. A unit that does not have tank heat will not maintain minimum required tank temperatures while in extended idle. The instruction for machines without a maintenance heater typically include running an empty cycle prior to loading a rack to ensure proper tank temperatures after an extended idle. We submit that the energy required to heat the water from ground temperature to the NSF minimum for the empty cycle can be greater than the proposed idle energy rate requirement. Therefore exempting the requirement for Chemical dump machines that do not have a maintenance heater from the requirement will actually increase the energy usage of the machines on the market.

### Flight Type requirements

We continue to support the addition of the Flight type machines. Previously there have been comments that on variable speed conveyors both the slowest and fastest conveyor speeds should be included in the energy calculation. We do also agree with these comments that the worst case scenario needs to be addressed in the performance criteria and both minimum and maximum speeds should be incorporated in the calculation or energy.

### Heat Recovery

Heat recovery devices do significantly reduce the energy the machine and overall system (including the facility boilers) use. We agree that including heat recovery in the requirement for flight type machines will ensure the most energy efficient machines will carry the Mark.

Supplemental devices

There are some supplemental devices that do add energy consumption to the units and may be worth addressing in the standard. Blow dryers are one that come to mind as large energy users as they typically use heated air.

Drain tempering and cold water thermostats utilize more water however they do not use more energy as unlike the final rinse water they are not heated therefore no energy is added by using them. The final rinse water is used as a measure of energy only because it is heated.

Again thank you for the opportunity to review and comment on the draft and if you have any questions please do not hesitate to contact me.

Regards



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Champion/Moyer Diebel

