



Standard Practice for Life Cycle Cost Analysis of Commercial Food Service Equipment¹

This standard is issued under the fixed designation F2687; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This standard practice for life cycle cost analysis of commercial food service equipment is designed for producers and end-users to utilize when forecasting and (or) evaluating the life cycle costs of equipment by accounting for tangible differences in operating and maintenance costs of commercial food service equipment. Results of the analysis detailed in this standard practice are intended for budgetary purposes.

1.1.1 The results may also be used to compare projected life cycle cost of different models from a single manufacturer, or models manufactured by multiple suppliers, or to establish when it is cost effective to replace a specific equipment versus incurring continued maintenance expenses.

1.2 Major categories included in this analysis include total purchase price, service and repair costs, preventative maintenance costs, utility operating costs and disposal costs. The results may be quantified as a yearly running total and a net present value.

1.3 Inputs for this life-cycle analysis will need to come from a variety of sources, including manufacturers, service agents, utility companies, and end users. Not all input variables need be considered for effective analysis. To avoid skewing the results, sections where reliable estimates are not available should be left out of the analysis.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

2. Referenced Documents

2.1 *ASTM Standards*:²

F1275 [Test Method for Performance of Griddles](#)

¹ This practice is under the jurisdiction of ASTM Committee F26 on Food Service Equipment and is the direct responsibility of Subcommittee F26.05 on Life Cycle Cost and Sustainability.

Current edition approved June 1, 2013. Published August 2013. Originally approved in 2007. Last previous edition approved in 2007 as F2687 – 07. DOI: 10.1520/F2687-13.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

F1361 [Test Method for Performance of Open Deep Fat Fryers](#)

F1484 [Test Methods for Performance of Steam Cookers](#)

F1496 [Test Method for Performance of Convection Ovens](#)

F1521 [Test Methods for Performance of Range Tops](#)

F1605 [Test Method for Performance of Double-Sided Griddles](#)

F1695 [Test Method for Performance of Underfired Broilers](#)

F1696 [Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines](#)

F1704 [Test Method for Capture and Containment Performance of Commercial Kitchen Exhaust Ventilation Systems](#)

F1784 [Test Method for Performance of a Pasta Cooker](#)

F1785 [Test Method for Performance of Steam Kettles](#)

F1786 [Test Method for Performance of Braising Pans](#)

F1787 [Test Method for Performance of Rotisserie Ovens](#)

F1817 [Test Method for Performance of Conveyor Ovens](#)

F1920 [Test Method for Performance of Rack Conveyor, Commercial Dishwashing Machines](#)

F1964 [Test Method for Performance of Pressure Fryers](#)

F1965 [Test Method for Performance of Deck Ovens](#)

F1991 [Test Method for Performance of Chinese \(Wok\) Ranges](#)

F2022 [Test Method for Performance of Booster Heaters](#)

F2093 [Test Method for Performance of Rack Ovens](#)

F2140 [Test Method for Performance of Hot Food Holding Cabinets](#)

F2141 [Test Method for Performance of Self-Serve Hot Deli Cases](#)

F2142 [Test Method for Performance of Drawer Warmers](#)

F2143 [Test Method for Performance of Refrigerated Buffet and Preparation Tables](#)

F2144 [Test Method for Performance of Large Open Vat Fryers](#)

F2237 [Test Method for Performance of Upright Overfired Broilers](#)

F2238 [Test Method for Performance of Rapid Cook Ovens](#)

F2239 [Test Method for Performance of Conveyor Broilers](#)

F2324 [Test Method for Prerinse Spray Valves](#)

F2379 [Test Method for Energy Performance of Powered Open Warewashing Sinks](#)

F2380 [Test Method for Performance of Conveyor Toasters](#)