NSF International
Special Engineered Specification
NSF SE 15741

Testing of Large Capacity Grease Interceptors Using an Accelerated Protocol

The Public Health and Safety Company.™

SPECIFICATIONS FOR A SPECIAL ENGINEERED (SE) PRODUCT

NSF SE 15741

Testing of Large Capacity Grease Interceptors Using an Accelerated Protocol

1. Purpose:
The purpose of this Special Engineered document is to evaluate the capacity of grease interceptors above the minimum capacity requirements found in ASME A112.14.3 using an accelerated test protocol.

2. Scope of Specification:
The scope of this specification is to outline the test methods and marking requirements for large capacity grease interceptors evaluated using an accelerated test protocol. "Large capacity grease interceptors" are those with capacities above 200% of the minimums defined in ASME A112.14.3. The installation parameters of grease interceptors evaluated using this SE may be Type A, B, C, or D per ASME A112.14.3, Section 2.2.

3. Application:
Grease interceptors evaluated under this specification are installed in a drainage system and are intended to reduce the amount of fats, oil, and grease (FOG) entering the sewer line.

4. Referenced Standards:
ASME A112.14.3 – Grease Interceptors
PDI G101 – Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance
CSA B481 – Grease Interceptors

5. Testing Requirements:
Testing consists of two phases. During phase 1, the minimum allowable capacity is established according to ASME A112.14.3 (2 lbs/gpm), at the determination of the manufacturer. Phase 1 concludes at breakthrough or 15 increments, whichever comes first. During phase 2, the increments are accelerated by adding lard directly through the lid in quantities specified by the manufacturer between increments (see Appendix for example calculations). The grease accumulated from phase 1 is left inside the interceptor. Before the 16th increment, melted lard is added through the lid. Next, a standard test increment is run using the test sinks and melted lard (0.2 lbs/gpm). The process is repeated: adding grease through the lid and running a standard ASME increment. Phase 2 concludes at breakthrough or 15 additional increments, whichever comes first. The formula for calculating average efficiency shall be:

$$\text{Average Efficiency} = \text{Average(Incremental Efficiencies)}$$

$$\text{Average Efficiency} = \frac{\text{Sum (Incremental efficiencies)}}{\text{Number of increments}}$$

6. Marking
Grease interceptors shall be marked according to the requirements of ASME A112.14.3, CSA B481 and/or PDI G-101, as applicable. Additional marking requirements per the SE are as follows:

- "___% efficiency at ___ lbs capacity per ASME A112.14.3"
- "___% efficiency at ___ lbs capacity per SE xxxxx"
- Mark of the certification agency

7. Installation and Maintenance Instructions
Grease interceptors shall be provided with installation and maintenance instructions that comply with ASME A112.14.3 Sections 4.2 and 4.3, respectively.

Appendix (Informative) – Capacity Calculation Example

EXAMPLE – 100 gpm Grease Interceptor with 1000 lbs estimated capacity

Phase 1

Estimated retained grease during 15 increments*	270	lbs

Phase 2

Melted lard added to tank per increment	50	lbs
Melted lard added to sinks per increment	20	lbs

Additional increments completed	10	12	15	increments
Additional retained grease*	630	756	945	lbs
Total grease retained* - (Phase 1 + Phase 2)	900	1026	1215	lbs

* Assuming 90% average efficiency throughout