

NSF/ANSI 58 TECHNICAL REQUIREMENTS



REVERSE OSMOSIS SYSTEMS

NSF/ANSI 58 is the American National Standard for point-of-use (POU) reverse osmosis (RO) systems. It was developed by a joint committee with equal representation from regulators, manufacturers and end users. This standard includes requirements addressing various aspects of these systems, including:

- > Safety of materials in contact with drinking water
- > Structural integrity
- > TDS (total dissolved solids) reduction performance
- > Efficiency rating
- > Recovery rating
- > Contaminant reduction performance
- > Information for the end user

TESTING UNDER NSF/ANSI 58

This standard requires different testing based on your specific RO unit or component. Testing is conducted as follows:



NON-PRESSURE BEARING COMPONENT

- ✓ **Material safety** – chemical extraction



PRESSURE BEARING COMPONENT

- ✓ **Material safety** – chemical extraction
- ✓ **Structural integrity** – cyclic and hydrostatic



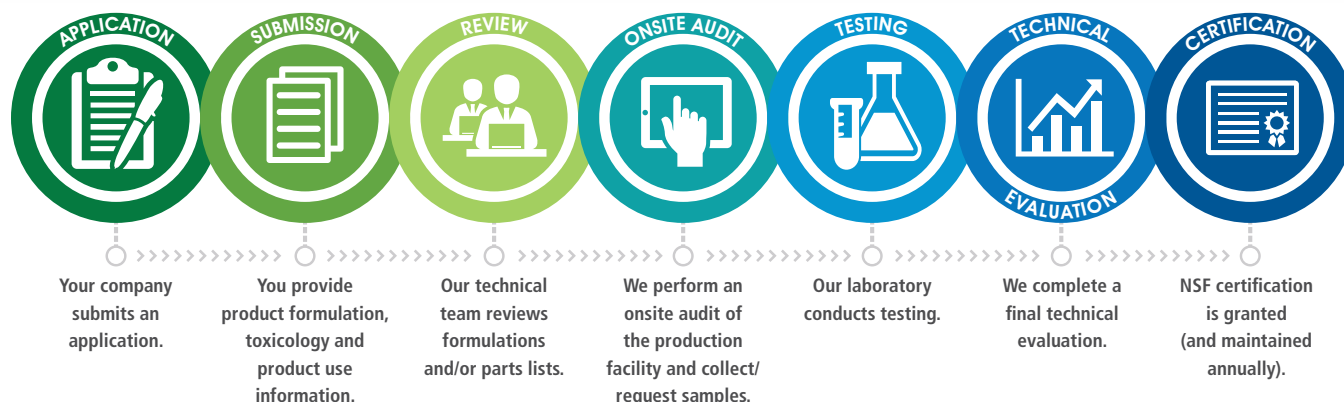
COMPLETE SYSTEM

- ✓ **Material safety** – chemical extraction
- ✓ **Structural integrity** – cyclic and hydrostatic
- ✓ **Contaminant reduction** – Total dissolved solids, VOC, cyst, etc.



WHAT YOU CAN EXPECT WHEN GETTING CERTIFIED TO NSF/ANSI 58

Testing is one element of becoming certified to NSF/ANSI 58. When you accept your quote and scope of work from NSF, you can expect the following steps:



CLAIMS AVAILABLE UNDER NSF/ANSI 58

Standard NSF/ANSI 58 includes test procedures to verify various claims that can be made for your RO system, including:

> Required

- TDS (total dissolved solids) reduction

> Optional

- Cyst reduction
- Hexavalent and trivalent chromium reduction
- Arsenic reduction
- Nitrate/nitrite reduction
- Cadmium reduction
- Lead reduction
- Barium reduction
- Turbidity reduction
- Fluoride reduction
- Copper reduction
- VOC reduction
- Asbestos reduction
- Perchlorate reduction
- Radium 226/228 reduction
- Selenium reduction
- Pentavalent arsenic reduction

Did you know? Only complete systems are eligible to make containment reduction claims.

NSF INTERNATIONAL

E water@nsf.org | www.nsf.org