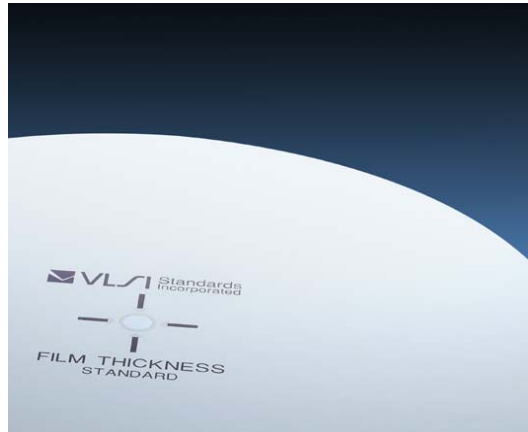


Silicon Dioxide Film Thickness Standards

NOURISH YOUR THIN FILM MEASUREMENT. Use the Film Thickness Standard (FTS) to verify the accuracy of single wavelength or spectroscopic ellipsometers (SWE or SE) and reflectometers. Monitor long term tool stability in support of ISO and TS accreditation programs, and eliminate the unwanted effects of airborne molecular contamination (AMC) on your metrology.

Pictured is a 300 mm Silicon Dioxide Film Thickness Standard. The certified area encircled at its center, is an ample 10 mm in diameter.



PRODUCT DESCRIPTION

The Film Thickness Standard from VLSI Standards consists of a silicon wafer that has a pattern of uniform, thermally grown silicon dioxide on the polished surface. The silicon wafer meets all SEMI Standard specifications according to M1 – 9X for Polished Monocrystalline Silicon Wafers. The certified area of the standard is enclosed in a 10 mm diameter, patterned region at the center of the wafer. Available wafer sizes include 100 mm, 125 mm, 150 mm, 200 mm and 300 mm.

The certified and NIST traceable measure and is the calculated film thickness for fixed index of refraction 1.46. The derived film thickness value is determined using a single layer model, with the refractive index of the silicon substrate chosen to match the values used by the National Institute of Standards and Technology.

PRODUCT SPECIFICATIONS

- **SEMI Specification Silicon Wafers**
100, 125, 150, 200 and 300 mm diameter wafers
- **Available Silicon Dioxide Thicknesses**
2, 4.5, 7.5, 12, 25, 50, 100, 200, 400, 675, and 1010 nm
- **Traceability**
NIST



FTS

Film Thickness Standard

Application: Film Thickness Calibration
 Equipment: Single Wavelength Ellipsometer (SWE), Spectroscopic Ellipsometer (SE) and Reflectometer
 Film: Silicon Dioxide
 Traceability: NIST
 Product Range: 20 Å to 10,100 Å

Film Thickness (Å)	Wafer Diameter				
	100 mm	125 mm	150 mm	200 mm	300 mm
20				FTS8-20	FTS12-20
45	FTS4-45	FTS5-45	FTS6-45	FTS8-45	FTS12-45
75	FTS4-75	FTS5-75	FTS6-75	FTS8-75	FTS12-75
120	FTS4-120	FTS5-120	FTS6-120	FTS8-120	FTS12-120
250	FTS4-250	FTS5-250	FTS6-250	FTS8-250	FTS12-250
500	FTS4-500	FTS5-500	FTS6-500	FTS8-500	FTS12-500
1,000	FTS4-1000	FTS5-1000	FTS6-1000	FTS8-1000	FTS12-1000
2,000	FTS4-2000	FTS5-2000	FTS6-2000	FTS8-2000	FTS12-2000
4,000	FTS4-4000	FTS5-4000	FTS6-4000	FTS8-4000	FTS12-4000
6,750	FTS4-6750	FTS5-6750	FTS6-6750	FTS8-6750	FTS12-6750
10,100	FTS4-10100	FTS5-10100	FTS6-10100	FTS8-10100	FTS12-10100