

Sample Certificate for 145nm Pitch Calibration Standard for AFM; #642-1AFM and #642-1

CERTIFICATION

Serial Number: 2825A073

Pitch Period: 144.25 nm (+/- 0.5 nm)

Standard deviation of individual pitch values < 1 nm (measured in 10 μ m image, using DiscTrack Plus™. Point to point measurements will be less precise, due to surface and edge roughness).

Instructions

Background Information

Composition: Aluminum lines on glass substrate about 6x4 mm. The pattern covers the entire specimen. Lines parallel to long (6mm) edge.

General appearance: see sketch and AFM image.

Ridge height: typically more than 80 nm. Note: this is not a step height reference specimen. Height is not specified or certified.

Can be used for AFM and related scanning probe techniques.

Appearance and usage

Be sure to mount the specimen with the right side up (see sketch)!

There may be a number of visible defects on the surface of this specimen, such as pits, scratches and dust. Defects can help you focus on the surface of the specimen. After focusing, for best results, make images that exclude such defects.

Storage and handling

Store in a dry environment at room temperature or below.

CAUTION:

- Do not touch the surface.
- Do not expose the surface to liquid or vapor of any material that reacts with Aluminum or glass.

We have not determined whether this specimen can be scanned in liquid.

Cleaning

We recommend "do not try to clean the specimen." There is sufficient usable area on the calibration standard to make tens of thousands of measurements without reusing any areas altered or contaminated by previous scans.

Therefore, we recommend that you do not attempt to remove any contamination which occurs during normal use.

Durability

Strict adherence to the storage, handling and cleaning procedures outlined above should preserve the standard for a period of years. However, since we cannot control the conditions of use, neither Advanced Surface Microscopy, Inc. nor its distributors assume any

responsibility for damage to this standard by improper handling and storage or by attempts to clean or refurbish it.

What side is up?

Note 3 dots on 1 edge.

As shown, the specimen is face up and the ridges are parallel to left edge.

