

# CERTIFICATION AND TESTING SERVICES



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Test sieves and shakers are finely-calibrated measuring devices, which must be certified, checked in operation, and regularly monitored. For these reasons, W.S. Tyler provides comprehensive test certificates and service for all of our products for ongoing, regulation-compliant quality assurance.

The necessary tests can be carried out at two confidence levels as a certifying and calibrating measurement. For calibration, two times as many meshes are measured as compared to certification, thereby achieving a higher level of statistical reliability. Finally, the measurements are evaluated separately in the warp and weft directions and the results saved for subsequent checks. Our services are applicable for both new and in-use test sieves.

The Primary Standards that govern Test Sieves are ASTM E11 and ISO

3310-1. Both W.S. Tyler and its parent organization, Haver & Boecker, Germany, are very active on the committees that write and oversee the Standards. By contributing our many years of expertise to the various committees, the marketplace can rely on the Standards to be valuable and practical to the product users.

## NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) TRACEABILITY

All of W.S. Tyler's Laboratory Services offer some degree of traceability directly to National Institute of Standards and Technology (NIST) W.S. Tyler's laboratory examinations are performed with an automatic, non-contact, dimensional measurement system with an accuracy of +/- 0.5 of a micron. W.S. Tyler, on average, performs 10,000 examinations per year in our on-site working laboratories.

Recommended in-use sieve re-certification schedule	
Aperture	Schedule*
5 in. – 1/4 in.	80 uses or 36 months
US # 3-1/2 – US # 12	70 uses or 30 months
US # 14 – US # 40	60 uses or 24 months
US # 45 – US # 140	50 uses or 18 months
US # 170 – US # 325	40 uses or 12 months
US # 400 – US # 635	20 uses or 6 months
*Whichever comes last	

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## Certified Test Sieve – Part #9998

### ASTM E11 Equivalent - Inspection Grade

- New and in-use Test Sieves
- Openings measured with a computerized video imaging system; +/- .5 microns
- Examined to the current ASTM and ISO specifications
- Products are serialized and supplied with NIST traceable document including statistical information on opening sizes and wire diameters

## Certified Test Sieve – Part #9992

### ASTM E11 Equivalent – Calibration Grade

- New and in-use Test Sieves
- Openings measured with a computerized video imaging system; +/- .5 microns
- Examined to the current ASTM and ISO specifications
- Products are serialized and supplied with NIST traceable document including statistical information on opening sizes and wire diameters
- Increased number of measurements provide a 99.73% level of confidence (k-factor) vs. the Inspection Grade

## Particle Analysis Services – Part #9995

- Performed in W.S. Tyler in-house lab
- Fine, dry applications from 2 in. through US #635 (20  $\mu$ m)
- SDS sheet must be provided when applicable
- Service includes detailed analysis of results

## Matched / Certified Test Sieve – Part #9991

- Individually performance tested against W.S. Tyler Master Series Sieves
- Performance test result tolerances: +/- 2.5%
- Certified including NIST Traceable & Performance Test Documents
- Designed for critical multiple location comparison analysis
- US # 8 – US # 325, 8 inch diameter, stainless steel cloth sieves ONLY

W.S. Tyler offers a performance matching service for companies with multiple testing locations, seeking data that is comparable for all labs. Matched test sieves are performance tested on a Ro-Tap against a set of Master Test sieves using a known sample. To be considered a Matched test sieve, the new sieve's sample results must fall within +/- 2.5% of the Master results. Once a sieve has been approved as Matched, it is certified to the ASTM E11 Inspection grade.

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**A** Dimension Reference Number

- 1 = Wire Diameter "x" direction
- 2 = Aperture Size "x" direction
- 3 = Wire Diameter "y" direction
- 4 = Aperture Size "y" direction

**B** Sample Size\* = Number of apertures or wire diameters measured

**C** Upper Spec. = Aperture size per ASTM E11 specification, plus tolerance

**D** Lower Spec. = Aperture size per ASTM E11 specification, minus tolerance

**E** Nominal = Specified aperture size, per ASTM E11 specification

**F** Standard Deviation = A numerical value that measures "spreading" tendency, a deviation of the values from their mean (average)

**G** Max. Measured = The largest aperture or wire diameter measured

**H** Min. Measured = The smallest aperture or wire diameter measured

**I** Range = The difference between the "max" and "min" above (rounded)

**J** Mean = Average aperture size or wire diameter measured

**K** Description = Test sieve designation/mesh size

**L** Serial No. = Identification number of test sieves

**M** Histogram = Graphic presentation of values measured vs. corresponding number of apertures examined

W.S. Tyler Certified, Certified Plus and Matched test sieves are examined to meet ASTM and ISO specifications.

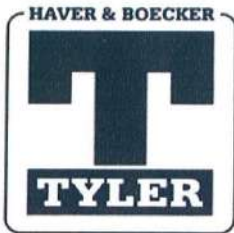
The openings of the sieves are measured with a computerized video imaging system. Products are then serialized and supplied with NIST traceable documents, including statistical information on opening sizes and wire diameters.

Shown here is a typical Document of Certification and descriptions of the terms used.

For more information, contact a W.S. Tyler representative at 1-800-321-6188 or by email at [info@wstyler.com](mailto:info@wstyler.com)



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W.S. TYLER®

## DOCUMENT OF CERTIFICATION

Based upon the data below, W.S. Tyler **CERTIFIES** that this sieve meets the requirements set forth by ASTM in Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves Designation: E11-09, for **Calibration Test Sieves**. (*W.S. Tyler Equivalent – Certified PLUS Test Sieve*)

The data for this sieve was derived using a View Voyager 1212 optical imaging device, following internal work instruction # **WI-750-006**. The View -Voyager 1212 machine, serial # 0361 was last **calibrated on 9/22/2011** with calibration due on **10/01/2012**. This optical calibration was performed using calibration standard, serial number: 91284 and is traceable to N.I.S.T by file No. 821/272649-06

- New certification  
  Re-certification  
  Sieve Visually Inspected  
  Sieve cleaned

### Wire Diameter

### Opening Size

