

## **The American National Standards Institute (ANSI) Approves New Quality Information Framework (QIF) v 2.0 Standard**

**New QIF™ V2.0 Standard: A Major Breakthrough for Manufacturing Quality Provides Complete & Accurate MBD along with many other enhancements for the Metrology Industry**

**Burleson, Texas, USA November 23, 2014** — The ([DMSC, Inc.](#)) Dimensional Metrology Standards Consortium announced today the American National Standards Institute ([ANSI](#)) has approved QIF v 2.0 (Quality Information Framework, version 2.0) as an American National Standard. This new standard *enhances* the previous ANSI Standard, QIF V1.0 containing quality planning and measurement results, by providing a complete and accurate 3D product definition with semantic geometric and dimensional tolerances, definitions for measurement resources, template for measurement rules, and statistical functionality. All of this to satisfy the digital interoperability needs for a wide variety of use cases including feature-based dimensional metrology, quality measurement planning, first article inspection, and discrete quality measurement.

On December 19th, 2013, The ANSI Board of Standards Review (BSR) approved QIF v1.0 as an American National Standard. This new standard provides, quality measurement planning (QIF Plans), first article inspection (QIF Results), and discrete quality measurement.

QIF v2.0 resolves model-based metrologies primary “pain point,” which is obtaining a complete and accurate 3D product definition with semantic geometric and dimensional tolerances (QIF MBD). It provides cost effective XML exchange of product definition with various conformance levels of semantic PMI (e.g., GD&T) that satisfies many CAD to model-based metrology use cases. QIF v2.0 also provides a way to define and apply measurement resources (QIF Resources), measurement rules (QIF Rules), and statistics (QIF Statistics) towards generating and communicating feature-based measurement plans based upon a plant, department, or supplier’s measurement resources and rules defined by a company and/or by part type. QIF models include quality characteristics and measurement features as defined in the ASME Y14.5 specification and the Dimensional Measuring Interface Standard (DMIS).

ANSI approval of QIF v2.0 indicates that QIF has attained a consensus approval from a large number of subject matter experts in the digital metrology industry. (See “About DMSC” below.) The QIF standard was designed to meet the highest industry requirements and to satisfy technological gaps that have traditionally cost industry hundreds of millions of dollars annually. The DMSC has met, and continues to meet the need for urgently required national standards in quality measurement in a timely fashion. ANSI’s accredited Standards Developing Organizations (SDOs) operate in accordance with national and often international guidelines, and have been verified by government and peer review assessments.

To find more information about the QIF standards please visit the QIF website at [www.qifstandards.org](http://www.qifstandards.org). To obtain your no-cost copy of the standard please send a request via email to [bsquier@dmis.org](mailto:bsquier@dmis.org).

*"I am proud of our standards community and the work that we have accomplished with this new standard. This doesn't replace DMIS (Dimensional Measurement Interface Standard) but it compliments and can harmonize with it. This new standard infrastructure is expandable to include every aspect of the Quality Information Framework, thus the name. Once adopted by the software vendors, this will allow us to properly use digital models with all the engineering requirements and quickly produce inspection and measurement plans throughout our supply chain (micro and macro), conduct inspections and measurements, then analyze and report in*

*standard formats via AS9102 or PPAP files. This will be a huge savings throughout every manufacturing industry in our environment without any cost to the software vendor or user."* said Ray Admire, DMSC Treasurer and Chairman of the Quality Measurement Standards Committee."

*"Manufacturing quality digital information incompatibilities are costly and affects everyone: vendors, suppliers, users, and customers. And the digital metrology community has lacked an enterprise-wide standards solutions, UNTIL NOW, QIFv2.0, a superior standards-based digital interoperability has been ANSI approved. Furthermore the QIF enables Manufacturing Quality to join the Model-Based Enterprise next generation of doing business."* said DMSC President Curtis Brown.

## **About DMSC**

The Dimensional Metrology Standards Consortium ([DMSC, Inc.](#)), is an ANSI Accredited Standards Developing Organization, as well as an A-Liaison to ISO TC 184/SC1. QIF has been developed and demonstrated with support from: Applied Automation Technologies, Boeing, Capvidia, DISCUS, Hexagon Metrology, Honeywell FM&T, InfinityQS, Innovalia Metrology , Inspec Software Corporation, IPI Solutions, John Deere, Kotem, Lockheed Martin, Metrology Integrators, Metrosage, Mitutoyo America, National Institute of Standards and Technology (NIST), Nikon Metrology, Origin International, PAS Technology, Pratt Whitney, PTC Solutions, Quality Vision International, Renishaw, Rolls Royce, Siemens PLM Software, Systems Insights, and Zeiss.

These are many of the same experts who continue to maintain the Dimensional Measuring Interface Standard (DMIS).

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