

REPORT OF SPECIAL TEST†

For: PC-DMIS 4.3

By: Wilcox Associates, Inc.

This software package was tested on 240 data sets, representing the following geometry types: lines, lines 2D, circles, circles 2D, planes, spheres, cylinders, and cones. The test procedures followed are documented in ASME B89.4.10-2000 and NISTIR 5686. The results of the tests are as follows:

ASME B89.4.10-2000 Standard Default Test

Geometry Type	Mean (RMS) Deviation and Expanded Uncertainty			
	Separation (μm) Uncertainty (μm)	Tilt (arc seconds) Uncertainty	Radius/dist (μm) Uncertainty (μm)	Apex (arc seconds) Uncertainty
Lines	$< 10^{-5}$ $< 10^{-5}$	2.1×10^{-6} 1.1×10^{-6}	—————	—————
Lines 2D	$< 10^{-5}$ $< 10^{-5}$	2.3×10^{-6} 1.1×10^{-6}	—————	—————
Planes	$< 10^{-5}$ $< 10^{-5}$	6.1×10^{-6} 5.1×10^{-6}	—————	—————
Circles	$< 10^{-5}$ $< 10^{-5}$	2.8×10^{-6} 1.7×10^{-6}	$< 10^{-5}$ $< 10^{-5}$	—————
Circles 2D	4.9×10^{-5} 3.5×10^{-5}	5.9×10^{-7} 2.5×10^{-7}	4.2×10^{-5} 3.1×10^{-5}	—————
Spheres	4.3×10^{-4} 1.9×10^{-4}	—————	2.2×10^{-4} 1.2×10^{-4}	—————
Cylinders	$< 10^{-5}$ $< 10^{-5}$	1.5×10^{-4} 1.3×10^{-4}	$< 10^{-5}$ $< 10^{-5}$	—————
Cones	$< 10^{-5}$ $< 10^{-5}$	9.6×10^{-5} 6.1×10^{-5}	$< 10^{-5}$ $< 10^{-5}$	7.7×10^{-5} 5.9×10^{-5}

Computing Environment: Windows XP SP2
2.4 GHz Core2 processor

Test System Version: NIST ATS Version 2.0

Tested software: PC-DMIS 4.3,
on Windows XP SP 2, 2.66 GHz Core2 Duo

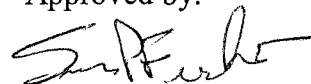
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† This report gives the results of a single special test conducted by the Manufacturing Systems Integration Division.