

CERTIFICATE

Q-DAS[®] Incorporated

grants certification to:

Helmel Engineering Products, Inc. 6520 Lockport Road Niagara Falls, New York 14305-3597

for compliance of the Export Interface

Geomet v7 and v8

with the Q-DAS® ASCII Transfer Format according to the attached specification worksheet.

This certificate confirms that this export interface meets the demands of the following documents:

ロ "Automotive Quality Data Exchange Format (Version 2.0)"	
☑ "GMPT K-fields 20080314"	
☐ "NGSPCS - Gage Interface Specification Attachment A Ford Kfields 200	050216"
□ other:	

Rochester Hills, 03/31/10

Thomas A. Stewart

President



Attachment to the Q-DAS® certificate from 03/31/10 for the company Helmel Engineering Products, Inc. Geomet v7 and v8

The following data fields were tested and are in compliance with the Q-DAS® ASCII Data Transfer Format:

Values with Additional Data Fields

K0001 Value K0002 Attribute K0004 Date/Time K0006 Part serial number K0007 Position K0008 Station/Line K0009 Text K0010 Machine K0012 Gage K0014 Part ID K0053 Operation

Part and Characteristics Data

K0100 Total no. of characteristics in file K1002 Part description K1053 Operation number K1101 Department K1303 Plant/Business unit K2001 Characteristics number

K2002 Characteristic description K2003 Characteristic abbreviation

K2004 Characteristic type K2005 Characteristic class K2008 Characteristic group type

K2022 Decimal places K2030 Group number

K2031 Group element number

K2060 Event catalog K2101 Nominal value

K2110 Lower specification limit K2111 Upper specification limit

K2112 Lower allowance K2113 Upper allowance K2120 Lower limit type K2121 Upper limit type K2142 Unit description K2404 Gage resolution

K2406 Gage manufacturer

Characteristics Data for Measurement System Analysis

K2202 Study type K2205 Number of parts K2220 Number of operators K2221 Number of trials

K2222 Number of reference measurements

Meets t	he deman	ds of the	following	documents:
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"Automotive Quality Data Exchange Format (Version 2.0)"
"GMPT K-fields 20080314"
"NGSPCS - Gage Interface Specification Attachment A Ford Kfields_20050216"
other:

Rochester Hills, 03/31/10