



Submitting Test Results to the Global Tire-Wheel Test System

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. This document describes the files necessary to load data into the Global Tire-Wheel Test System (GTWTS). It also includes any necessary naming conventions and codes required for data submission.

1.2 Applicability. This standard is applicable to files being loaded into the GTWTS.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

GMW3059

GMW14996

GMW15208

GMW15438

GMW14585

3 Requirements

3.1 Test Request Files.

3.1.1 Files Created when Test Request is Processed. When test requests are processed, the following files are sent to the requested tester:

- A Portable Document Format (PDF) of the Test Request
- Input files and/or data sheets (as applicable)
- Extensible Markup Language (XML) skeleton files

3.1.2 XML Skeleton Files. XML skeleton data files are test result files in XML format that already have the header information filled in from the Test Request. For example, for tire test requests this header information includes the Test Request Number, Construction Number, Supplier Code, Tire Size, Load Index and Tester Code. Only the test results have to be added to the file for it to load into the GTWTS. See Appendix A, Figure A1 for example.

3.2 Test Results Data Files.

3.2.1 XML Files. Test results are electronically entered into the GTWTS via XML files. Additional results can be loaded as file attachments via the file attachment section of the XML file. See the Test System Database Coordinator for XML format and examples. See Appendix A, Figure A2 for example.

3.2.2 Extensible Schema Definition (XSD) Files. XSD files are definitions that can be used to verify XML formats. See the Test System Database Coordinator for XSD files.

3.2.3 Tire Performance Criteria (TPC) Files. The previous TPC file formats have been replaced by XML file formats.

3.2.4 Data (DAT) Files. DAT files are processed data result files that provide detail beyond the results in the XML file. DAT files have been defined for the following test areas:

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Documents

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- GMW14996 Tire Rolling Resistance Test, Method B (Stepwise Coastdown)
- GMW15438 Tire Flat-Spot Test
- GMW14585 Electrical Resistance of Vehicle Tires, Method B.

3.2.5 Composite (CMP) Files. CMP files are processed data result files that provide detail beyond the results in the XML file. CMP files are required for GMW15208 Tire Braking Traction.

3.3 File Naming Convention. The file name is a combination of information provided by the GTWTS coordinator. The separate segments of the file name are to be separated by underscores as in the following example:

GM GM is the two character "Tester File Code" for the information to be provided in the XML file.

T09-05586 This character sequence represents the assigned "Test Request Number" from the GTWTS.

DFM The three character code associated with "Dynamic Force and Moment" test area within GTWTS (see Table 1).

001 A three digit "File Sequence Number" assigned by the file originator to create unique file names to be provided to the GTWTS. For CMP files, this sequence should start with a "C".

Filename GM_T09-05586_DFM_001.xml

CMP Filename GM_T09-05586_RRB_C01.xml

3.4 Codes.

3.4.1 Tester and Test Site Codes. Unique codes have been assigned to each Tester. Each Tester will have one Tester code and as many Test Site Codes as needed. Tire Manufacturers will also have Supplier Codes representing the various tire brands. See the Test System Database Coordinator for code assignment as needed.

3.4.2 Test Area Codes. The Test Area Codes are defined in Table 1 each Test Area.

Table 1: Test Area Codes

Type	Test Area Code	Test Area
Tire	MAS	GMW14998 Tire Mass
Tire	TRD	GMW15004 Tire Tread Groove Depth Measurement Test
Tire	DIM	GMW14997 Tire Dimensions Test
Tire	TRR	Twin Rolling Resistance
Tire	RRC	1.7M Constant Speed (80 km/h) Rolling Resistance
Tire	RRA	GMW14996 Tire Rolling Resistance Test - Method A
Tire	RRB	GMW14996 Tire Rolling Resistance Test - Method B (Stepwise Coastdown)
Tire	TWA	GMW14913 Tire Treadwear - Method A
Tire	TWB	GMW14913 Tire Treadwear - Method B
Tire	TWC	GMW14913 Tire Treadwear - Method C
Tire	ATE	GMW15001 Accelerated Tire Endurance (ATE)
Tire	RAL	GMW15355 Tire Rapid Air Loss
Tire	RUN	GMW15307 Test Drive with Run Flat Tires: Tires with Flat-running Properties
Tire	TRS	GMW15121 Tire Rim Slip Test
Tire	DRT	GMW15207 Tire Snow Driving Traction
Tire	BRT	GMW15208 Tire Braking Traction (Wet and Dry)
Tire	WST	Worn Tire Predicted Snow Traction
Tire	FMT	GMW15204 Tire Steady – State Force and Moment
Tire	DFM	GMW16337 Tire Dynamic Force and Moment

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Type	Test Area Code	Test Area
Tire	RFM	GMW16386 Tire Force and Moment Transient Response
Tire	RAT	GMW15206 Tire Residual Aligning Torque (RAT)
Tire	AIR	GMW15000 Tire Air Permeation
Tire	RID	GMW15002 Tire Ridging – Reaction to Longitudinal Road Ridges
Tire	HSE	GMW15122 Light Truck High Speed Endurance
Tire	SSC	GMW15144 Tire Sealant Static Creep Test
Tire	SDC	GMW15145 Tire Sealant Dynamic Creep Test
Tire	PSE	GMW15146 Tire Puncture Sealing Efficiency
Tire	ERA	GMW14585 Electrical Resistance Vehicle Tires – Method A
Tire	ERB	GMW14585 Electrical Resistance Vehicle Tires – Method B
Tire	MMI	GMW15205 Mass Moment of Inertia
Tire	TBU	GMW15270 Tire Bead Unseating Test
Tire	SFT	GMW15429 Tire Sealant Fleet Test
Tire	DAB	Dynamic Assembly Balance
Tire	NOI	Tire Noise – GMW14876 Tire Force Transmissibility and Wheel Lateral Stiffness Evaluation Procedure and GMW14239 Radiated Tire Noise Source Level Evaluation Procedure
Tire	PRN	Pass-by Regulatory Tire Noise Test
Tire	LAS	Laser Tire Profile
Tire	RPK	GMW14999 Tire Revolutions Per Kilometer (RPK)
Tire	LTU	Low Speed Tire Uniformity
Tire	LAU	Low Speed Assembly Uniformity
Tire	HSU	GMW15120 Tire Highway Speed Uniformity (HSU)
Tire	FSU	GMW15438 Tire Flat-Spot Test
Tire	LTF	Long Term Flatspot Test
Tire	MOU	Mounting Trials
Tire	TMO	Tire Modeling Data
Tire	TIR	GMW17282 Tire Impact Response
Tire	TRM	GMW17360 NTRC Tire Ride Modeling Tests for Swift
Tire	CTF	GMW17359 CompTire Force and Moment Test
Tire	TER	GMW17302 Tire Effective Rolling Radius
Tire	CTT	Chip/Tear Test
Tire	TDA	Tread Depth Flats - Analytical Model
Tire	TDF	Tread Depth Flats - Loaded Footprint
Tire	MCT	GMW16332 Tire Material Cold Temperature Evaluation
Tire	MTT	Miscellaneous Tire Test
Wheel	BWF	GMW14340 Biaxial Wheel Fatigue Test
Wheel	ROT	GMW14341 Wheel Rotary Bending Fatigue
Wheel	RAD	GMW14909 Radial Fatigue Test
Wheel	IMP	GMW14910 Wheel Lateral Impact Test
Wheel	MHS	GMW14342 Steel Wheel Disc Mounting Hole Strength Test – Test 1
Wheel	MH2	GMW14342 Steel Wheel Disc Mounting Hole Strength Test – Test 2
Wheel	PHS	GMW15303 Pilot Hole Strength Test
Wheel	SVS	GMW14912 Snap-in Tire Valve Stem Tests
Wheel	WMA	GMW14998 Tire/Wheel Mass Measurement Test
Wheel	WMI	GMW15205 Tire/Wheels Mass Moment of Inertia
Wheel	IFA	GMW15321 Wheel Inboard Rim Flange Impact – Method A

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