



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

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MECHANICAL

Valid To: May 31, 2020

Certificate Number: 4251.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests:

Test Technology(s):

Test Method:

Engineering Approval Evaluation Program

GB/T 1332-1991; GB/T 13043-2006; QC/T 252-1998;
QC/T 75-1998; QC/T 256-1998; GB 7258-2017;
GB/T 12534-1990; QC/T 900-1997; GB/T 13873-2009;
GB/T 23336-2009; GB/T 23335-2009; GB/T26408-2011;
GB/T 26778-2011; QC/T667-2010; GB/T 28962-2012;
ADR 63/00; ADR 64/00;
ADR 44/02 (*except crane and steel cylinders*)

Dimensions Parameters

GB 1589-2016; GB/T 12673-1990; GB/T 12538-2003;
QC/T 577-1999; GB/T 15705-1995; GB/T 13053-2008;
GB/T 12540-2009; ADR 43/04; GSO159/1993

Weight Parameter

GB 1589-2016; GB/T 12674-1990; 92/21/EEC; GSO159/1993;
97/27/EC

Requirements for Speedometer and Odometer Calibration

GB 15082-2008; GB/T 12548-2016; ECE R39;
GB/T 12677-1990; SANS 1441:2006; ADR 18/03;
75/443/EEC (*except category L vehicles*)

Coasting Test

GB/T 12536-2017

Dynamic Characteristics

GB/T 12539-1990; ECE R68; GB/T 12543-2009;
GB/T 12547-2009; GB/T 18276-2017; GB 18565-2016;
GB/T 12544-2012

Braking Performance

GB 12676-2014; GB 7258-2017;
GB/T 13594-2003; ECE R13 (*except electric brake system*);
ECE R13H; FMVSS 105; FMVSS 135; 71/320/EEC;
GB 21670-2008; FMVSS 121 (*except for dynamometer tests*);
FMVSS 126-2007; GTR No. 8-2008; ADR 38/04;
GB 12676-2014; ADR 35/05; ADR 31/03

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Test Technology(s):

Test Method:

Forward Visibility for Drivers	77/649/EEC; GOST R 51266; ECE R125; GB 11562-2014
Rearview Mirrors-Requirements Installation	GB15084-2013; 2003/97/EC; ECE R46; 71/127/EEC (<i>except for camera-monitor devices for indirect vision and devices for indirect vision other than mirrors</i>); GSO 421/2005; GSO 422/2005
Defroster Performance	GB 11555-2009; 78/317/EEC; GB/T 24552-2009; (EU) No 672/2010; FMVSS 103
Demister Performance	GB 11555-2009; 78/317/EEC; GB/T 24552-2009; (EU) No 672/2010
Controllability and Stability	GB/T 6323-2014; QC/T 480-1999; ISO 4138-2012; ISO 7401-2011; ISO 3888-1999; (EU) No 130/2012; ISO 3888-2-2011
Ride Comfort	GB/T 4970-2009; QC/T 474-2011
Leak Tightness	QC/T 476-2007; QC/T 271-1999
Region Adaptability	GB/T 12535-2007; GB/T 12542-2009; GB/T 12546-2007; GB/T 12782-2007; GB/T 28958-2012; GB/T 12678-1990; GB/T 12679-1990; QC/T 900-1997; Hainan Motor Vehicle Proving Ground Motor Vehicle Product Reliability Engineering Approval Evaluation Program; Dingyuan Motor Vehicle Proving Ground Motor Vehicle Product Reliability Engineering Approval Evaluation Program; Ministry of Communications Road Traffic Proving Ground Motor Vehicle Product Reliability Engineering Approval Evaluation Program; Dongfeng Motor Vehicle Proving Ground Heavy Truck Product Reliability Engineering Approval Evaluation Program; Dongfeng Motor Vehicle Proving Ground Medium Truck Product Reliability Engineering Approval Evaluation Program; Dongfeng Motor Vehicle Proving Ground Light Truck Product Reliability Engineering Approval Evaluation Program; Dongfeng Motor Vehicle Proving Ground Passenger Car and Mini Truck Product Reliability Engineering Approval Evaluation Program; Dongfeng Motor Vehicle Proving Ground Bus Product Reliability Engineering Approval Evaluation Program
Reliability and Durability	GB/T 12678-1990; GB/T 12679-1990; QC/T 900-1997; Hainan Motor Vehicle Proving Ground Motor Vehicle Product Reliability Engineering Approval Evaluation Program; Dingyuan Motor Vehicle Proving Ground Motor Vehicle Product Reliability Engineering Approval Evaluation Program;

Test Technology(s):Reliability and Durability (*cont.*)**Test Method:**

Ministry of Communications Road Traffic Proving Ground Motor Vehicle Product Reliability Engineering Approval Evaluation Program;
Dongfeng Motor Vehicle Proving Ground Heavy Truck Product Reliability Engineering Approval Evaluation Program;
Dongfeng Motor Vehicle Proving Ground Medium Truck Product Reliability Engineering Approval Evaluation Program;
Dongfeng Motor Vehicle Proving Ground Light Truck Product Reliability Engineering Approval Evaluation Program;
Dongfeng Motor Vehicle Proving Ground Passenger Car and Mini Truck Product Reliability Engineering Approval Evaluation Program;
Dongfeng Motor Vehicle Proving Ground Bus Product Reliability Engineering Approval Evaluation Program

Assembly, Adjustment and Appearance of Vehicle

QC/T 900-1997

Requirements for Controls, Indicators and Tell-Tales

GB 4094-2016; GB 4094-1999; ECE R121; 78/316/EEC; FMVSS 101; GB/T 4094 con.2-2017

Requirements for Wheel Guards

GB 7063-2011; 78/549/EEC; (EU) No 1009/2010

Requirements for Accelerator Control Systems

FMVSS 124

Installation Characteristics of Electric Horn

GB 15742-2001; GB 7258-2017; 70/388/EEC; ECE R28; SANS 10169:2004

Requirements for External Lighting and Signaling

GB 4785-2007; ECE R 48; 76/756/EEC; GSO 1503/2010; ADR 13/00

Operation and Beam Adjustment of Headlamps

GB 7258-2017; GB 4785-2007

Bus Construction

GB 13094-2017; GB 18986-2003; GB/T 16887-2008; GB/T 19950-2005; ECE R36; ECE R52; ECE R107; GB 24407-2012; GB 17578-2013; ECE R 66; ADR 58/00; ADR 59/00; 2001/85/EC

Requirements for Fuel System and Exhaust Pipe

GB 7258-2017

Overturning Stability

GB 7258-2017; GB/T 14172-2009; GB 28373-2012

Requirements for External Projections

GB 11566-2009; GB 20182-2006; ECE R26; ECE R61; 74/483/EEC; 92/114/EEC

Requirements for Steering Parameter Testing

GB 7258-2017; GB 17675-1999; 70/311/EEC; ECE R79 (*except for related to power assisted steering systems*)

Requirements for Trafficability

GB/T 12541-1990



Test Technology(s):**Test Method:**

Requirements for License	GB 15741-1995; 70/222/EEC; ROCT P 50577; (EU) No 1003/2010
Requirements for Vehicles for the Carriage of Dangerous Goods	GB 20300-2018; ECE R105; 98/91/EC; GB 21668-2008; GB18564.1-2006 (coating, marks and labels only)
Requirements for the Interior Fittings	GB 11552-2009; 74/60/EEC; ECE R21; SANS 1047:1985; ADR 21; QC/T 804-2014
Requirements for Wipers and Washer	GB 15085-2013; 78/318/EEC; (EU) No 1008/2010; FMVSS 104
Requirements for Vehicles with Regard to Their Front and Rear Protective Devices	GB 17354-1998; ECE R42; FMVSS 581; GSO 41/2007
Requirements for The Cab of a Commercial Vehicle	ECE R29; GB 26512-2011
Side Door Strength	FMVSS 214; GSO 38/2005; GSO 40/2011; GB 15743-1995; ADR 29/00; SASO GSO 2113:2012
Roof Strength	FMVSS 216; GSO 39/2005; GSO 40/2011; GB 26134-2010
Theft Protection	GB15740-2006; ECE R18; 74/61/EEC; ECE R116; GSO 1053-2000; SANS 1248:1988
Harmful Substances in Cabin of Vehicles	HJ/T 400-2007; GB/T 27630-2011; GB/T 28370-2012; GB/T17729-2009; GB 24407-2012
Measuring the Performance of Tire Pressure Monitoring System by Vehicles	FMVSS 138; GB 26149-2017
Bus Emergency Exits and Window Retention and Release	FMVSS 217
Requirements for Plates and Inscriptions	76/114/EEC; (EU) No 19/2011
Requirements for Spray-Suppression Systems	91/226/EEC; (EU) No 109/2011
Windscreens and Glazing Other Than Windscreens to Vehicles	92/22/EEC; ECE R43 Annex 21; SANS 1191:2005; SANS 1192:2005; SANS 1193:2005 (installation of safety glass only)
Requirements for Tire	92/23/EEC; FMVSS 110; FMVSS 120; GB/T 29041-2012; (EU) No 458/2011; ECE R117
Transmission Shift Lever Sequence, Starter Interlock, And Transmission Braking Effect	FMVSS 102
Front Underrun Protection	ECE R93; 2000/40/EEC; GB 26511-2011; ADR 84/00; SASO GSO 2112:2012

Test Technology(s):**Test Method:**

Rear Impact Protection	FMVSS 223 (<i>except for absorbance of guards</i>); FMVSS 224; SANS 1055:2003; SASO GSO 2114:2012
General Safety Requirements	GSO 42/2015; ADR 42/04
Recyclability and Recoverability	2005/64/EC; GB/T 19515-2004
Requirements for Low-Speed Vehicles	FMVSS 500
Requirements for Roof Escape Hatch	GB/T 23334-2009
Requirements for Safety Belt Reminder	GB/T 24551-2009
Safety Specifications for Motor Vehicles Operating on Roads	GB 7258-2017 (sections 4.3, 4.5, 4.6, 4.8, 4.14, 8.1, 8.2, 8.3, 8.4, 8.6, 9.1.1, 9.1.4, 9.1.5, 9.4.4, 10.2, 10.5, 11.2, 11.3, 11.5.2, 11.5.3, 11.5.4, 11.5.8, 11.6, 11.8, 11.9, 12.1, 12.2, 12.4, 12.6, 12.9.2, 12.9.3, 12.10, 12.11, 12.13.1, 12.13.2, 12.13.3, 13, 14)
Special Purpose Vehicle for Disabled	GB 7258-2017 (section 14)
Power-Operated Window	FMVSS 118 (<i>except for optical</i>)
Requirements for Special Purpose Vehicle	JB 8716-1998 (<i>except for connection, discard as useless of metal structure, reel and pulley</i>); GB 7258-2017; JG 5099-1998; JT 230-1995; GB 20062-2006; GB12602-2009; GB 12268-2005; QC/T 932-2012; GB 29753-2013; GB 12268-2012; QC/T 718-2013 (only for operating noise and strength of constructure); QC/T 21-1992 (sections 4.2.4, 4.2.5, 4.2.6, 4.3.4, 4.3.5); QC/T 24-1992 (sections 3.2.4, 4.2.3); QC/T 448-1999 (sections 1.2.2, 1.3.3, 1.4, 2.4, 2.5, 2.6, 2.13, 2.15); QC/T 451-1999 (section 2.3.8.1, 3.5.2); QC/T 456-1999 (sections 4.2.14, 5.5.6); QC/T458-2004 (sections 3.1.12, 4, 5.3); QC/T 464-1999 (sections 4.3.3, 4.4, 5.3, 5.8, 5.9); QC/T 808-2009 (sections 4.1.5, 4.3.2, 5.3, 5.4); QC/T 29100-1992 (section 3.2.3); QC/T 52-2015 (sections 4.1.10, 4.2.1.4, 4.2.2.2, 4.2.4.2, 4.2.6.2); QC/T 994-2015 (sections 4.4.3, 4.7.1); QC/T 455-1999 (section 2.11.6); QC/T 749-2006 (sections 4.5.3.7, 5.3.6.2); QC/T 40-1992 (sections 4.1, 4.2); QC/T 560-2010 (sections 4.3.5, 5.6, 4.3.4, 5.7); QC/T 956-2013 (sections 4.4.2, 4.4.3, 5.5); QC/T 493-1999 (sections 1.6.5, 1.6.8, 1.6.12)
Requirements for Police Patrol Vehicles	GA1006-2012
Performance Requirements for Active Safety System	ECE R130-2013; ECE R131-2014; GB/T 30677-2014

Test Technology(s):

All Items

Test Method:

GB 18322-2002; QC/T 629-2005; ADR 11/00; QC/T 533-1999;
QC/T 534-1999; QC/T 293-1999; QC/T 523-1999;
GB 11567-2017; ECE R58; ECE R73; 89/297/EEC;
70/221/EEC; QC/T 311-2008; QC/T 961-2013;
QC/T 77-1993; GB 15085-2013; 78/318/EEC; QC/T 44-2009;
GB 15085-2013; 78/318/EEC; GB 15086-2013; QC/T 323-2007;
70/387/EEC; ECE R11; GTR No1; GSO 419/1994;
GSO 420/1994; SANS 1443:1987; JIS/TRIAS 11-4-1-29-2;
JIS/TRIAS11-1-4-36; ADR 2/01; QC/T 988-2014;
GB 11557-2011; ECE R12; 74/297/EEC; FMVSS 203;
SABS 1440:1987;
Korean Regulation on Motor Vehicle Safety Standards No.1002
Article 89 Steering Mechanism; SANS 20012:1994;
ADR 10/02; GB15084-2013; QC/T 531-2001; FMVSS 111;
ECE R46; SABS 1436:1994; ADR 14/02; GB 17352-2010;
GSO 421/2005; GSO 422/2005; QC/T 947-2013;
GB 15083-2006; ECE R17; GB 13057-2003; GB 13057-2014;
74/408/EEC; ECE R80; FMVSS 222; ECE R126;
SABS 1429:1987; SANS 20017:2002; SANS 1564:2005;
SANS 20080(SABS ECE R80):1999; JIS/TRIAS 11-1-4-30;
JIS/TRIAS 11-4-1-22; QC/T 805-2008; GB 24406-2012;
QC/T 831-2010; QC/T 844-2011; QC/T 845-2011;
ADR 3/03; ADR 68/00;
C-NCAP Management Regulation (2012 edition; QC/T 964-
2014; C-NCAP; QC/T 633-2009; JT/T 460-2001;
GB 16897-2010; FMVSS 106; GB 7128-2008; GB 16897-2010;
FMVSS 106; GB/T 7939-2008; GB/T 5568-2013;
GB 16897-2010; FMVSS 106; FMVSS106; QC/T 80-2011;
GB 8410-2006; 95/28/EC; ECE R118; FMVSS 302;
GSO 98/1988; GB 14166-2003; ECE R16; FMVSS 209;
77/541/EEC; GSO 96/1988; GSO 97/1988; SABS 1080:2002;
GB/T 26948.1-2011; ISO 24135-1:2006; ADR 4/05;
GB 14166-2013; QC/T 987-2014; GB14167-2006;
Automobile Type Approval handbook for Japanese Certification
11-4-11(V21)-1994 Seat Belts; ECE R14; 76/115/EEC;
FMVSS 210; ISO 3776-1:2007; ISO 3776-2:2007;
ISO 6683:2005; ADR 5/05; GB 14167-2013; GB/T 17921-2010;
GB 11568-2011; FMVSS 113; QC/T 207-1996; GB15740-2006;
ECE R18; 74/61/EEC; ECE R116; SABS 1248:1988;
GB/T 25985-2010; ADR 25/02; QC/T 628-2014;
QC/T 545-1999; QC/T 491-1999; GB 18296-2001; ECE R34;
70/221/EEC; GB/T 21424-2008; GB/T 21423-2008;
GB/T 25608-2010; ISO 21507:2005; GB 24387-2009;
GB/T 23292-2009; QC/T 644-2014; GB/T 5334-2005;
GB/T 15704-1995; GB/T 3487-2005; ECE R124; SAE J2530;
GB/T 5909-2009; QC/T 259-2011; GB/T 15704-2012;
SAE J175-2003; SAE J267-2007; SAE J328-2005;
ISO 3006-2005(E); ISO 3894-2005(E); ISO 7141-2005(E);
ISO15172-2005; QC/T 242-2014; JIS D4103:1998;
ES 3.10:2006; ES 3.11:2006; ES 3.18:1996; SAE J 1992-2012;



Test Technology(s):

All Items (Cont.)

Test Method:

ECE R59; 70/157/EEC; GB/T 4759-2009; QC/T 631-2009; GB 4599-2007; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R112; ECE R113; ECE R1/2; ECE R5; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R6; 76/759/EEC; SANS 1376-3:2006; ADR 6/00; GB 5920-2008; GB 15766.1-2008; GB/T 10485-2007; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R7; 76/758/EEC; SANS 1376-3:2006; ADR 49/00; GB 4660-2007; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R19; 76/762/EEC; ADR 50/00; GB 11554-2008; GB 15766.1-2008; GB/T 10485-2007; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R38; 77/538/EEC; ADR 52/00; GB 15235-2007; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R23; 77/539/EEC; ADR 1/00; SANS 1376-3:2006; GB 18408-2001; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R4; 76/760/EEC; SANS 1376-3:2006; ADR 48/00; GB 5920-2008; QC/T 260-1998; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; SANS 1376-3:2006; ADR 60/00; GB 18099-2000; GB 18099-2013; ECE R91; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R91; 76/758/EEC; SANS 1376-3:2006; ADR 74/00; GB 18409-2001; GB 18409-2013; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; ECE R77; 77/540/EEC; SANS 1376-3:2006; GB 5948-1998; GB/T 10485-2007; GB 15766.1-2008; GB/T 15766.2-2007; GB/T 15766.3-2007; GB 19152-2003; GB 17510-2008; GB 15766.1-2008; ECE R50; GB/T 10485-2007; GB/T 15766.2-2007; GB/T 15766.3-2007; GB 11564-2008; SANS 513:2005; ADR 47/00; ECE R3; 76/757/EEC; GB 19151-2003; ECE R27; FMVSS 125; QC/T 501-1999; GB 13954-2009; GB 15742-2001; 70/388/EEC; ECE R28; GSO 99-1988; SANS 20028:1972; QC/T 16-1992; QC/T 416-1999; GB/T 26673-2011; QC/T 19-1992; GB/T 14820-2009; QC/T 729-2005; QC/T 424-1999; GB/T 26672-2011; QC/T 419-1999; QC/T 695-2002; QC/T 731-2005; GB/T 26674-2011; QC/T 548-1999; QC/T 29090-1992; QC/T 413-2002; QC/T 29092-1992; GB/T 22711-2008; GB 26149-2017; QC/T 810-2009; QC/T 198-1995; QC/T 218-1996; QC/T 504-1999; QC/T 505-1999; QC/T 506-1999; QC/T 632-2000; GB/T 19056-2012; FMVSS 208; ECE R 94; ECE R95; ECE R34; GB 11551-2014; GB 20071-2006; GB 20072-2006; GB/T 20913-2007; 96/79/EC; 70/156/EEC; 96/27/EC; ECE R32; ECE R33; FMVSS 214; FMVSS 204; FMVSS 212; FMVSS 219; FMVSS 301; GSO 36-2005; GSO 37-2012; GSO 1707/2005; GSO 1708/2005; SANS 20094:2009;



Test Technology(s):

All Items (*Cont.*)

Test Method:

SANS 20012:1994; ADR 69/00; ADR 72/00; ADR 73/00;
Korean Regulation on Motor Vehicle Safety Standards No.1002
Article 91 Fuel System;
C-NCAP Child Restraint System (CRS) Assessment Program
(2014);
Korean Regulation on Motor Vehicle Safety Standards No.1002
Article 102 Passenger protection in a collision;
Korean Regulation on Motor Vehicle Safety Standards No.1002
Article 105 Windows; JIS/TRIAS 47-3;
JIS/TRIAS 33; JIS/TRIAS 47;
C-NCAP Management Regulation (2012);
C-NCAP Management Regulation (2015);
FMVSS 208; ECE R129;
Restraint Systems used on board of motor vehicles (ECRS);
77/389/EEC; (EU) NO 1005-2010; GB/T 28948-2012;
2003/102/EC; 2005/66/EC; GTR; GB/T 24550-2009; U-NCAP;
(EC) 78/2009; (EC) 631/2009; ECE R127; QCT 938-2013;
ECE R30; ECE R54; ECE R64; FMVSS 109; FMVSS 117;
FMVSS 119; FMVSS 129; FMVSS 139; GSO 645-2005;
GSO 646-1996; GSO 647-1996; SABS VC8056:2001;
SABS VC8059:2001; GB/T 23663-2009; GB/T 2933-2009;
GB/T 4502-2009; GB/T 4501-2008; GB/T 521-2012;
GSO 51-2007; GSO 52-2007; GSO 53-2007; GSO 1784-2006;
ADR 23/02; GB/T 2977-2008; GB 9743-2007; GB 9744-2007;
GB/T 2978-2008; GB 518-2007; GB/T 13203-2014;
GB/T 2983-2008; GB 7036.2-2007; GB/T 30196-2013;
GB/T 2978-2014; GB/T 6326-2014; GB 9743-2015;
GB 9744-2015; GSO 1783/2006; HG/T 2177-2011;
GB 7036.1-2009; FMVSS 201; FMVSS 220; FMVSS 131;
GB/T 18488.1-2006; GB/T 18488.2-2006; GB/T 29307-2012;
QC/T 893-2011; QC/T 896-2011; QC/T 792-2007;
GB/T 18488.1-2015; GB/T 18488.2-2015; GB/T20234.1-2011;
GB/T20234.2-2011; GB/T20234.3-2011; QC/T 841-2010;
GB/T 18487.1-2001; QC/T 895-2011; DB11/Z 753-2010;
GB 20816-2006; QC/T 636-2000; QC/T 420-2004;
GB/T 20734-2006; QC/T 755-2006; GB/T 25986-2010;
GB/T 25978-2010; GB 9656-2003; QC/T 258-2013;
GJB 893-1990; QC/T 198-2014; GB 32086-2015;
Vehicle Safety Testing Directions No.66:Automobile Fuel Tank;
SAE J267:2014; GB 32087-2015; GB/T 29040-2012;
ISO 28580:2009; GB/T 18861-2012; ISO 18164:2005;
SAE J1269:2006; SAE J 2452:1999; GMW 14996:2012;
GB/T 30198-2013 (*except 6.4f, g, h, i*)

Engineering Approval Evaluation Program

GB/T 18388-2005; GB/T 28382-2012

Engine Performance

QC/T 901-1998; GB/T 17692-1999; GB/T 18297-2001;
ECE R85; 80/1269/EEC; GSO ISO 2534:2005;
ISO 2534:1974; GSO ISO 1585:2008(E); ISO 1585:1992;
HJ 439-2008; ECE R120; GB 28239-2012



Test Technology(s):**Test Method:**

Durability	GB/T 19055-2003; QC/T 526-2013
PCV Valve	Verification of the Crankcase Ventilation System
Part Items	GB 15086-2013; QC/T 323-2007; 70/387/EEC; ECE R11; FMVSS 206; GTR No1; GSO 419/1994; GSO 420/1994; SANS 1443:1987; JIS/TRIAS 11-4-1-29-2; JIS/TRIAS11-1-4-36; ADR 2/01; GSO 135/2007; GSO 136/2007; QC/T 664-2000; GB 20461-2006; FMVSS 575.104; JT/T 475-2002 (sections 5.10.1-5.10.3); QC/T 649-2013 (<i>except 6.10.2, 6.12</i>)
Requirements for Combined Instruments	QC/T 727-2007
Requirements for Sensor	QC/T 821-2009; QC/T 822-2009; QC/T 823-2009; QC/T 824-2009
Requirements for Alarms	QC/T 208-2007
Requirements for Clocks	GB/T 17929-2007
Requirements for Motor for Instrument	QC/T 820-2009
Hydraulic and Hydraulic Burst of LPG Cylinder	GB 17259-2009; FMVSS 304
Requirements for Marking	GB 17258-2011
Requirements for 80 Percent Stop Valve of LPG Vehicle	ECE R67; AS 1425 (<i>except for filling speed test</i>)
Requirements for Liquid Level Gauge of LPG Vehicle	ECE R67; AS 1425
Requirements for Pressure Relief Valve (Discharge Valve) of LPG Vehicle	ECE R67; AS 1425 (<i>except for relief capability test</i>)
Requirements for Remotely Controlled Service Valve with Excess Flow Valve of LPG Vehicle	ECE R67; AS 1425 (<i>except for endurance test</i>)
Requirements for Gas-Tight Housing of LPG Vehicle	ECE R67
Requirements for Vaporizer/Pressure Regulator of LPG Vehicle	ECE R67; AS 1425; GB 20912-2007
Requirements for Solenoid Valve of LPG Vehicle	ECE R67; AS 1425; QC/T 673-2007

Test Technology(s):**Test Method:**

Requirements for Flexible Hoses	ECE R67 (<i>except for pulse test and solute test</i>)
LPG Vehicle	QC/T 745-2006 (<i>except for impulse test</i>)
Requirements for Filling Receptacle of LPG Vehicle	ECE R67; AS 1425; GB/T 18364.1-2001
Requirements for Gas Injection Device or Injector of LPG Vehicle	ECE R67
Requirements for Electronic Control Unit of LPG Engine	ECE R67
Cylinders Installing	GB 19239-2013; ECE R67; SANS 20067(SABS ECE R67):2004
Requirements for Power Supply Bushing of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Pressure Relief Device (Fuse) of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Fuel Pump of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for LPG Filter Unit of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Non-Return Valve of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Service Coupling of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Gas Injection Device or Injector of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Gas Injection Device or Gas Mixing Piece of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Fuel Rail of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Gas Dosage Unit	SANS 20067(SABS ECE R67):2004
Requirements for Pressure and/or Temperature Sensor of LPG Vehicle	SANS 20067(SABS ECE R67):2004
Requirements for Regulator of CNG Vehicle	GB/T 20735-2006; ISO 15500:2002; ECE R110; SANS 20110 (SABS ECE R110):2003

Test Technology(s):**Test Method:**

Requirements for Solenoid Valve of CNG Vehicle	QC/T 674-2007; ECE R110; SANS 20110 (SABS ECE R110):2003
Requirements for Filling Receptacle of CNG Vehicle	GB/T 18363-2001; ECE R110; SANS 20110 (SABS ECE R110):2003
Requirements for Hoses of CNG Vehicle	ECE R 110 (<i>except for impulse test of hose assembly</i>); QC/T 746-2006; ISO/DIS 15500:2002; SANS 20110 (SABS ECE R110):2003
Requirements for Pressure and Temperature	ECE R 110; ISO/DIS 15500:2002; SANS 20110 (SABS ECE R110):2003
Requirements for Gas/Air Mixer or Injector of CNG Vehicle	ECE R 110; ISO/DIS 15500:2002; SANS 20110 (SABS ECE R110):2003
Cylinders Installing	ECE R 110; GB 19239-2013; SANS 20110 (SABS ECE R110):2003
Requirements for Valve	ISO/DIS 15500:2002
Requirements for CNG Fuel System Components	ISO/DIS 15501:2000
Requirements for Technical Conditions	QC/T 245-2002
Requirements for Lead-Acid Batteries	GB/T 5008.2-2013; GB/T 5008.1-2013; GB/T 23638-2009; GB/T 22473-2008; GB/T 22199-2008; GB 13337.1-2011; GB/T 7403.1-2008; GB/T 5008.2-2013; GB/T 5008.1-2013; GB/T 23638-2009; GB/T 22473-2008; GB/T 22199-2008; GB 13337.1-2011; GB/T 7403.1-2008
Requirements for Lithium-Ion Batteries	DB12/T 246-2012; DB12/T 475-2012; UL 2580-2011; UL 1642-2012; GB/Z 18333.1-2001; QC/T 743-2006
Requirements for Nickel- Metal Hydride Batteries	GB/T 18332.2-2001; QC/T 744-2006
Requirements for Ultra Capacitors	UL 810A-2012; QC/T 741-2006
Requirements for Zinc-Air Batteries for Electric Road Vehicles	GB/Z 18333.2-2001
Requirements for Battery Management System	QC/T 897-2011
Communication Protocols	GB/T 27930-2011
Requirements for Brakes	QC/T 564-2008; QC/T 479-1999; QC/T 239-1997; QC/T 237-1997; QC/T 316-1999; QC/T 592-2013; SAE J2521; SAE J2522; ECE R90;

Test Technology(s):**Test Method:**

Requirements for Brakes (<i>Cont.</i>)	GB/T 23926-2009; QC/T 239-2015
Requirements for Proportion Valve	QC/T 593-2014
Requirements for Automobile Pedal Device	QC/T 788-2007
Requirements for Friction Materials	GB 5763-2008; GB/T 5766-2007; QC/T 472-1999; QC/T 473-1999; SAE J160-2013; SAE J661-2012; GB/T 17469-2012; ECE R90; GB/T 26736-2011 ISO 6310-2009; ISO 6311-1980; ISO 6312-2010; ISO 6313-1980; ISO 6314-1980; GB/T 29066-2012
Corrosion	GB/T 1771-2007; ISO 7253:1996; SAE J2334:2003; ASTM B117:2011; QC/T 484-1999; QC/T 15-1992; GB/T 10125-2012; ISO 9227:2006
Safety Requirements	GB/T 24549-2009
Requirements for Fuel Cell Engine	GB/T 24554-2009
Requirements for Fuel Cell Power System	GB/T 25319-2010
Requirements for Refueling Receptacle	GB/T 26779-2011
Requirements for Vehicles-Onboard Hydrogen System	GB/T 29126-2012; GB/T 26990-2011
Maximum Speed	GB/T 26991-2011
Vibration/Shock /Bump Test	GB/T 2423.10-2008; GB/T 2423.56-2006; GB/T 2423.35-2005; GB/T 2423.36-2005
Salt Mist	GBT 2423.17-2008; GB/T 2423.18-2012
Impact Resistance	GB/T 5137.1-2002
Penetration Resistance	GB/T 5137.1-2002
Abrasion Resistance	GB/T 5137.1-2002
Fragmentation	GB/T 5137.1-2002
Headform Impact	GB/T 5137.1-2002
Visible Light Transmittance Test	GB/T 5137.2-2002
Secondary Image Deviation Test	GB/T 5137.2-2002
Optical Distortion Test	GB/T 5137.2-2002
Color Recognition Test	GB/T 5137.2-2002

Test Technology(s):**Test Method:**

Radiation Resistance	GB/T 5137.3-2002
Heat Resistance	GB/T 5137.3-2002
Wet Resistance	GB/T 5137.3-2002
Burning Resistance	GB/T 5137.3-2002
Simulated Weathering Resistance	GB/T 5137.3-2002
Chemical Etching Resistance	GB/T17339-1998
Temperature Changes Resistance	GB/T17339-1998
Dewpoint Test	GB 18054-2000
Accelerated Durability Test	GB 18054-2000
Surface Stress Test	GB/T 18144-2008
Without Coating Glass Edge Stress Test	GB/T 18144-2008
Controllability And Stability	ISO 17288-2-2011; ISO/TS 20119:2002
Harmful Substances in Cabin of Vehicles	ISO 12219-1: 2012(E); ISO 16000-3:2011(E); ISO 16000-6-2011:2011(E); CQC 9205-2014; CQC 9206-2014; CQC 9207-2014
Performance Requirements for Active Safety System	ISO 17387(2008); ISO 17361-2007; GB/T 26773-2011; ISO 11270-2014; ISO 15623-2013; GB/T 20608-2006; ISO 15622-2010; ISO 22178-2009; ISO 22179-2009; European new car assessment programme – test protocol – AEB systems Euro NCAP; European new car assessment programme –assessment protocol– safety assist Euro NCAP(sections 5, 7); C-NCAP Test of automatic emergency braking system for vehicles (AEB CCR) C-NCAP Management Regulation (2018 edition); C-NCAP Test of automatic emergency braking system for vehicles (AEB VRU_Ped) C-NCAP Management Regulation (2018 edition); E-NCAP 2017 Test description - lane support system□2.0.1□; Test records of AEB-VRU system test procedures Euro NCAP 2015 (sections 1, 2); GB/T 33577-2017; EU No 351-2012; EU No 347-2012; ISO 22839-2013; BS ISO 16787-2016; JT/T 883-2014; JT/T 1094-2016
Engines to be Installed in Non-Road Mobile Machinery	DB 12/588-2015 (<i>except 5.2.2</i>)
Stone Impact	ISO 20567-1-2005; SAE J400-2002

Test Technology(s):

Test Method:

Hexavalent Chromium

IEC 62321-7-1 Edition 1.0 2015-09

Fog

QB/T 2728-2005; ISO 6452-2007; FZ/T 60045-2014;
DIN 75201-2011; SAE J1756-1994

Odor

SAE J1351:2008; VDA 270:1992

On the following products or types of products:

Motor vehicles, Electric vehicles, Engine, Sun visor, Drive axle, Lateral and Rear underrun protection, Vacuum booster, Brake master cylinder, etc.

WITHDRAWN



Accredited Laboratory

A2LA has accredited

CATARC AUTOMOTIVE TEST CENTER (TIANJIN) CO., LTD.

for technical competence in the field of

Mechanical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 7th day of August 2018.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 4251.02
Valid to May 31, 2020

For the tests to which this accreditation applies, please refer to the laboratory's Mechanical Scope of Accreditation.