




**Repubblica di San Marino**  
**Autorità per l'Omologazione**  
**Republic of San Marino**  
**Authority for Homologation**


Via Consiglio dei Sessanta, 99  
47891 Dogana - Repubblica di San Marino

**Comunicazione**  
**Communication**

	Concernente <sup>2/</sup> Concerning <sup>2/</sup>	<b>Il rilascio dell'omologazione</b> <b>Approval granted</b> <del>L'estensione dell'omologazione</del> <del>Approval extended</del> <del>Il rifiuto dell'omologazione</del> <del>Approval refused</del> <del>La revoca dell'omologazione</del> <del>Approval withdrawn</del> <del>La cessazione definitiva della produzione</del> <del>Production definitively discontinued</del>
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of restraining devices for child occupants of power-driven vehicles, pursuant Regulation No 129

<b>Omologazione N.</b> <i>Approval No.</i>	<b>E57*129R03/04*0003</b>	<b>Estensione N.</b> <i>Extension No.</i>	<b>00</b>
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<b>Marchio di omologazione</b> <i>Approval mark</i>	 <b>129R-040003</b>
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- |                                                                                                                    |                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 1.1. Forward-facing child restraint / rearward-facing child restraint / <del>lateral facing child restraint:</del> | Rearward-facing child restraint (40-105 cm)<br>Forward-facing child restraint (76-150 cm)           |
| 1.2. Integral/Non integral <sup>(2)</sup> :                                                                        | Integral (40-105cm)<br>Non-integral (100-150cm)                                                     |
| 1.3. Belt type: <sup>(2)</sup>                                                                                     | (Adult) three-point belt<br><del>(Adult) lap belt</del><br>Special type belt/retractor <sup>2</sup> |
| 1.4. Other features:                                                                                               | chair assembly/ <del>impact shield</del> <sup>2</sup>                                               |

2. Trade name or mark: COCCOLLE
3. Manufacturer's designation of the Enhanced Child Restraint System: TS001
4. Manufacturer's name: [REDACTED]
5. If applicable, name of his representative: Not Applicable
6. Address: [REDACTED]
7. Submitted for approval on: 01/03/2021
8. Technical Service conducting approval tests: **AUTOMOTIVE TECHNICAL SERVICE S.r.l.**  
Via Consiglio dei Sessanta, 99  
47891 – DOGANA Repubblica di San Marino
9. Type of device: deceleration/acceleration<sup>2</sup>: See Test Report No. ATS-SM-IR-129-02798
10. Date of test report issued by that Service: 09/04/2021
11. Number of test report issued by that Service: ATS-SM-IR-129-02798
12. Approval granted/extended/refused/withdrawn<sup>2</sup> for size range 40 cm to 150 cm for i-Size specific vehicle or for use as a "special needs restraint", position in vehicle
13. Position and nature of the marking: Sticker pasted on the rear side of base
14. Place: DOGANA – Repubblica di San Marino
15. Date: 19/04/2021
16. Signature



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Ing. Marco CONTI  
Direttore Generale  
General Director

17. The following documents, bearing the approval number shown above, are attached to this communication:

- a) Drawings, diagrams and plans of the child restraint, including any retractor, chair assembly, impact shield fitted;
- b) Drawings, diagrams and plans of the vehicle structure and the seat structure, as well as of the adjustment system and the attachments, including any energy absorber fitted;
- c) Photographs of the child restraint and/or vehicle structure and seat structure;
- d) Instructions for fitting and use.

(2) *Strike out what does not apply*

<b>Allegato</b> <i>Enclosure</i>			
<b>Al certificato di omologazione ECE N.</b> <i>To ECE approval certificate No.</i>		<b>E57*129R03/04*0003*00</b>	
<b>Indice del fascicolo di omologazione</b> <i>Index to the information package</i>			
<b>Data</b> <i>Date of issue</i>	<b>19/04/2021</b>	<b>Data ultima modifica</b> <i>Last amendment date</i>	--
1.	<b>Clausole di garanzia e istruzioni sul diritto di presentare ricorso</b> <i>Collateral clauses and instruction on right to appeal</i>		
2.	<b>Rapporto(i) Finale di Ispezione N.</b> <i>Inspection report(s) No.</i>	<b>ATS-SM-IR-129-02798</b>	<b>Data</b> <i>Date</i> <b>09/04/2021</b>
3.	<b>Scheda informativa N.</b> <i>Information document No.</i>	<b>TS001-R129.03-00</b>	<b>Data</b> <i>Date</i> <b>10/03/2021</b>
			<b>Data ultima modifica</b> <i>Last amendment date</i> --

## Clausole di garanzia e istruzioni sul diritto di presentare ricorso

### Clausole di garanzia

La produzione in serie deve essere esattamente conforme ai documenti di omologazione. Le variazioni di produzione in serie sono consentite solo con il consenso espresso del **Autorità per l'Omologazione**.

Le variazioni del nome della società, l'indirizzo e lo stabilimento di produzione, nonché una delle parti che hanno l'autorità alla consegna o eventuali rappresentanti nominati al momento del rilascio dell'omologazione, devono essere immediatamente comunicate al **Autorità per l'Omologazione**. La violazione di queste regole può portare al ritiro dell'omologazione ed inoltre può essere legalmente perseguita.

L'omologazione decade se viene restituita o ritirata o se il tipo omologato non è più conforme ai requisiti di legge. La revoca può essere fatta se non esistono più i requisiti richiesti per il rilascio e la continuazione dell'omologazione, se il titolare dell'omologazione viola gli obblighi dettati dall'omologazione, anche nel caso in cui gli obblighi derivino dalle condizioni assegnate all'interno dell'omologazione, o se è accertato che il tipo approvato non è conforme ai requisiti di sicurezza del traffico e di tutela dell'ambiente.

L'**Autorità per l'Omologazione** può verificare la corretta applicazione della delega conferita rilasciata nella presente omologazione, in qualsiasi momento. In particolare, questo include la verifica della produzione, che sia conforme, nonché le misure di controllo di conformità della produzione. Per questo, possono essere presi dei campioni dalla produzione. I dipendenti o rappresentanti dell'**Autorità per l'Omologazione** possono avere accesso senza ostacoli agli impianti di produzione e stoccaggio.

La delega conferita contenuta nella presente omologazione non è trasferibile. I diritti del marchio di terzi non sono interessati da questa omologazione.

### Istruzione su diritto di ricorso

Questa omologazione è appellabile entro un mese dalla notifica. Il ricorso deve essere presentato per iscritto o come una domanda inviata all' **Autorità per l'Omologazione** - Via Consiglio dei Sessanta, 99 - 47891 Dogana - Repubblica di San Marino.

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### ***Collateral clauses and instruction on right to appeal***

#### Collateral clauses

*The individual production of serial fabrication must be in exact accordance with the approval documents. Changes in the individual production are only allowed with express consent of the **Authority for Homologation**.*

*Changes in the name of the company, the address and the manufacturing plant as well as one of the parties given the authority to delivery or authorized representative named when the approval was granted is to be immediately disclosed to the **Authority for Homologation**. Breach of this regulation can lead to recall of the approval and moreover can be legally prosecuted.*

*The approval expires if it is returned or withdrawn or if the type approved no longer complies with the legal requirements. The revocation can be made if the demanded requirements for issuance and the continuance of the approval no longer exist, if the holder of the approval violates the duties involved in the approval, also to the extent that they result from the assigned conditions to this approval, or if it is determined that the approved type does not comply with the requirements of traffic safety or environmental protection.*

*The **Authority for Homologation** may check the proper exercise of the conferred authority taken from this approval at any time. In particular this means the compliant production as well as the measures for conformity of production. For this purpose samples can be taken or have taken. The employees or the representatives of the **Authority for Homologation** may get unhindered access to the production and storage facilities.*

*The conferred authority contained with issuance of this approval is not transferable. Trade mark rights of third parties are not affected with this approval.*

#### Instruction on right to appeal

*This approval can be appealed within one month after notification. The appeal is to be filed in writing or as a transcript at the **Authority for Homologation** - Via Consiglio dei Sessanta, 99 - 47891 Dogana - Repubblica di San Marino.*

Inspection Report No.: ATS-SM-IR-129-02798



Of: 09/04/2021

Type: TS001

Manufacturer: [REDACTED]

## Inspection Report

**No. ATS-SM-IR-129-02798**  
**Rel. 00**

Inspection concerning vehicles / components with regard to:

### Enhanced Child Restraint Systems

performed according to

### ECE Regulation No. 129

as last amended by

### 03 series of amendments

of the Economic Commission for Europe

Approval status	
ECE	Number of approval
	<b>E57*129R03/04*0003*00</b>

Inspection Report No.: ATS-SM-IR-129-02798

Of: 09/04/2021

Type: TS001

Manufacturer: Ningbo Twinkle Star Baby Products Co., Ltd.

**0. General information**

0.1. Make (trade name of manufacturer): COCCOLLE

0.2. Type: TS001

0.2.1. Variants: Not applicable

0.3. Name and address of manufacturer:



0.3.1. Name and address of manufacturer's authorized representative: Not applicable

0.3.2. Production plant(s) address(es):



0.4. No. of the information document: TS001-R129.03-00 Date: 10/03/2021

0.5. Position of the approval mark: Sticker pasted on the rear side of base

**1. Tested system**

1.1. Description of the test system

1.1.1. Make: See 0.1 above

1.1.2. Type: TS001

1.1.3. Variant / Version: Not applicable

1.1.4. Place of marking: See the information document

Inspection Report No.: ATS-SM-IR-129-02798

Of: 09/04/2021

Type: TS001

Manufacturer: XXXXXXXXXXXXXXXXXXXX

1.1.5 Main characteristics

Category(ies) :	i-Size (40-105cm) i-Size Booster Seat (100-150cm)
ECRS class:	Integral (40-105cm) Non-integral (100-150cm)
Size Range:	40-150cm
Maximum occupant mass for i-Size:	24kg
ECRS orientation:	Rearward-facing (40-105cm) Forward-facing (76-150cm)
Anti-rotation device:	Top Tether (40-105cm)
Child Restraint Mode:	Five-point harness (40-105cm) Adult three-point safety belt (100-150cm)
Locking-off device type:	Not applicable
Type of retractor:	Not applicable
Belt type:	Adult three-point safety belt
Other features:	Chair assembly / <del>impact shield</del>
Installation Methods:	40-105cm: Rearward facing/harness/ISOFIX/Top tether; 76-105cm: Forward facing/harness/ISOFIX/Top tether; 100-150cm: Forward facing/adult safety belt (with or without ISOFIX)
Backrest positions:	Adjustable
Declaration on toxicity:	See information document
Declaration on flammability:	See information document
Instruction for use of ECRS in the vehicle:	See information document



Inspection Report No.: ATS-SM-IR-129-02798

Of: 09/04/2021

Type: TS001

Manufacturer: XXXXXXXXXX

## 2. Test records

2.1. Equipment for measuring and testing: Used equipment fulfill all requirements of the ECE Regulation No. 129.03

2.2. Conformity with the technical sheet and attached drawings: SI / YES  NO / NO  NR / NA

2.3 Test results

Para. Parameter Complies

### Clause 4. Markings

4.1. ECRS is marked of manufacturer's name, initials or trade mark: fulfilled

4.2. ECRS is clear and indelible marked with year of production: fulfilled

4.3. Orientation, size range, maximum occupant mass, webbing path, and visibility of these marking. fulfilled

4.4. ECRS is permanently attached the warning label of "Airbag" for rearward facing: fulfilled

4.5. ECRS is permanently attached the warning label of no forward-facing for child less than 15 months: fulfilled

4.6 Webbing path

4.6.1 The adult safety-belt route markings shall be placed on all belt guides and lock off devices. The adult safety-belt route markings shall be at least the width of the adult webbing path. fulfilled

4.6.2 The correct webbing path indication for Non-integral ECRS fulfilled

4.6.3 The correct webbing path indication for integral belted ECRS fulfilled

4.7. Marking for integral ECRS including ISOFIX connections attachments

4.7.1. for i-Size ECRS, the i-Size Logo shall permanently visible. fulfilled

4.7.2. For Specific Vehicle ISOFIX ECRS, the ISOFIX logo and user instruction label shall permanently visible. n.a

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Of: 09/04/2021

Type: TS001

Manufacturer: XXXXXXXXXX

4.7.3.	An international approval mark	fulfilled
	If ECRS containing modules, approval module mark shall be permanently attached on ISOFIX base:	n.a
4.7.4.	If ECRS containing modules, module mark shall be permanently attached on the module:	n.a.
4.8.	Marking for non-integral ECRS	
4.8.1.	for i-Size booster seat ECRS, the i-Size booster seat user instruction label shall permanently visible:	fulfilled
4.8.2.	for Specific vehicle booster seat ECRS, the Specific vehicle booster seat user instruction label shall permanently visible:	n.a.
4.8.3	for Universal booster cushion ECRS, the user instruction label shall permanently visible:	n.a.
4.8.4	for specific vehicle booster cushion ECRS, the user instruction label shall permanently visible:	n.a.
4.8.5.	Label for size limit for booster cushion ECRS.	n.a.
4.9.	Marking for ECRS with an impact shield	n.a.
4.10.	Any removable insert shall have permanently attached label to indicate the brand, model and size range of ECRS.	n.a.
4.11	A Booster seat that converts to a Booster cushion by a removable backrest, shall have a permanently attached label on the backrest, to indicate the brand and model of the ECRS.	n.a.
4.12	ECRS shall have a permanently attached label to inform the user of the appropriate method of restraint of the child over the entire stature range declared by the manufacturer.	fulfilled
4.13	Marking for Integral Belted Enhanced Child Restraint System.	n.a.
4.14	Additional markings	fulfilled

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Of: 09/04/2021

Type: TS001

Manufacturer: XXXXXXXXXX

**6. General specifications**

- 6.1. Positioning and securing on the vehicle fulfilled
- 6.2. Configuration of the ECRS fulfilled
- 6.3. ECRS specification
  - 6.3.1. Material fulfilled
  - 6.3.2. General characteristics fulfilled
  - 6.3.3. ISOFIX attachments fulfilled
  - 6.3.4. ISOFIX ECRS top tether strap specifications fulfilled
  - 6.3.5. i-Size ECRS support-leg and support-leg foot requirements n.a.
- 6.4. Control of marking fulfilled
- 6.5. Control of instructions on installation and the instructions for use fulfilled
- 6.6. Provisions applicable to the assembled restraint
  - 6.6.1. Resistance to corrosion (only the corrosible parts were tested) fulfilled
  - 6.6.2. Energy absorption

	Area of headform impact		Head form deceleration
Deceleration of headform [g] (limit 60g)	The middle of head backrest	left side	2.1
		right side	1.5
	The sides of head backrest	left side wing	1.4
		right side wing	1.4
Depth of the side wings $\geq$ 90mm	205		
Sample No. 1: meet the requirements			

6.6.3. Overturning

	ECRS orientation	Installation Methods	Direction of rotation				Mass of the dummy [kg]
			Clock wise	Anti-clock wise	Roll ahead	Roll back	
Dummy's head vertical movement [mm] (limit 300 mm)	Rearward-facing (40-105cm)	ISOFIX+ Top tether (Backrest inclined)	15	11	13	14	3.6
			53	55	50	57	15.1
	Forward-facing (76-105cm)	ISOFIX+ Top tether (Backrest upright)	29	22	21	24	11.3
			60	58	61	59	15.1
	Forward-facing (100-150cm)	Adult safety belt (Backrest upright)	63	66	64	60	15.1
			116	118	120	117	36.1
		Adult safety belt + ISOFIX (Backrest upright)	60	62	59	61	15.1
	111		110	115	109	36.1	
	Sample No. 2: meet the requirements						

6.6.4. Dynamic test

Table 1 Type of dynamic test device: deceleration

Acceleration curves: meet the requirements. Refer to appendix 2.

Testing parameter	Limit	Result		
ECRS Class	-	integral		
ECRS orientation	-	rearward-facing		
Impact direction	-	rear		
Backrest position	-	fixed		
Attachments		ISOFIX+TT	ISOFIX+TT	ISOFIX+TT
Used dummy	-	Q0	Q1.5	Q3
Mass of dummy [kg]	-	3.6	11.3	15.1
Trolley impact speed [km/h]	30-32	30.3	30.3	30.0
Trolley stopping distance [mm]	250-300	279	281	289
Trolley max. dece. [g]	14-21	20.34	20.17	20.6
Head performance criterion	≤ 600/800	391.7	179.6	111.0
Resultant head acceleration 3 ms [g]	≤ 75/80	73.09	47.77	39.65
Resultant chest acceleration 3 ms [g]	≤ 55	40.54	47.93	34.62
Chest deflection [mm]	-	--	5.81	0.42
Upper neck tension force [N]	-	502.4	919.3	1151.9
Upper neck flexion moment [Nm]	-	17.92	14.93	19.27
Abdominal pressure [bar]	L	≤ 1.2/1.0	--	0.67
	R	≤ 1.2/1.0	--	0.68
Maximum of head displacement	x [mm] (horizontal)	≤ 700	--	--
	at time [ms]	-	--	--
	z [mm] (vertical)	≤ 800	--	--
Buckle open force after [N]	≤ 80	56	60	62
Failure or breakage	no	no	no	no

6.6.4.  
Table 2

Testing parameter		Limit	Result					
ECRS Class		-	integral					
ECRS orientation		-	rearward-facing					
Impact direction		-	frontal					
Backrest position		-	fixed					
Attachments		-	ISOFIX+TT		with 100mm bar	ISOFIX (mis use)		
Used dummy		-	Q0	Q1.5	Q3	Q3	Q3	
Mass of dummy [kg]		-	3.6	11.3	15.1	15.1	15.1	
Trolley impact speed [km/h]		48-50	48.4	48.3	48.3	48.3	48.3	
Trolley stopping distance [mm]		600-700	682	672	671	669	670	
Trolley max. dece. [g]		20-28	26.18	27.59	24.77	27.21	27.02	
Head performance criterion		≤ 600/800	268.5	200.9	333.5	299.1	275.6	
Resultant head acceleration 3 ms [g]		≤ 75/80	56.28	48.78	61.08	54.92	52.32	
Resultant chest acceleration 3 ms [g]		≤ 55	27.38	53.16	45.01	49.30	47.40	
Chest deflection [mm]		-	3.23	3.23	1.11	1.05	1.09	
Upper neck tension force [N]		-	256.3	1070.3	1332.1	1658.4	1789.9	
Upper neck flexion moment [Nm]		-	11.84	4.11	12.04	7.51	14.55	
Abdominal pressure [bar]		L	≤ 1.2/1.0	--	0.58	0.68	0.75	0.70
		R	≤ 1.2/1.0	--	0.61	0.64	0.71	0.68
Maximum of head displacement	x [mm] (horizontal)	≤ 700	OK	OK	OK	OK	OK	
	at time [ms]	-	--	--	--	--	--	
	z [mm] (vertical)	≤ 800	OK	OK	OK	OK	OK	
Buckle open force after [N]		≤ 80	58	61	63	65	63	
Failure or breakage		no	no	no	no	no	no	

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Of: 09/04/2021

Type: TS001

Manufacturer: XXXXXXXXXX

6.6.4.  
Table 3

Testing parameter	Limit	Result		
ECRS Class	-	integral		
ECRS orientation	-	rearward-facing	rearward-facing	forward-facing
Impact direction	-	lateral		
Backrest position	-	fixed		
Attachments	-	ISOFIX+TT		
Used dummy	-	Q0	Q1.5	Q3
Mass of dummy [kg]	-	3.6	11.3	15.1
Door bench relative velocity [m/s]	6.375-7.25	6.85	6.84	6.84
Trolley stopping distance [mm]	200-300	232	239	230
Trolley max. dece. [g]	-	6.75	6.75	6.75
Head performance criterion	$\leq 600/800$	277.3	416.8	376.5
Resultant head acceleration 3 ms [g]	$\leq 75/80$	63.70	71.09	65.73
Upper neck tension force [N]	-	171.8	616.8	1078.7
Upper neck flexion moment [Nm]	-	19.00	9.74	13.82
Head containment (no head contact and not exceed vertical plane)	no	no	no	no
Buckle open force after [N]	$\leq 80$	59	61	63
Failure or breakage	no	no	no	no

6.6.4.  
Table 4

Testing parameter	Limit	Result					
ECRS Class	-	integral					
ECRS orientation	-	forward-facing					
Impact direction	-	frontal			lateral		
Backrest position	-	upright					
Attachments	-	ISOFIX_TT	ISOFIX (mis use)	ISOFIX_TT			
Used dummy	-	Q1.5	Q3	Q3	Q1.5	Q3	
Mass of dummy [kg]	-	11.3	15.1	15.1	11.3	15.1	
Trolley impact speed [km/h]	48-50	48.4	48.4	48.4	-	-	
Door bench relative velocity [m/s]	6.375-7.25	-	-	-	6.84	6.85	
Trolley stopping distance [mm]	600-700 (F) 200-300 (L)	673	670	677	232	224	
Trolley max. dece. [g]	20-28 (F)	28.03	28.34	28.09	-	-	
Head performance criterion	≤ 600/800	359.0	321.4	350.4	372.2	332.7	
Resultant head acceleration 3 ms [g]	≤ 55 (F) ≤ 75/80 (L)	49.07	53.96	47.67	69.0	63.6	
Resultant chest acceleration 3 ms [g]	≤ 55(F)	40.37	38.91	34.09	-	-	
Chest deflection [mm]	-	16.56	1.49	1.52	-	-	
Upper neck tension force [N]	-	1735.4	2121.6	2405.6	426.3	965.5	
Upper neck flexion moment [Nm]	-	5.54	12.65	12.02	11.41	15.15	
Abdominal pressure [bar]	L	≤ 1.2/1.0	0.68	0.75	0.65	-	-
	R	≤ 1.2/1.0	0.71	0.71	0.72	-	-
Maximum of head displacement	x [mm] (horizontal)	≤ 700	334	404	531	-	-
	at time [ms]	-	81	84	97	-	-
	z [mm] (vertical)	≤ 800	648	686	682	-	-
Buckle open force after [N]	≤ 80	60	60	60	63	61	
Failure or breakage	no	no	no	no	no	no	

6.6.4.  
Table 5

Testing parameter	-	Result				
ECRS Class	-	Non-integral				
ECRS orientation	-	forward-facing				
Impact direction	-	frontal				
Backrest position	-	upright				
Attachments	-	ISOFIX+TT	ISOFIX	Not in use		
Used dummy	-	Q3	Q10	Q3	Q10	
Mass of dummy [kg]	-	15.1	36.1	15.1	36.1	
Trolley impact speed [km/h]	48-50	48.3	48.4	48.4	48.3	
Trolley stopping distance [mm]	600-700	671	674	667	669	
Trolley max. dece. [g]	20-28	27.2	26.88	27.57	27.36	
Head performance criterion	≤ 800	440.84	559.56	608.36	602.85	
Resultant head acceleration 3 ms [g]	≤ 80	66.61	62.95	76.83	76.06	
Resultant chest acceleration 3 ms [g]	≤ 55	41.64	47.35	47.16	49.23	
Chest deflection [mm]	-	1.67	1.33	1.95	1.35	
Upper neck tension force [N]	-	2370.4	4111.6	3024.0	4067.4	
Upper neck flexion moment [Nm]	-	9.05	14.75	9.40	3.13	
Abdominal pressure [bar]	L	≤ 1.0	0.74	0.71	0.68	0.72
	R	≤ 1.0	0.75	0.75	0.71	0.71
Maximum of head displacement	x [mm] (horizontal)	≤ 700	340	381	352	393
	at time [ms]	-	80	93	85	95
	z [mm] (vertical)	≤ 800	698	736	695	718
Buckle open force after [N]	-	-	-	-	-	
Failure or breakage	no	no	no	no	no	



6.6.4.	Testing parameter	-	Result			
Table 6	ECRS Class	-	Non-integral			
	ECRS orientation	-	forward-facing			
	Impact direction	-	Lateral			
	Backrest position	-	upright			
	Attachments	-	ISOFIX+TT		ISOFIX	
	Used dummy	-	Q3	Q6	Q3	Q6
	Mass of dummy [kg]	-	15.1	23.4	15.1	23.4
	Door bench relative velocity [m/s]	6.375-7.25	6.85	6.85	6.83	6.85
	Trolley stopping distance [mm]	200-300	231	241	232	232
	Trolley max. dece. [g]	-	6.75	6.75	6.75	6.78
	Head performance criterion	≤ 600/800	302.8	312.9	301.2	329.9
	Resultant head acceleration 3 ms [g]	≤ 80	60.94	60.20	60.58	61.87
	Upper neck tension force [N]	-	1077.0	1166.0	1121.7	1197.3
	Upper neck flexion moment [Nm]	-	12.68	27.10	22.54	22.86
	Head containment (no head contact and not exceed vertical plane)	no	no	no	no	no
	Buckle open force after [N]	≤ 80	-	-	-	-
	Failure or breakage	no	no	no	no	no

6.6.5. Resistance to temperature (only the relevant parts were tested) fulfilled

6.7. Provisions applicable to individual components of the restraint

6.7.1. Buckle

6.7.1.1. General requirements for buckles (including dimensional and geometrical) fulfilled

6.7.1.5.

6.7.1.6. The buckle shall be test by heat and operate 5,000 ± 5 opening and closing cycles, before dynamic test fulfilled

6.7.1.7. Buckle releasing force before and after dynamic test fulfilled

6.7.1.8. Strength of the buckle  
Buckle shall withstand 10kN for mass limit greater than 13kg fulfilled

6.7.2. Adjusting device

6.7.2.1. General requirements for adjusting device fulfilled

6.7.2.4.

- 6.7.2.5. Microslip testing, the amount of strap slip shall not exceed 25mm for one adjusting device or 40mm for all adjusting devices fulfilled  
one adjusting strap slip sample one: 8 mm  
one adjusting strap slip sample two: 7 mm  
all adjusting strap slip sample one: 10 mm  
all adjusting strap slip sample two: 12 mm
- 6.7.2.6. The adjuster must not break or become detached when test for ease of adjustment fulfilled
- 6.7.2.7. An adjuster shall be test by operate 5,000 ± 5 cycles, before dynamic test fulfilled
- 6.7.3. Retractors n.a.
- 6.7.4. Straps

		Requirements	Measured value	Result	
Strap		-	25 mm		
Strap width [mm] strained by 75% of its breaking load	Sample 1	≥ 25	28.0	pass	
	Sample 2	≥ 25	28.5	pass	
Strength F [kN] after room conditioning	Sample 1 (F1)		11.8	pass	
	Sample 2 (F2)		11.8	pass	
Difference between F1 and F2 (< 10% of the bigger value of F1, F2)			0.0%	pass	
Force [kN] of the strap destruction after its special conditioning	75% of the average of F1 and F2		8.9	-	
	light conditioning	Sample 1	≥ 3.6 kN, and ≥ 75% of the average of F1 and F2	11.7	pass
		Sample 2		11.7	pass
	cold conditioning	Sample 1		11.7	pass
		Sample 2		11.7	pass
	heat conditioning	Sample 1		11.8	pass
		Sample 2		11.7	pass
	exposure to water	Sample 1		11.7	pass
		Sample 2		11.7	pass
	abrasion conditioning	Sample 1		11.5	pass
Sample 2		11.5		pass	

- 6.7.5. ISOFIX attachment specifications fulfilled
- 6.8. Classification fulfilled

**9. Production qualification**

9.2. Production qualification test

Configuration of test samples:  
i-Size ECRS, integral, forward-facing (76-105cm). Test with Q3 dummy (15.1kg), frontal impact.

PQT No.	Maximum horizontal head excursion [mm] (L: 500)	Head acc. 3ms [g] ( $\leq 80$ )	Chest acc. 3ms [g] ( $\leq 55$ )	Head criterion - HPC ( $\leq 800$ )	Abdominal pressure [bar] ( $\leq 1.0$ )		Upper neck tension force [N]	Upper neck flexion moment [Nm]	Chest def. [mm]
1	404	61.94	42.81	356.09	0.68	0.69	2365	11.83	1.24
2	410	62.10	41.86	379.79	0.70	0.71	2655	11.32	1.43
3	404	63.60	38.48	375.00	0.72	0.73	2642	11.66	1.31
4	395	60.28	37.04	380.15	0.69	0.70	2863	11.88	1.32
5	402	56.42	41.32	337.98	0.70	0.72	2633	12.82	1.21
Calculation X	403	60.87	40.30	-	-	-	-	-	-
Calculation S	5.4	2.75	2.43	-	-	-	-	-	-
X + S	408.4	63.62	42.74	-	-	-	-	-	-

No value shall exceed 1.05 L, and X + S shall not exceed L fulfilled

**14. Information for users**

- 14.1. ECRS is accompanied by instructions in the language of the country where the device is sold fulfilled
- 14.2. Instructions on installation fulfilled
- 14.3. Instructions for use fulfilled

Inspection Report No.: ATS-SM-IR-129-02798

Of: 09/04/2021

Type: TS001

Manufacturer: XXXXXXXXXX

**3. Other information**

Place of inspection: Automotive Collision Test Lab, State Key Lab of ASE of TSU

Date of inspection: March 23, 2021~ March 26, 2021

Technical service representative:

**Senior Inspector**

**Junior Inspector  
(if applicable)**

Mark Cao

N/A

Manufacturer's representative: Not applicable

Remarks: None

**3.1 Appendix**

1. List of modifications

2. Test curve

**3.2 Enclosures**

Information folder



Inspection Report No.: ATS-SM-IR-129-02798



Of: 09/04/2021

Type: TS001

Manufacturer: [REDACTED]

## Appendix 1

List of modifications

Applicable / Not Applicable

Appendix 1

More details for application of

Date :

Correction of : -

Modification of : -

Addition of : -

Deletion of : -

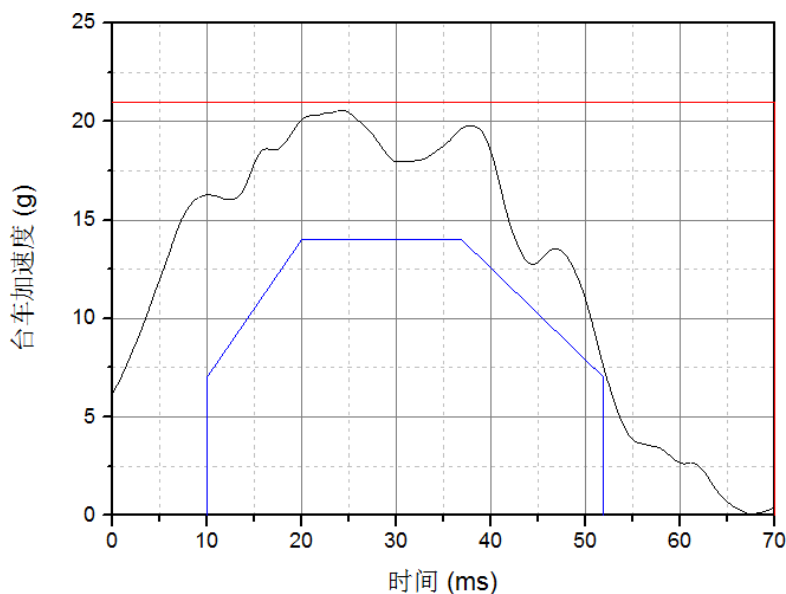
## Appendix 2

Test curve

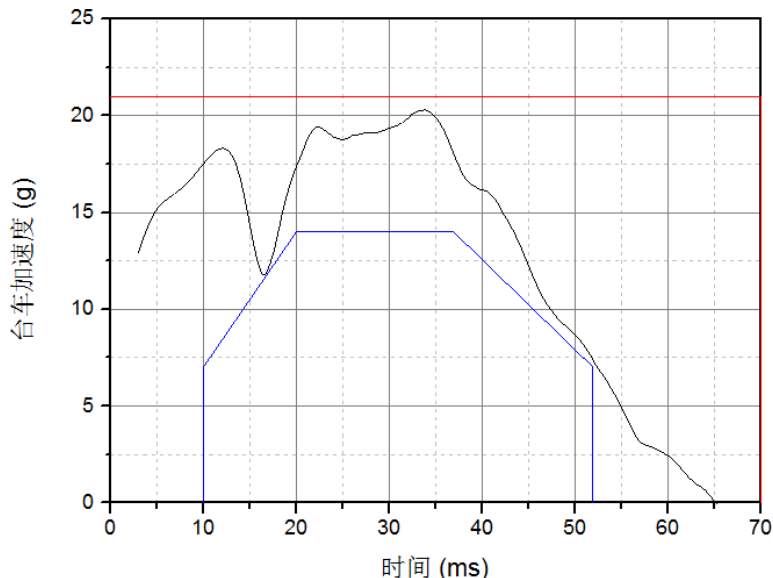
Appendix 2

### Test curve of trolley

Dummy Q0, rear impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

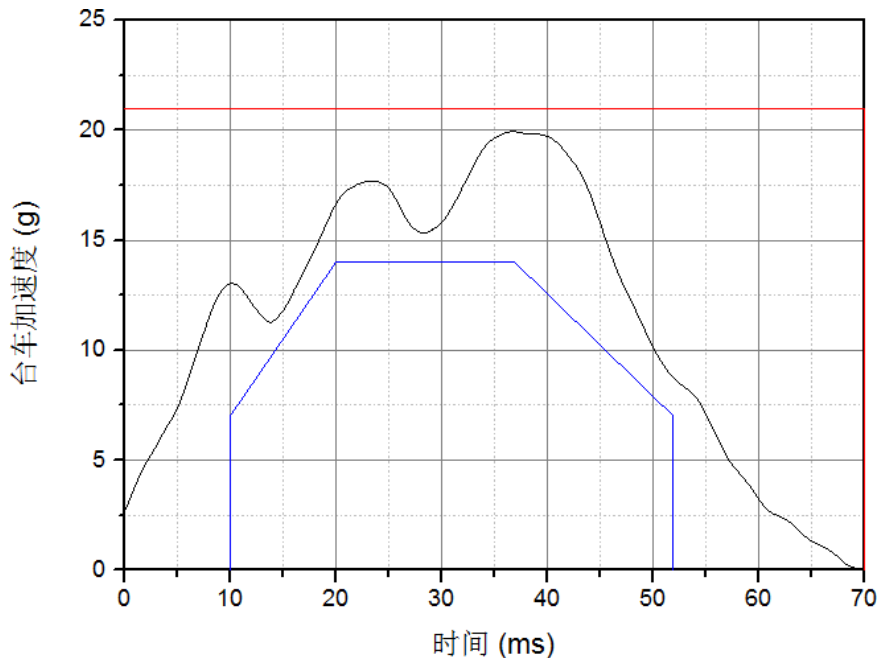


Dummy Q1.5, rear impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

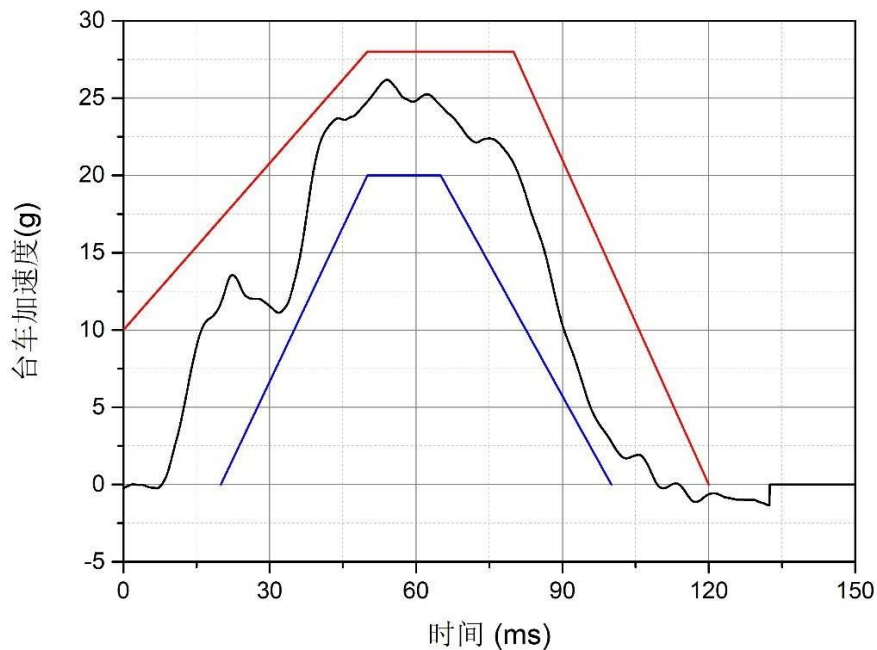




Dummy Q3, rear impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

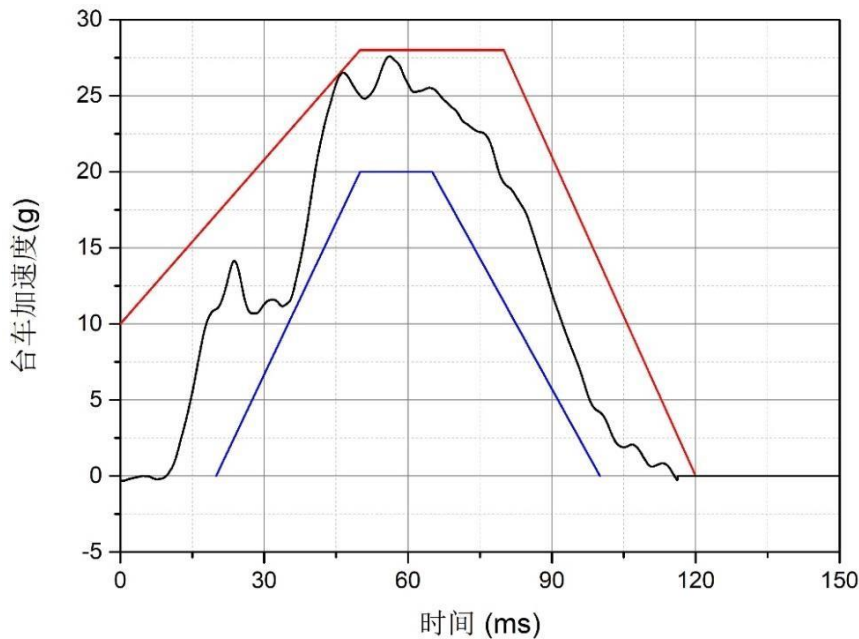


Dummy Q0, frontal impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

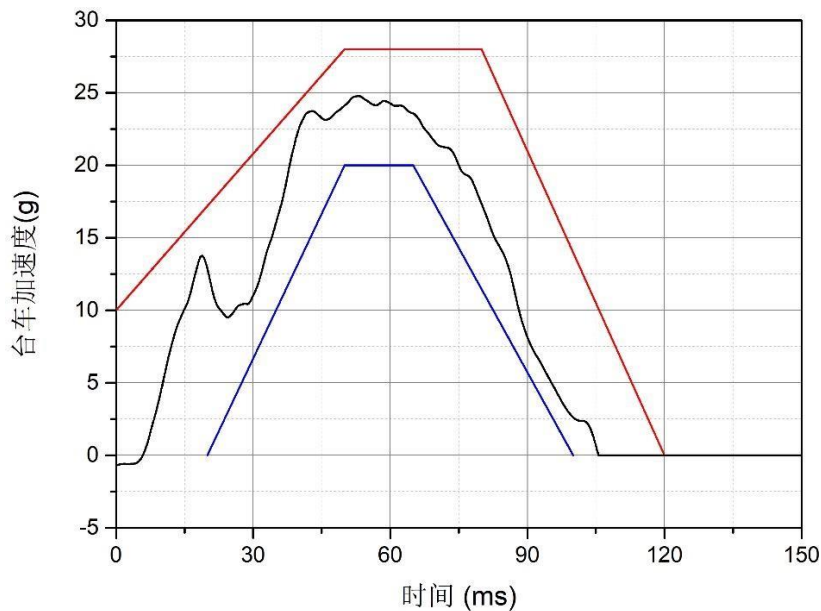




Dummy Q1.5, frontal impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

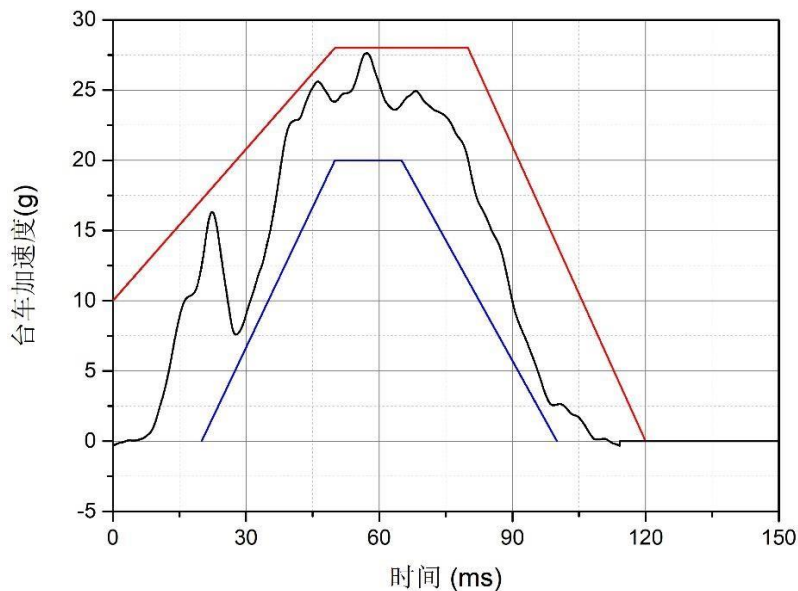


Dummy Q3, frontal impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

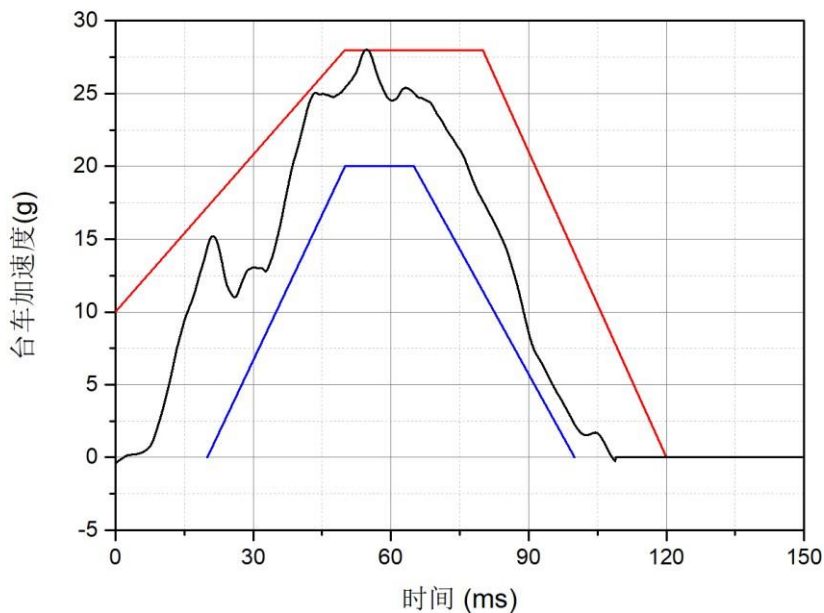




Dummy Q3, frontal impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether, with 100mm bar

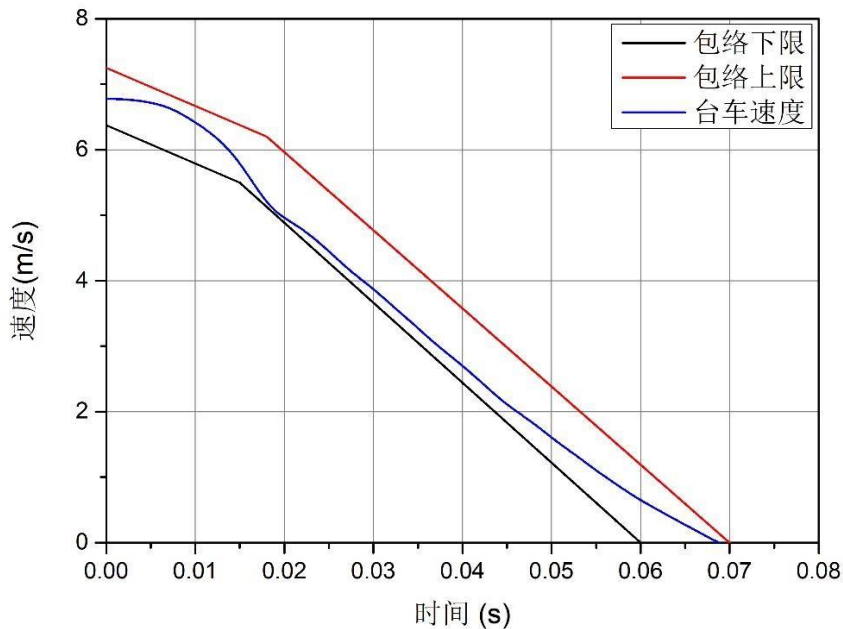


Dummy Q3, frontal impact, i-Size ECRS, integral, rearward facing, with ISOFIX (without top tether)

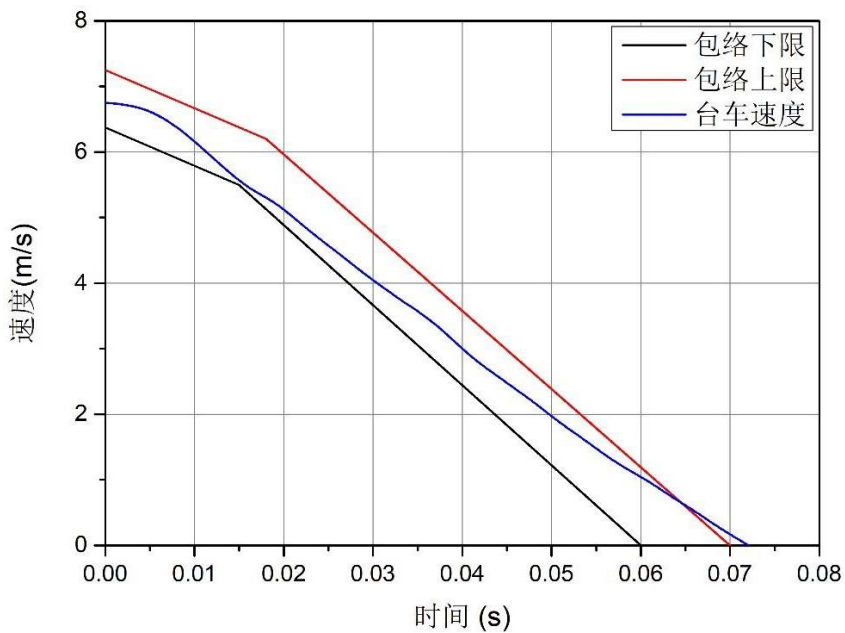




Dummy Q0, lateral impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

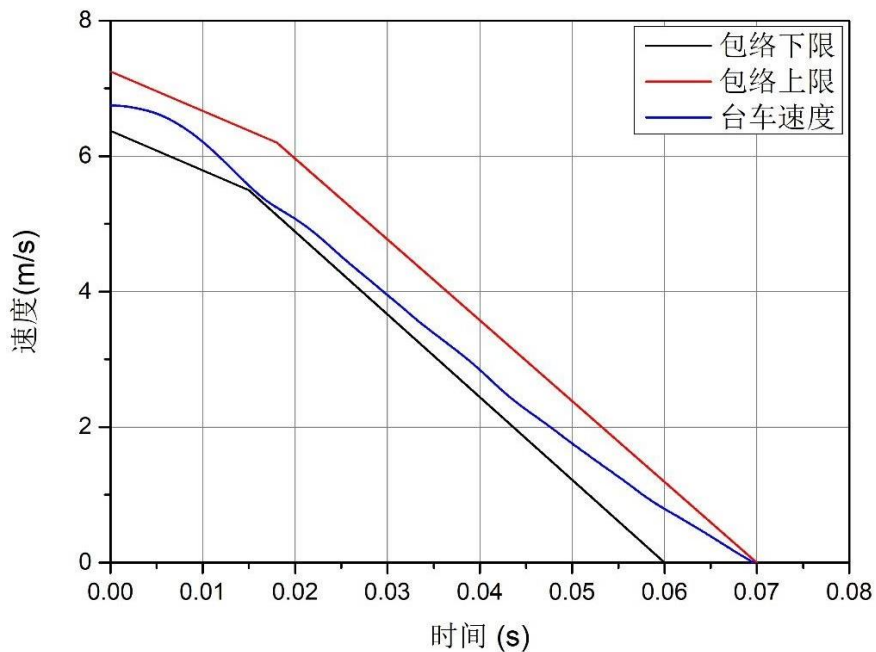


Dummy Q1.5, lateral impact, i-Size ECRS, integral, rearward facing, with ISOFIX+top tether

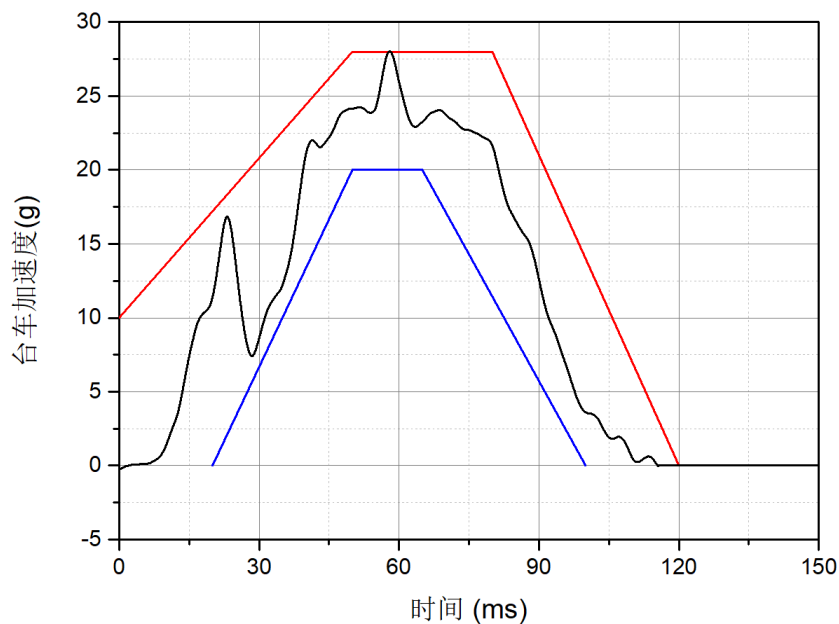




Dummy Q3, lateral impact, i-Size ECRS, integral, forward facing, with ISOFIX+top tether

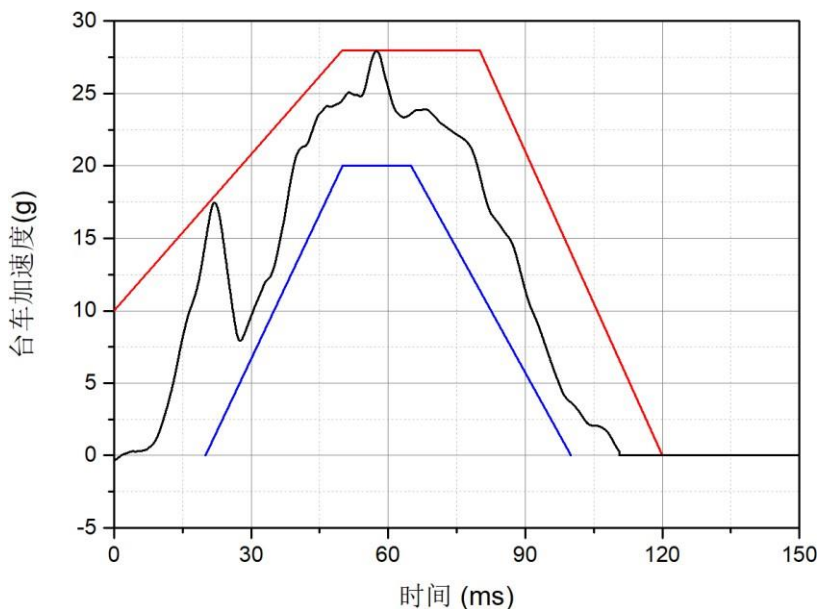


Dummy Q1.5, frontal impact, i-Size ECRS, integral, forward facing, with ISOFIX+top tether

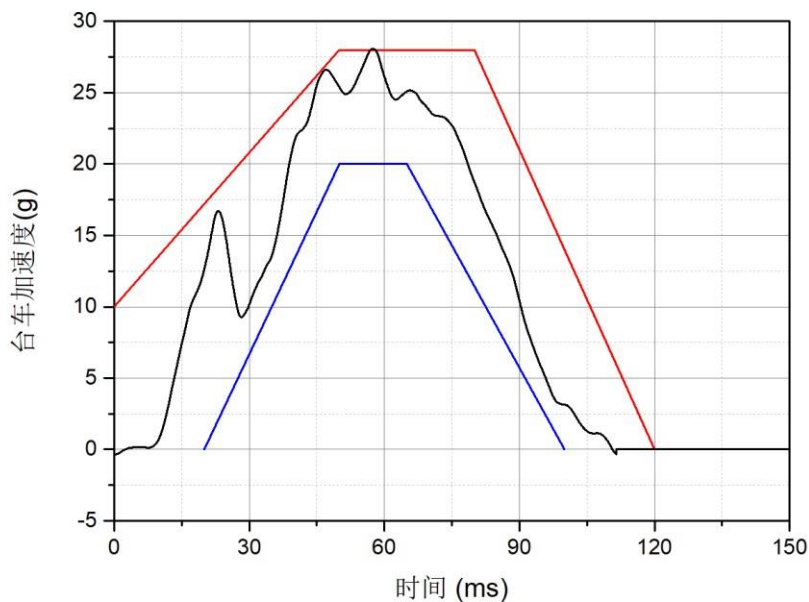




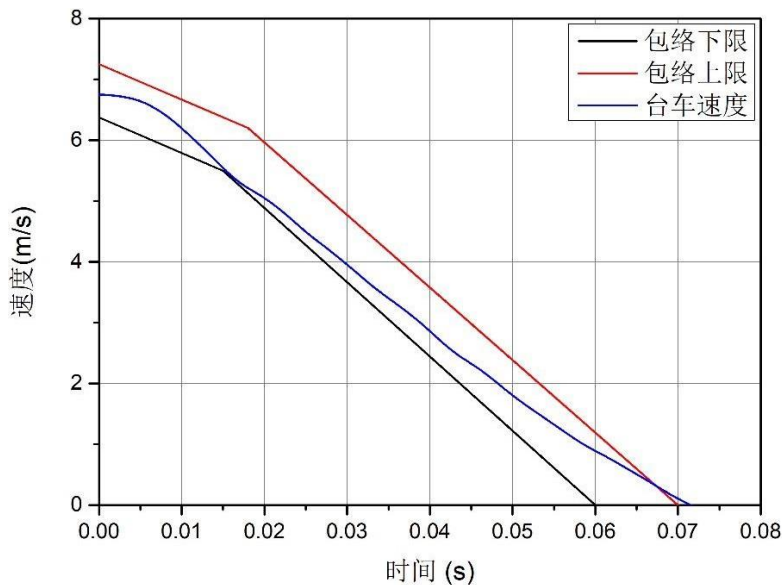
Dummy Q3, frontal impact, i-Size ECRS, integral, forward facing, with ISOFIX+top tether



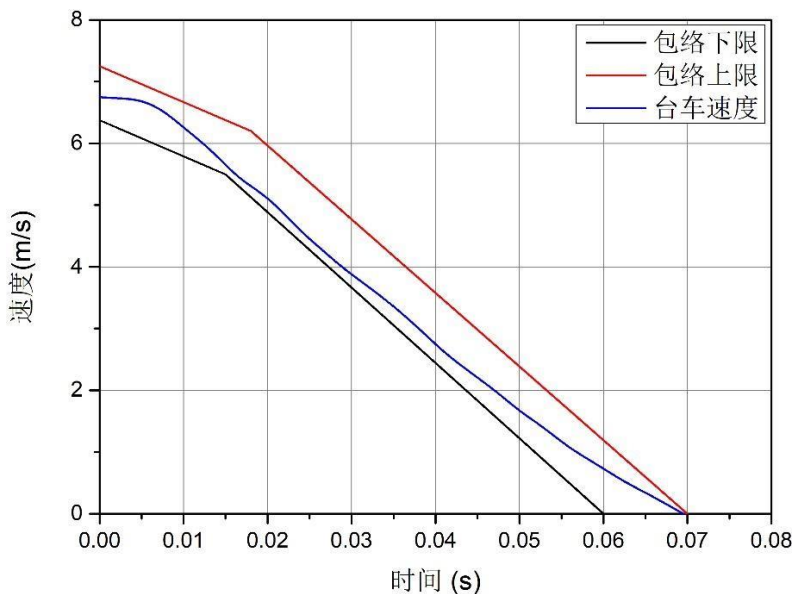
Dummy Q3, frontal impact, i-Size ECRS, integral, forward facing, with ISOFIX (without top tether)



Dummy Q1.5, lateral impact, i-Size ECRS, integral, forward facing, with ISOFIX+top tether

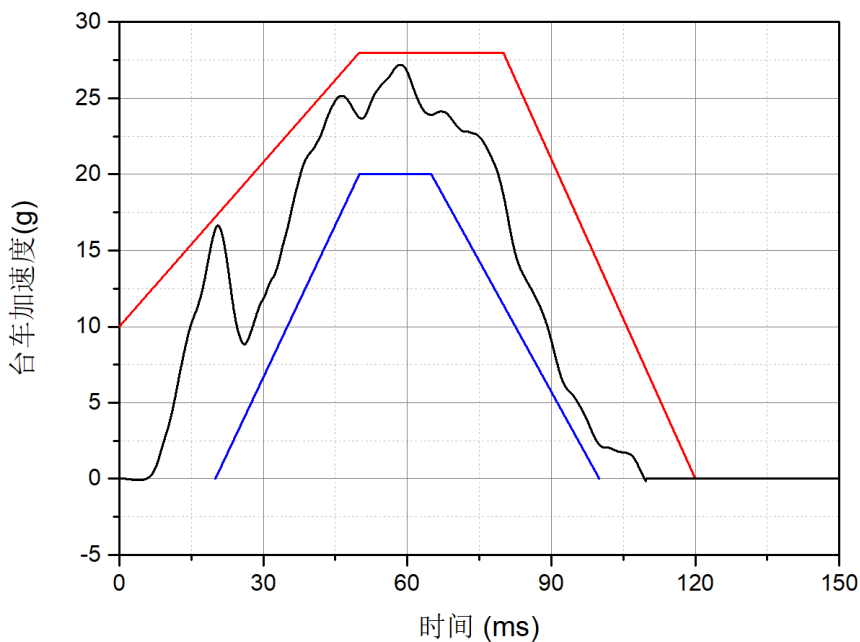


Dummy Q3, lateral impact, i-Size ECRS, integral, forward facing, with ISOFIX+top tether

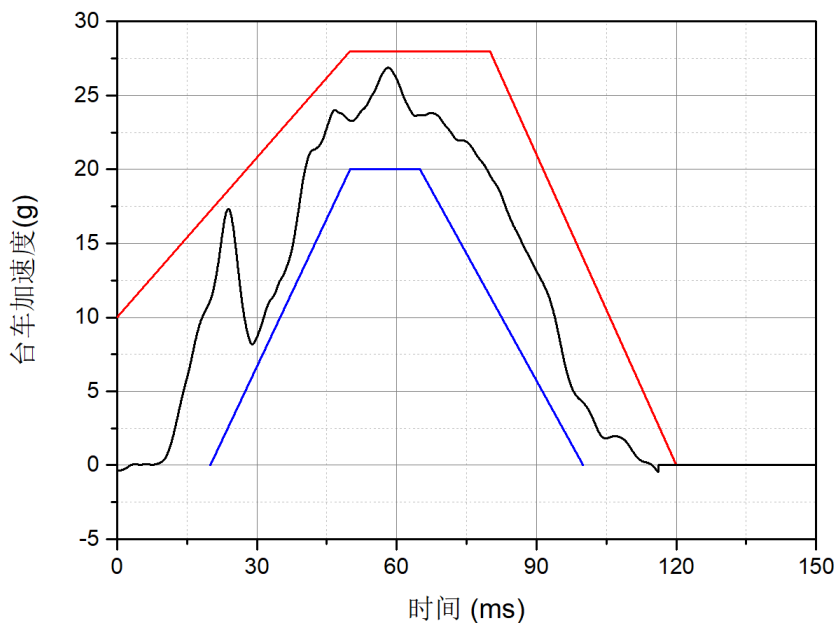




Dummy Q3, frontal impact, i-Size booster seat, non-integral, forward facing, with ISOFIX+top tether

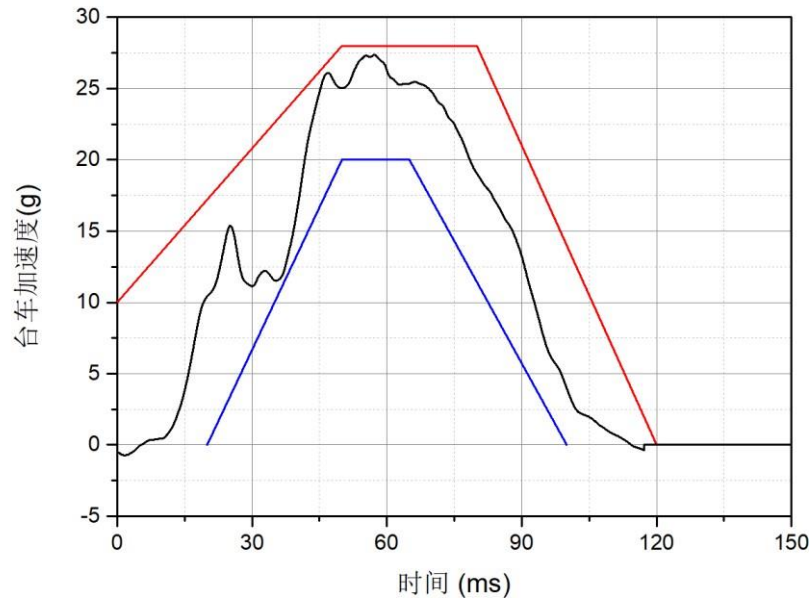


Dummy Q10, frontal impact, i-Size booster seat, non-integral, forward facing, with ISOFIX+top tether

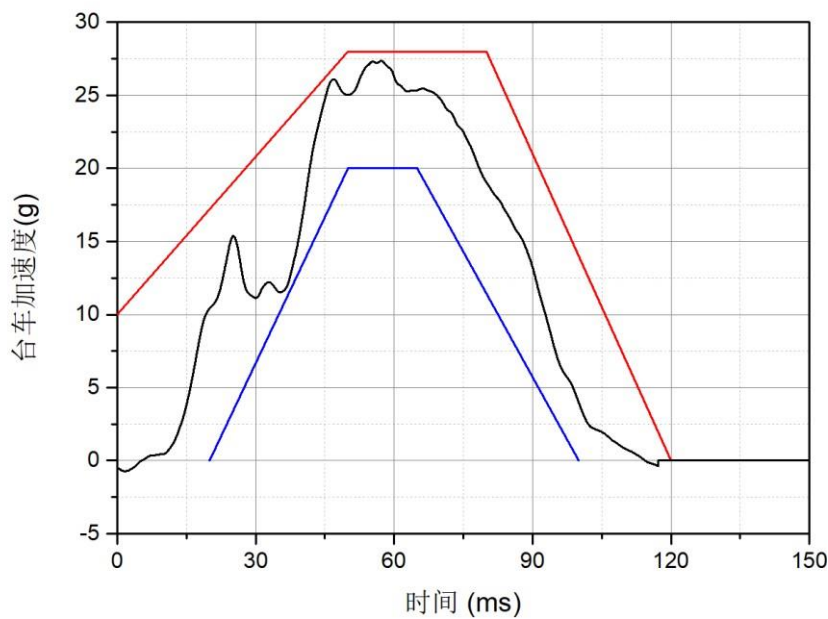




Dummy Q3, frontal impact, i-Size booster seat, non-integral, forward facing, with ISOFIX

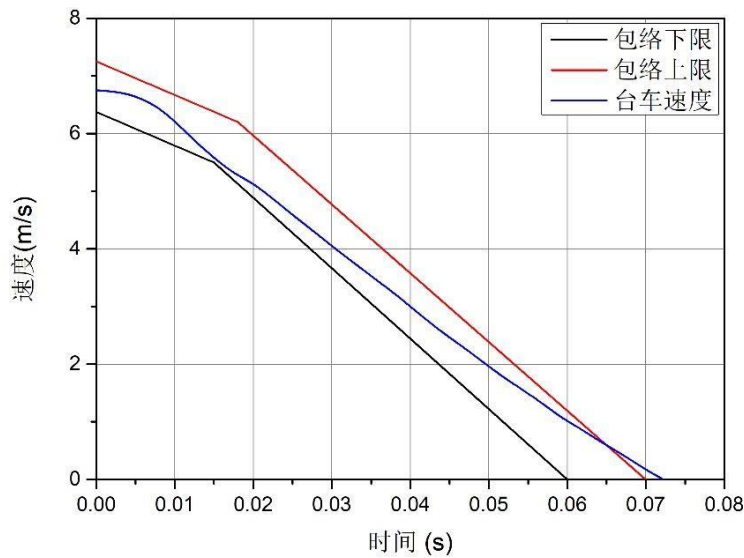


Dummy Q10, frontal impact, i-Size booster seat, non-integral, forward facing, without ISOFIX (mis use)

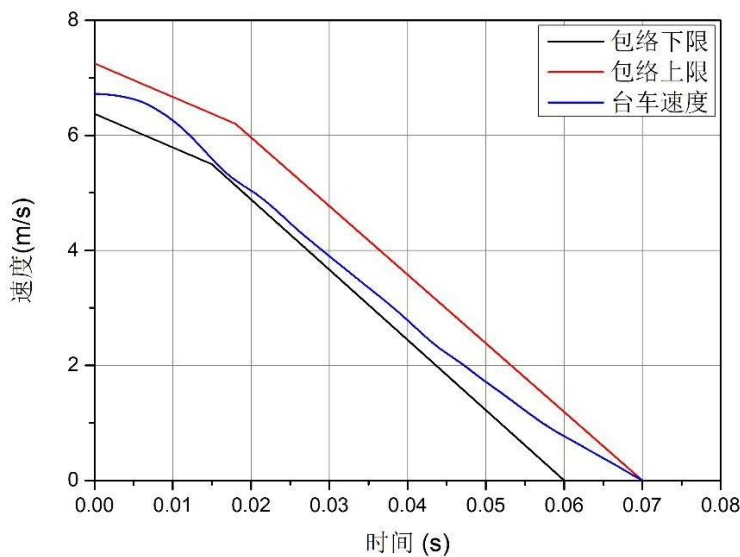




Dummy Q3, lateral impact, i-Size booster seat, non-integral, forward facing, with ISOFIX+top tether

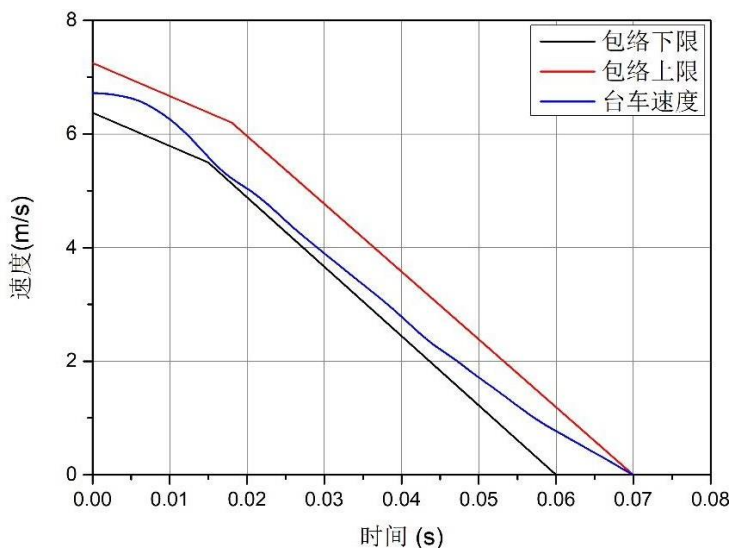


Dummy Q6, lateral impact, i-Size booster seat, non-integral, forward facing, with ISOFIX+top tether

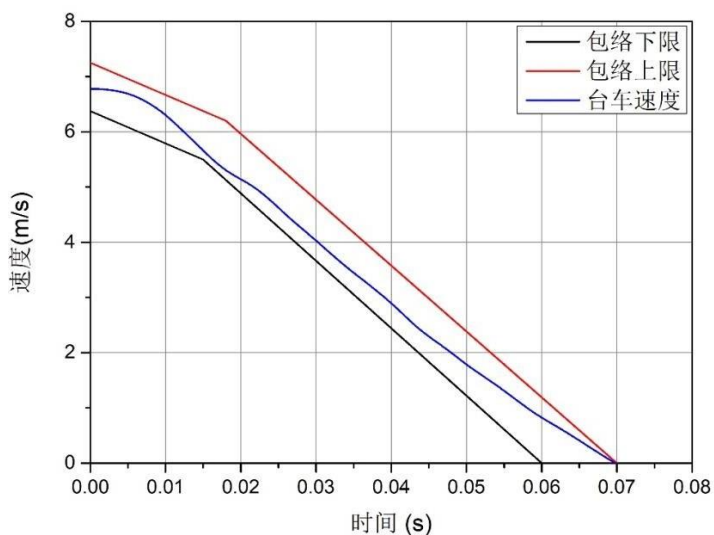




Dummy Q3, lateral impact, i-Size booster seat, non-integral, forward facing, with ISOFIX



Dummy Q6, lateral impact, i-Size booster seat, non-integral, forward facing, with ISOFIX





### Product Qualification Test

Dummy Q3, frontal impact, i-Size ECRS, integral, forward facing, with ISOFIX+top tether

