GRAND-DUCHÉ DE LUXEMBOURG

Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

SOCIÉTÉ NATIONALE DE
CERTIFICATION ET D'HOMOLOGATION
s.a.r.l.

Registre de Commerce: B 27180

L-5201 Sandweiler

Référence: E13*22R00*22R05*10247*00

Annexes: - Rapport technique
- Fiche de renseignements du constructeur

Sandweiler, le 17 novembre 2015

Communication concernant [2]:

Communication concerning [2]:

- **la délivrance d'une homologation**
  approval granted
- ~~**l'extension d'homologation**~~
  ~~approval extended~~
- ~~**le refus d'homologation**~~
  ~~approval refused~~
- ~~**le retrait d'homologation**~~
  ~~approval withdrawn~~
- ~~**l'arrêt définitif de la production**~~
  ~~production definitely discontinued~~

d'un type de casque de protection ~~sans~~ / avec / un / ~~plusieurs~~ / type(s) d'écran en application du Règlement N°22

of a type of protective helmet ~~without~~ / with / one / ~~more~~ / visor type(s) pursuant to regulation N°22

Homologation N°:
Approval number: E13*22R00*22R05*10247*00

Marque(s) d'homologation:
Approval mark(s):

Casque:
Helmet: E13
0510247/P-XXXX
FS-813

Ecran(s):
Visor(s): E13
0510142
FS-806

1. **Marque de fabrique ou de commerce:**
Trade mark: ZG-MS

Marque(s) de commerce:
Commercial mark(s): ZG-MS, FASEED, SHAFT

2. **Type:** FS-813

Version(s): FS-813, FS-813A

Dénomination(s) commerciale(s):
Commercial description(s): FS-813, ZG-813, SH-519, FS-813A, ZG-813A, SH-519W

Technischer Dienst • Typprüfstelle Fahrzeuge/Fahrzeugteile • TÜVRheinland C

3.	**Tailles:** Sizes:	XS 53-54, S 55-56, M 57-58, L 59-60, XL 61-62, XXL 63-64
4.	**Nom du fabricant:** Manufacturer's name:	Jiangyin City Zhegang Mould Plastic Co., Ltd.
5.	**Adresse du fabricant:** Address of manufacturer:	No. 203, Lu Hu West Rd., Huaxi Fifth Village, Huashi Town, Jiangyin City, Jiangsu Province P.R. China
6.	**Le cas échéant, nom de son représentant:** If applicable, name of manufacturer's representative:	not applicable
7.	**Adresse du représentant:** Address of manufacturer's representative:	not applicable
8.	**Description sommaire du casque:** Brief description of helmet:	The integral-faced helmet FS-813 is composed of ABS shell (Acrylonitrile-Butadiene-Styrene). The protective padding is made of one EPS (Expanded Poly Styrene) size liner, one EPS crown liner at the top area, two EPS side liners and one EPS chin liner. The adaptation to the different head sizes is done by different thickness of the size liner, and different thickness of the comfort padding.
9.	**Casque ~~dépourvu de protection maxillaire (J)~~ muni d'une protection maxillaire intégrale (P) ~~d'une protection maxillaire non intégrale (NP)~~ [2]:** Helmet ~~without lower face cover (J)~~ with protective lower face cover (P) ~~with non-protective lower face cover (NP)~~ [2]:	with protective lower face cover (P)
10.	**Type de l'écran ou des écrans:** Type of visor or visors:	FS-806
11.	**Description sommaire de l'écran ou des écrans:** Brief description of visor or visors:	clear visors, made of polycarbonate (PC) with hardened coating on the surface, and a thickness of 2 mm
12.	**Présenté à l'homologation le:** Submitted for approval on:	29.10.2015
13.	*Autorité déléguée:* *Assigned authority:*	*Société Nationale de Certification et d'Homologation L-5201 Sandweiler*
	Service technique chargé des essais d'homologation: Technical service responsible for conducting approval tests:	TÜV Rheinland Luxemburg GmbH 2a, Kalchesbruck L-1852 Luxembourg
14.	**Date du procès-verbal délivré par ce service:** Date of report issued by that service:	12.11.2015
15.	**Numéro du procès-verbal délivré par ce service:** Number of report issued by that service:	85-R22-440/15-00
16.	**Remarques:** Comments:	the helmet version FS-813A is equipped with an integrated sunvisor not tested according to item 6.15 of Regulation 22/05.
17.	**Homologation [2]:** Approval [2]:	granted / ~~extended~~ / ~~refused~~ / ~~withdrawn~~

18. **Lieu:** / Place: Sandweiler

19. **Date:** / Date: 17 novembre 2015

20. **Signature:** / Signature:

Pour le Département des Transports

Marco FELTES
Inspecteur Principal 1er en rang

Pour la SNCH

Claude LIESCH
Directeur

21. **Les documents suivants portant le numéro d'homologation indiqué ci-dessus peuvent être obtenus sur demande:** / The following documents, bearing the approval number shown above, are available on request: see: INDEX to TYPE-APPROVAL REPORT

Modifications faisant l'objet de la présente extension: / *Reason for extension:*

not applicable

(2) **Biffer les mentions inutiles.** / Strike out what does not apply.

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L-5201 Sandweiler

Référence: E13*22R00*22R05*10247*00

Annexes: - Rapport technique
- Fiche de renseignements du constructeur

Sandweiler, le 17 novembre 2015

INDEX DU DOSSIER D'HOMOLOGATION
INDEX TO TYPE-APPROVAL REPORT

	Numéro d'homologation: Approval number:	E13*22R00*22R05*10247*00
	Révision: Revision:	00
	Marque de fabrique ou de commerce: Trade name or mark:	ZG-MS, FASEED, SHAFT
	Type: Type:	FS-813
1.	**Procès-verbal d'essai:** Test report:	N° 85-R22-440/15-00
	- Test report: - List of modifications: - Technical information: - Test minutes:	Pages 1 to 4; Appendix 0 - Page 5; Appendix L - Page 6; Appendix 1 - Pages 7 to 17.
2.	**Dossier du constructeur:** Report of the manufacturer:	N° ZG-MS-FS-813-00
	- Index to the information folder:	Refer to contents of manufacturer's information document.
3.	**Autres documents annexés:** Other documents annexed:	not applicable
4.	**Date de délivrance de l'homologation initiale:** Date of issue of initial type approval:	17.11.2015
5.	**Date de la dernière délivrance de pages révisées:** Date of last issue of revised pages:	not applicable
6.	**Date de la dernière délivrance d'une homologation révisée:** Date of last extension:	not applicable

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TEST REPORT

according with ECE-Regulation

Protective helmets and their visors for drivers and passengers of motor cycles and mopeds

ECE-R22

including all amendments

Amend. 05, Suppl. 2

Previously granted
ECE – approval : ---

Structure of report :

0. General
1. Test object(s)
2. Test minutes
3. Comments to test object
4. Appendices
5. Statement of conformity

0. General

0.1.	Trade name or mark	:	ZG-MS
	Commercial mark(s)	:	ZG-MS, FASEED, SHAFT
0.2.	Type	:	FS-813
	Commercial description(s)	:	FS-813, ZG-813, SH-519, FS-813A, ZG-813A, SH-519W
	Version(s)	:	FS-813, FS-813A
0.3.	Helmet category	:	P (acc. 5.1.4.1.2.1 of ECE-R22.05)
0.4.	Name and address of the manufacturer	:	Jiangyin City Zhegang Mould Plastic Co., Ltd. No. 203, Lu Hu West Rd., Huaxi Fifth Village, Huashi Town, Jiangyin City, Jiangsu Province, P.R. China
	of the authorized representative	:	Not applicable
0.5.	Number of information folder	:	ZG-MS-FS-813-00
	Date	:	October 20, 2015
	Revision status	:	not applicable

1. Test object(s)

1.1.	Description		
	Identification number	:	Prototype, marking after granting ECE-approval
	Type	:	FS-813
1.1.1.	Structure of the helmet	:	The integral-faced helmet FS-813 is composed of ABS shell (Acrylonitrile-Butadiene-Styrene). The protective padding is made of one EPS (Expanded Poly Styrene) size liner, one EPS crown liner at the top area, two EPS side liners and one EPS chin liner. The adoption to the different head sizes is done by different thickness of the size liner, and different thickness of the comfort padding. The helmet version of FS-813A is equipped with an integrated sunvisor not tested according to item 6.15 of Regulation 22/05.
1.1.2.	Structure of visor	:	Clear visors, made of Polycarbonate (PC) with hardened coating on the surface, and a thickness of 2.0 mm

1.1.3	List of parts	:	See information document of the manufacturer
1.1.4	Location of the marking	:	The ECE-label is sewed on the chinstrap.
1.1.5.	Helmet sizes	:	XS 53-54, S 55-56, M 57-58, L 59-60, XL 61-62, XXL 63-64
1.1.6.	material of the outer shell	:	ABS (Acrylonitrile-Butadiene-Styrene)
1.1.7.	material of the visor	:	Polycarbonate (PC)
1.1.8.	marking of the visor	:	Approval number FS-806
1.2.	Remarks	:	Without

2. Test minutes

2.1.	Test equipment	:	The measurement equipment used was in compliance with the test requirements.
2.2.	Test results		
2.2.1.	Summary of test results	:	See test minutes Appendix 1
2.3.	General information about the tests		
2.3.1.	Test object received on	:	October 29, 2015
2.3.2.	Test date	:	October 29, 2015
2.3.3.	Test site	:	TÜV Rheinland (Guangdong) Ltd. Guangzhou Helmet Laboratory Room 103, Building A, No. 11 Jingye 3rd Street, Yushu Industrial Park, Guangzhou Science City, Guangzhou 510663, P.R. China
2.3.4.	Remark	:	The results of the test refer exclusively to the object(s) mentioned at point 1 of this report.

3. Comments to the test object : ---

4. Appendices

0 List of modifications

L Technical description of type and communication concerning the ECE-approval

1 Test minutes : Appendix 1

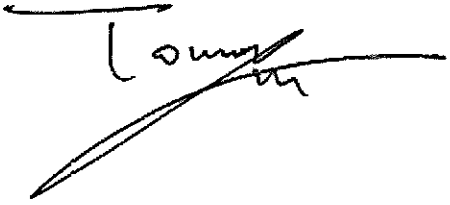
Information folder : ZG-MS-FS-813-00 (21 pages)

5. Statement of conformity

The information folder and the type described there comply with the requirements in the above mentioned directive/regulation.

The test report comprises - including appendices 0 to 1 – the pages 1 to 17 and shall not be reproduced except in full without the written approval of the testing laboratory.

Engineering centre Shanghai, November 12, 2015
TYY / JWP



M.S. Tony Yan
Expert Technical Service

List of modifications

Appendix 0

Correction of	:	---
Modification of	:	---
Addition of	:	---
Deletion of	:	---

Technical description of type and communication concerning the ECE-approval

Appendix L

1.	**Trade mark**	:	ZG-MS
	Commercial mark(s)	:	ZG-MS, FASEED, SHAFT
2.	**Type**	:	FS-813
	Commercial description(s)	:	FS-813, ZG-813, SH-519, FS-813A, ZG-813A, SH-519W
	Version(s)	:	FS-813, FS-813A
3.	**Sizes**	:	XS 53-54, S 55-56, M 57-58, L 59-60, XL 61-62 XXL 63-64
4.	**Manufacturer's name**	:	Jiangyin City Zhegang Mould Plastic Co., Ltd.
5.	**Address**	:	No. 203, Lu Hu West Rd., Huaxi Fifth Village, Huashi Town, Jiangyin City, Jiangsu Province, P.R. China
6.	**If applicable, name of manufacturer's representative**	:	Not applicable
7.	**Address**		Not applicable
8.	**Brief description of helmet**	:	The integral-faced helmet FS-813 is composed of ABS shell (Acrylonitrile-Butadiene-Styrene). The protective padding is made of one EPS (Expanded Poly Styrene) size liner, one EPS crown liner at the top area, two EPS side liners and one EPS chin liner. The adoption to the different head sizes is done by different thickness of the size liner, and different thickness of the comfort padding. The helmet version of FS-813A is equipped with an integrated sunvisor not tested according to item 6.15 of Regulation 22/05.
9.	**Helmet**	:	With protective lower face cover (P)
10.	**Type of visor or visors**	:	FS-806
11.	**Brief description of visor or visors**	:	Clear visors, made of Polycarbonate (PC) with hardened coating on the surface, and a thickness of 2.0 mm
12.	**Submitted for approval on**	:	October 29, 2015
14.	**Date of report issued by that service**	:	November 12, 2015

1. General

Appendix 1

1.1.	Make	:	ZG-MS
	Commercial mark(s)	:	ZG-MS, FASEED, SHAFT
1.2.	Type	:	FS-813
	Commercial description(s)	:	FS-813, ZG-813, SH-519, FS-813A, ZG-813A, SH-519W
	Version(s)	:	FS-813, FS-813A
	Technical description helmet	:	The integral-faced helmet FS-813 is composed of ABS shell (Acrylonitrile-Butadiene-Styrene). The protective padding is made of one EPS (Expanded Poly Styrene) size liner, one EPS crown liner at the top area, two EPS side liners and one EPS chin liner. The adoption to the different head sizes is done by different thickness of the size liner, and different thickness of the comfort padding. The helmet version of FS-813A is equipped with an integrated sunvisor not tested according to item 6.15 of Regulation 22/05.
	Technical description visor	:	Clear visors, made of Polycarbonate (PC) with hardened coating on the surface, and a thickness of 2.0 mm
1.3.	Name and address of manufacturer	:	Jiangyin City Zhegang Mould Plastic Co., Ltd. No. 203, Lu Hu West Rd., Huaxi Fifth Village, Huashi Town, Jiangyin City, Jiangsu Province, P.R. China
1.4.	Name and address of manufacturer's authorized representative	:	Not applicable

2. General arrangement of the helmet

2.1.	General requirements	:	The requirements of the covered zones are fulfilled for all helmet-sizes. There are projections of the outer shell, greater than 2 mm. All external projections have a radius ≥ 1 mm, respectively ≥ 2 mm for external projections which are more than 2 mm above the outer shell. The here described parts are rounded and konvex to the outer shell surface. The outer shell is smooth in the meaning of the requirement. Under a load of 150 N the width of the chin strap is ≥ 20 mm. The chin strap is covered with an additional comfort padding.

The helmet is equipped with automatic buckle. The free end of the chin strap is adjusted. Means are provided to prevent the retention system being completely undone.

Manufacturer-information about size and weight are located on the outer shell by adhesive label(s). Additional consumer information, in accordance to the ECE-R22, is given by the owners manual, which is enclosed to the offered helmet.

The helmet is not equipped with retro reflective parts in accordance to the item 6.16 of the ECE-R22.

2.2. Shock-absorption-tests : The determined values of acceleration were below the limit of 275g at an impact speed of 7,5 m/s (esp. 5,5 m/s at point S). The HIC-values were below the limit of 2400.

- Shock-absorption test results of the version FS-813:

helmet size : XS 53-54
test-head-size : 54
anvil : Flat (Helm. 1), Kerbstone (Helm. 2)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 1	B	198	1463
Low Temp. (-20°C)	XR	199	1567
	P	216	2309
	R	199	1964
	S	118	394
Helmet 2	B	160	1132
High Temp. (+50°C)	XR	163	1325
	P	180	1272
	R	121	766
	S	---	---

helmet size : S 55-56
test-head-size : 54
anvil : Flat (Helm. 3), Kerbstone (Helm. 4)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 3	B	190	1571
Low Temp. (-20°C)	XR	225	1803
	P	194	2078
	R	166	1437
	S	125	459
Helmet 4	B	143	1079
High Temp. (+50°C)	XR	156	1239
	P	148	1233
	R	123	824
	S	---	---

helmet size : M 57-58
test-head-size : 57
anvil : Flat (Helm. 5), Kerbstone (Helm. 6)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 5	B	169	1363
Low Temp. (-20°C)	XR	214	1725
	P	211	2184
	R	182	1514
	S	134	440
Helmet 6	B	197	1193
High Temp. (+50°C)	XR	189	1298
	P	160	1167
	R	110	761
	S	---	---

helmet size : L 59-60
test-head-size :60
anvil :Flat (Helm. 7), Kerbstone (Helm. 8)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 7	B	188	1461
Low Temp. (-20°C)	XR	255	2042
	P	216	2186
	R	201	1705
	S	180	626
Helmet 8	B	148	1003
High Temp. (+50°C)	XR	218	1380
	P	202	1329
	R	137	985
	S	---	---

helmet size : XL 61-62
test-head-size :62
anvil :Flat (Helm. 9), Kerbstone (Helm. 10)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 9	B	179	1347
Low Temp. (-20°C)	XR	235	1855
	P	205	2008
	R	194	1463
	S	166	544
Helmet 10	B	160	975
High Temp. (+50°C)	XR	193	1236
	P	186	1204
	R	127	889
	S	---	---

helmet size : XL 61-62
test-head-size : 62
anvil : Flat (Helm. 11), Kerbstone (Helm. 12)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 11	B	188	1417
Ambient	XL	200	1497
	P	205	1850
	R	179	1560
	S	---	---
Helmet 12	B	141	952
Ambient	XL	197	1179
	P	174	1202
	R	126	902
	S	---	---

- Shock-absorption test results of the version FS-813A:

helmet size : XS 53-54
test-head-size : 54
anvil : Flat (Helm. 1), Kerbstone (Helm. 2)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 1	B	198	1599
Low Temp. (-20°C)	XR	225	1937
	P	211	2274
	R	202	1761
	S	120	384
Helmet 2	B	164	1176
High Temp. (+50°C)	XR	132	1045
	P	141	1167
	R	174	923
	S	---	---

helmet size : S 55-56
test-head-size : 54
anvil : Flat (Helm. 3), Kerbstone (Helm. 4)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 3	B	205	1634
Low Temp. (-20°C)	XR	210	1731
	P	216	2068
	R	190	1756
	S	104	282
Helmet 4	B	150	1086
High Temp. (+50°C)	XR	131	1027
	P	155	1216
	R	143	964
	S	---	---

helmet size : M 57-58
test-head-size : 57
anvil : Flat (Helm. 5), Kerbstone (Helm. 6)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 5	B	189	1407
Low Temp. (-20°C)	XR	213	1729
	P	196	2112
	R	187	1643
	S	106	317
Helmet 6	B	210	1239
High Temp. (+50°C)	XR	152	1039
	P	175	1251
	R	128	851
	S	---	---

helmet size : L 59-60
test-head-size :60
anvil :Flat (Helm. 7), Kerbstone (Helm. 8)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 7	B	179	1314
Low Temp. (-20°C)	XR	240	1919
	P	221	2039
	R	201	1400
	S	150	449
Helmet 8	B	216	1271
High Temp. (+50°C)	XR	202	1267
	P	219	1491
	R	152	1100
	S	---	---

helmet size : XL 61-62
test-head-size :62
anvil :Flat (Helm. 9), Kerbstone (Helm. 10)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 9	B	206	1677
Low Temp. (-20°C)	XR	253	1968
	P	224	2128
	R	223	1664
	S	200	672
Helmet 10	B	264	1333
High Temp. (+50°C)	XR	266	1343
	P	236	1451
	R	220	1280
	S	---	---

helmet size : XL 61-62
test-head-size :62
anvil :Flat (Helm. 11), Kerbstone (Helm. 12)

Conditioning	Impact point	Res. acceleration [g]	HIC [-]
Helmet 11	B	193	1365
Ambient	XL	209	1557
	P	222	1909
	R	205	1636
	S	---	---
Helmet 12	B	156	1119
Ambient	XL	213	1257
	P	169	1253
	R	193	1338
	S	---	---

2.3. Dynamical Test of the retention system

Helmet size	XS 53-54 (for version FS-813)	Limits
Test head size	54	
Dynamic movement (mm)	28.1	≤ 35 mm
Permanent movement after 2 min. (mm)	9.9	≤ 25 mm

Helmet size	XS 53-54 (for version FS-813A)	Limits
Test head size	54	
Dynamic movement (mm)	30.8	≤ 35 mm
Permanent movement after 2 min. (mm)	12.5	≤ 25 mm

2.4. Test of field of vision

Helmet size	XS 53-54 (for version FS-813)	Limits
Test head size	54	
Vertical angle of vision (°)		
Upwards	7	≥ 7°
Downwards	45	≥ 45°
Horizontal angle of vision (°)	212	≥ 210°

Helmet size	XS 53-54 (for version FS-813A)	Limits
Test head size	54	
Vertical angle of vision (°)		
Upwards	7	≥ 7°
Downwards	47	≥ 45°
Horizontal angle of vision (°)	214	≥ 210°

2.5. Rigidity-test

Helmet size	XL 61-62 (for version FS-813)	Limits
Deformation under load (mm)		
Along the longitudinal axis	13.0	≤ 40 mm
Along the transversal axis	10.0	≤ 40 mm
Permanent deformation atfer 5 min		
Along the longitudinal axis	4.0	≤ 15 mm
Along the transversal axis	3.0	≤ 15 mm

Helmet size	XL 61-62 (for version FS-813A)	Limits
Deformation under load (mm)		
Along the longitudinal axis	19.0	≤ 40 mm
Along the transversal axis	12.0	≤ 40 mm
Permanent deformation atfer 5 min		
Along the longitudinal axis	6.0	≤ 15 mm
Along the transversal axis	4.0	≤ 15 mm

2.6. Retention (detaching) test

Helmet size	XS 53-54 (for version FS-813; with FS-01 buckle)	Limits
Test head size	54	
Movement of the reference line (°)	21	≤ 30°

Helmet size	XS 53-54 (for version FS-813A; with FS-01 buckle)	Limits
Test head size	54	
Movement of the reference line (°)	25	≤ 30°

2.7. Chin strap and buckle test

1.	Operation force of the automatic buckle according 7.11.2. Measured at static load of 150 N	
Helmet size	XS 53-54	Limits
Test head size	54	
Openning force (N)	FS-01 buckle < 30 N	≤ 30 N
2.	Resistance of the automatic buckle according 7.11.2. The load of 2000 N at the automatic buckles made no fracture or disengage. After the test the automatic buckle was still be capable of operation.	
3.	Microslip-test of the chin strap according 7.9	
	FS-01 buckle = 3.5 mm	≤ 10 mm
4.	Abrasion test the chin strap according 7.10. Not necessary in acc. with 7.10 (a), because the movement of the chin strap after 500 cycles was less than 5 mm	

2.8. Shear assessment test for projections or irregularities in the outer surface according 7.4.2

Helmet size	XL 61-62	
Test head size	62	
	Test with positive result at the following points of the outer shell:	
1.	Front air vent sliding tangential at the projection	Positive

2.9. Test for friction assessment in acc. with 7.4.2

	The requirements are fulfilled.

2.10. Visor tests

1. Mechanical characteristics in acc. to 7.8.2

Helmet size	XL 61-62
Test head size	62
Conditioning of the visor	Low temp. (-20 °C)
Visor test piece 1	positive, no penetration, no sharp splinter
Visor test piece 2	positive, no penetration, no sharp splinter
Visor test piece 3	positive, no penetration, no sharp splinter

2. Optical characteristics and scratch resistance in acc. to 7.8.3
Refer to visor type approval E13*22R00*22R05*10142*01

Jiangyin City Zhegang Mould Plastic Co., Ltd.

Information folder No. ZG-MS-FS-813-00

Application date: October 20, 2015

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E13*22R00*22R05*10247*00
Société Nationale de Certification et d'Homologation
L-5201 SANDWEILER (Luxembourg)
Organisme accrédité OLAS EN 45011
Accreditation N° 5/001 (Portée communiquée sur demande)

Jiangyin City Zhegang Mould Plastic Co., Ltd.

Information folder No. ZG-MS-FS-813-00

Application date: October 20, 2015

INFORMATION DOCUMENT FOR TYPE-APPROVAL OF PROTECTIVE HELMETS ~~AND / OR[1] OF THEIR VISORS~~ FOR DRIVERS AND PASSENGERS OF MOTOR CYCLES AND MOPEDS

1.	Make (trade name or mark of the manufacturer)	: ZG-MS
	Commercial mark(s)	: ZG-MS, FASEED, SHAFT
2.	Type	: FS-813
	Commercial description(s)	: FS-813, ZG-813, SH-519; FS-813A, ZG-813A, SH-519W
	Version	: FS-813, FS-813A
3.	Sizes	: XS53-54, S 55-56, M 57-58, L 59-60, XL 61-62, XXL63-64
4.	Name of the manufacturer	: Jiangyin City Zhegang Mould Plastic Co., Ltd.
5.	Address of the manufacturer	: No. 203, Lu Hu West Rd., Huaxi Fifth Village, Huashi Town, Jiangyin City, Jiangsu Province, P.R. China
6.	Name of the manufacturer's representative	: not applicable
7.	Address of the manufacturer's representative	not applicable
	Brief description of the helmet and / ~~or~~[1]	: Protective helmet equipped with visor for drivers and passengers of mopeds and motorcycles
	~~Brief description of visor~~	

NOTE:
[1] strike trough where not applicable

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Jiangyin City Zhegang Mould Plastic Co., Ltd.

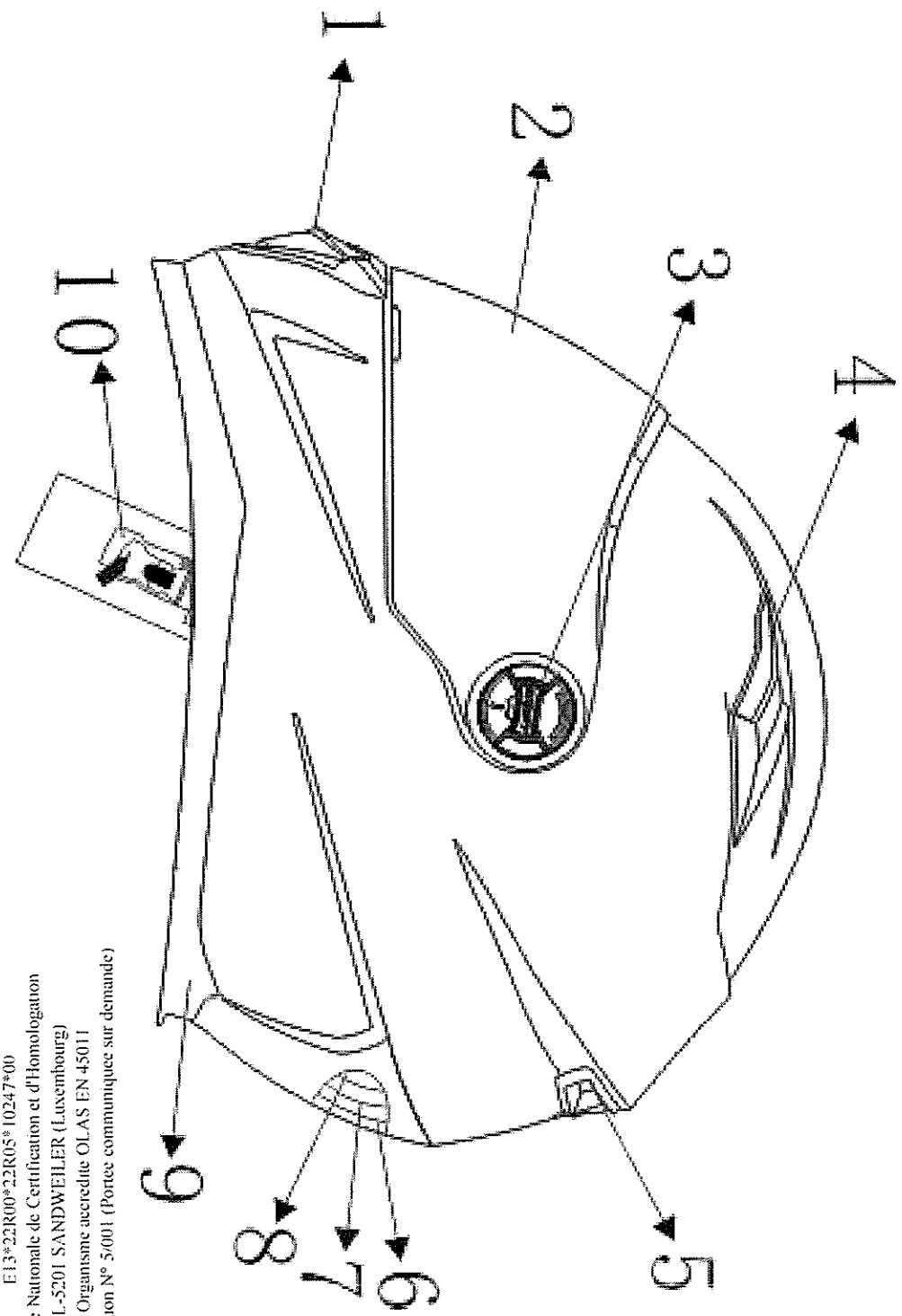
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ADDITIONAL INFORMATION

~~Helmet without lower face cover (J)~~ / with protective lower face cover (P) ~~/ with non protective lower face cover (NP)~~	:
Type of visor or visors	: FS-806
~~Types of helmet to which the visor may be fitted~~	:
Name and address of assembly plant	: Jiangyin City Zhegang Mould Plastic Co., Ltd. No. 203, Lu Hu West Rd., Huaxi Fifth Village, Huashi Town, Jiangsu Province, P.R. China
Applicable regulation	: ECE-R22, 05 series of amendments

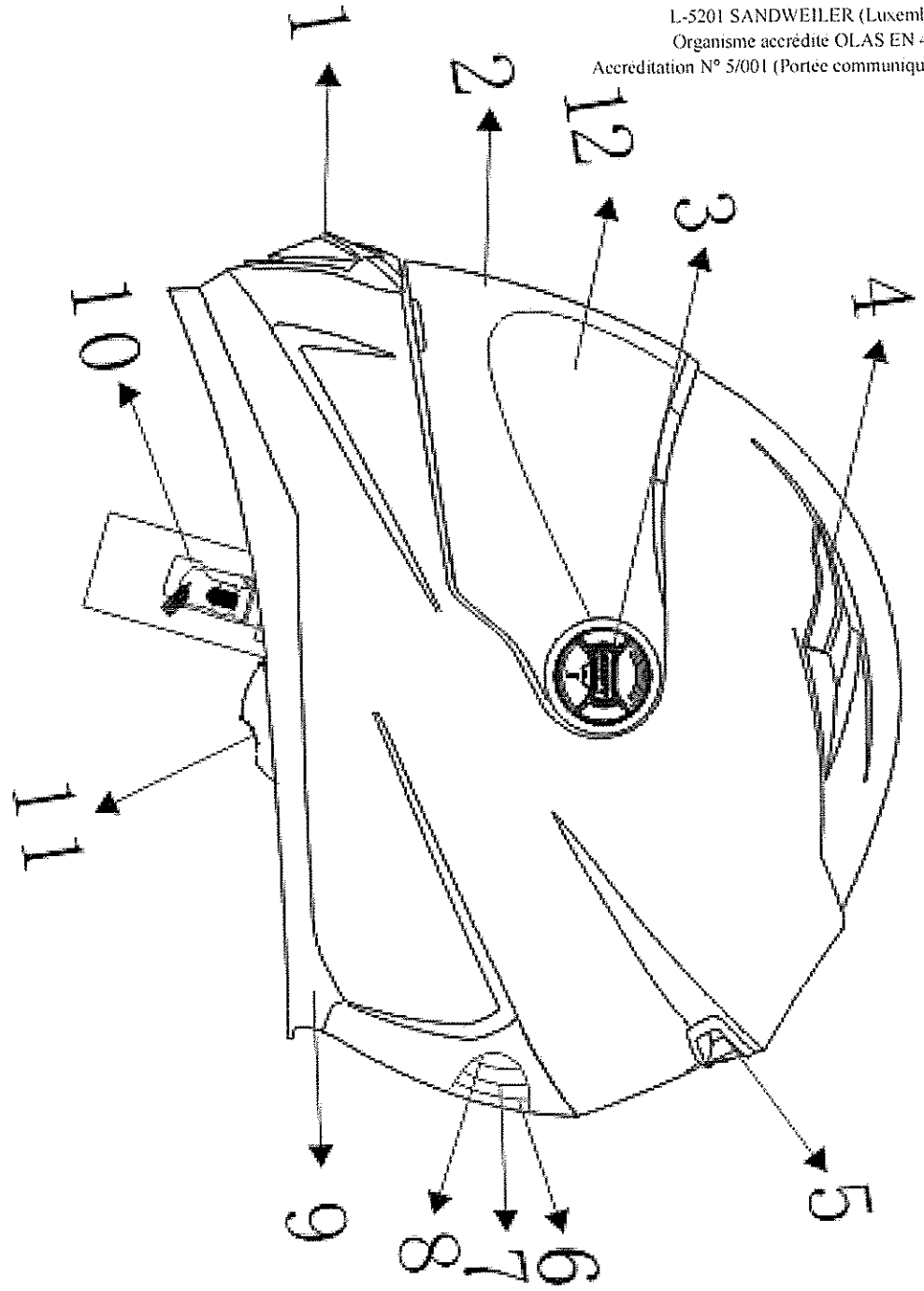
NOTE:
[1] strike trough where not applicable



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DRW.	FS-813-01	Assembly Drawing (for version of FS-813)

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DRW.	FS-813-02	Assembly Drawing (for version of FS-813A)

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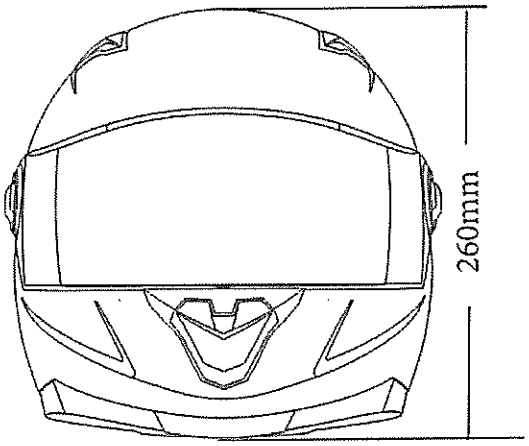
Part No.	Subject or name	Material
1	Mouth ventilation	PC
2	Visor	PC
3	Ratchet	ABS
4	Top ventilation	PC
5	Rear ventilation	PC
6	Outer shell	ABS
7	Protective padding	EPS
8	Comfort padding	Velvet
9	Rubber strip	PVC
10	Retention system	Nylon
11	Twist switch (for version of FS-813A)	ABS
12	Sun visor (for version of FS-813A)	PC
		Material list of parts

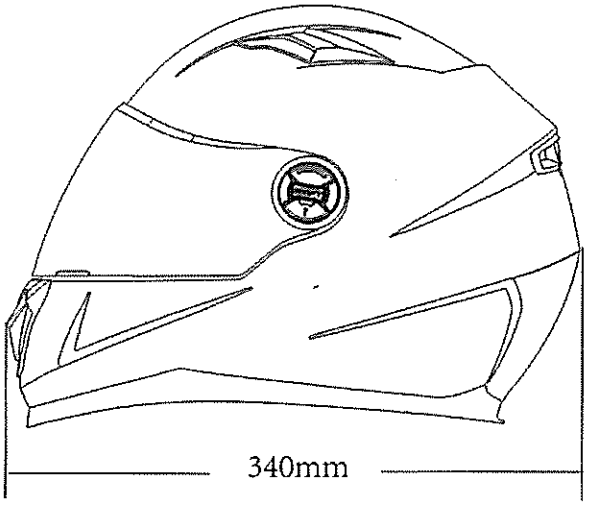
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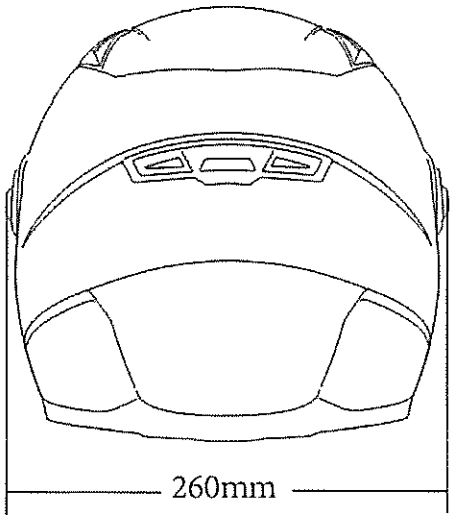
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DRW.	FS-813-03	Helmet section view

Jiangyin City Zhegang Mould Plastic Co., Ltd.

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Impact absorption material thickness in millimeter, SHELL					
Size	**Section B-Point**	**Section P-Point**	**Section R-Point**	**Section X-Point**	**Lower Face cover**
XS	3.8	3.8	3.8	3.8	3.8
S	3.8	3.8	3.8	3.8	3.8
M	3.8	3.8	3.8	3.8	3.8
L	3.8	3.8	3.8	3.8	3.8
XL	3.8	3.8	3.8	3.8	3.8
XXL	3.8	3.8	3.8	3.8	3.8

Impact absorption material thickness in millimeter, LINER (for version of FS-813)				
Size	**Section B-Point**	**Section P-Point**	**Section R-Point**	**Section X-Point**
XS	33	32	35	30
S	33	32	35	30
M	33	32	35	30
L	34	31	46	30
XL	34	31	46	30
XXL	34	31	46	30

Impact absorption material thickness in millimeter, LINER (for version of FS-813A)				
Size	**Section B-Point**	**Section P-Point**	**Section R-Point**	**Section X-Point**
XS	30	38	32	30
S	30	38	32	30
M	30	38	32	30
L	30	37	29	28
XL	30	37	29	28
XXL	30	37	29	28

Impact absorption material thickness in millimeter, LINING					
Size	**Section B-Point**	**Section P-Point**	**Section R-Point**	**Section X-Point**	**Side Part Lining**
XS	12	10	12	45	12
S	12	10	12	40	12
M	10	10	10	35	10
L	12	10	12	30	12
XL	10	10	10	25	10
XXL	8	10	8	20	8

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Dimension and weight

1. Dimension of the shell:

SIZE	Length (mm)	Width (mm)	Height (mm)
XS-XXL	340	260	260

2. Total weight of the helmet:

Size	Weight (g) (for version FS-813)	Weight (g) (for version FS-813A)	Tolerance (g)
XS	1450	1500	± 50
S	1450	1500	± 50
M	1450	1500	± 50
L	1450	1500	± 50
XL	1450	1500	± 50
XXL	1450	1500	± 50

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3. Specific gravity of the impact absorption liner

For version of FS-813:

Size	Specific gravity of size liner (kg/m³)	Specific gravity of side liner (kg/m³)	Specific gravity of crown liner (kg/m³)
XS	40	45	23
S	40	45	23
M	40	45	23
L	50	65	35
XL	50	65	35
XXL	50	65	35

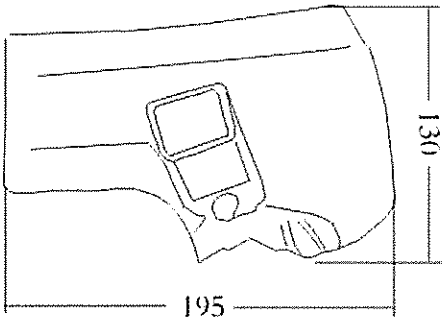
For version of FS-813A:

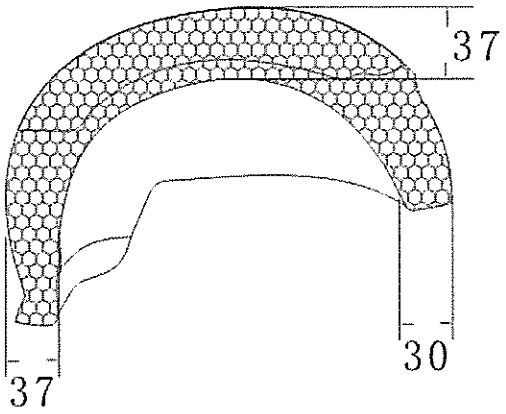
Size	Specific gravity of size liner (kg/m³)	Specific gravity of side liner (kg/m³)	Specific gravity of crown liner (kg/m³)
XS	45	50	23
S	45	50	23
M	45	50	23
L	60	65	40
XL	60	65	40
XXL	60	65	40

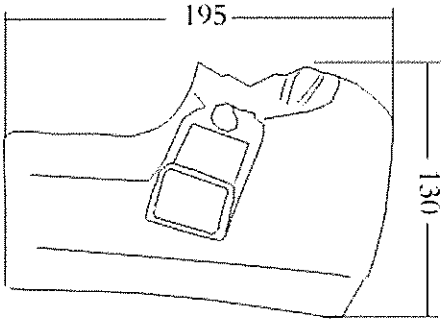
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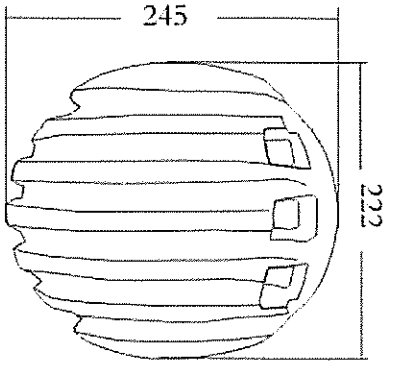
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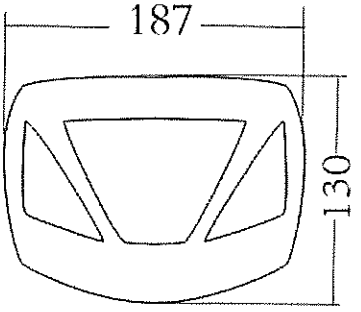
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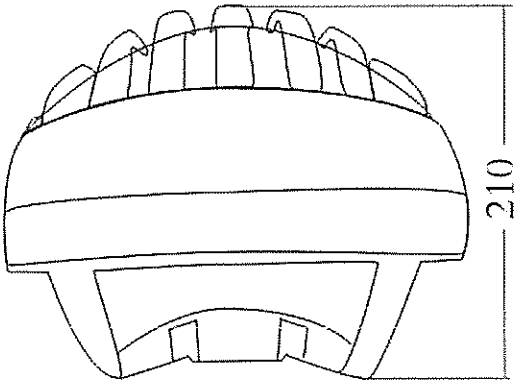


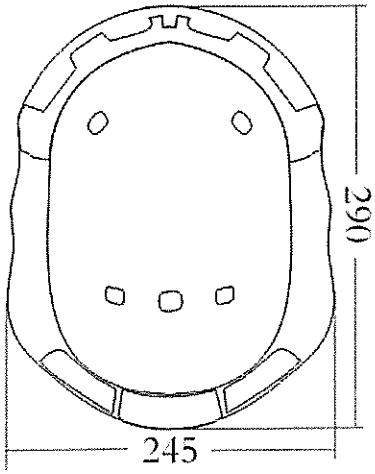












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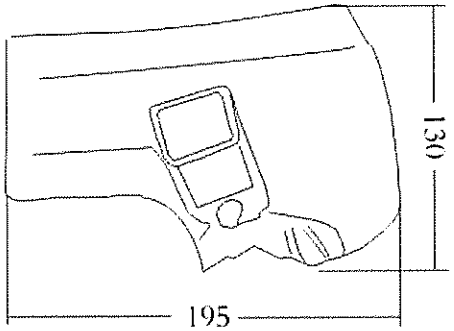
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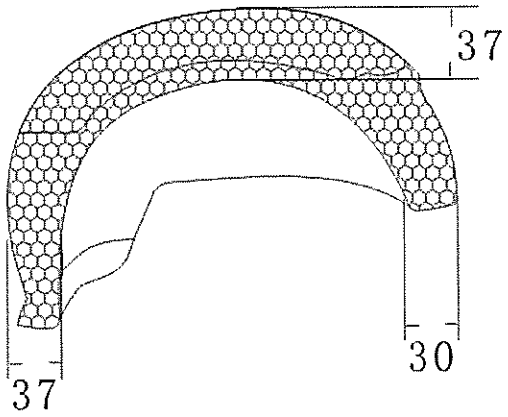
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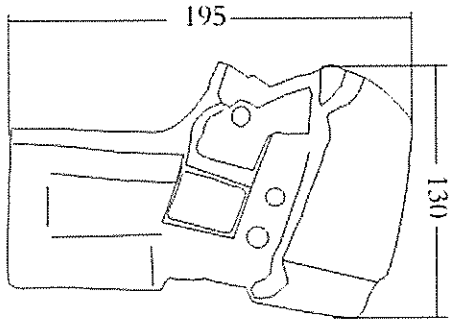
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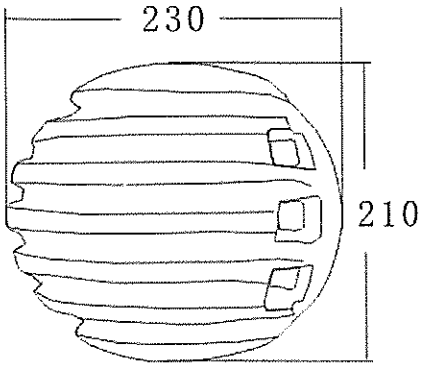
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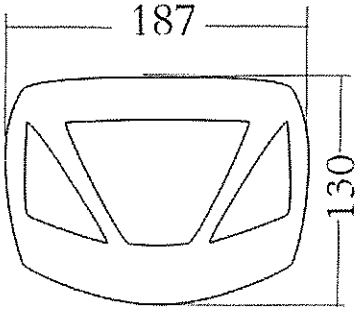
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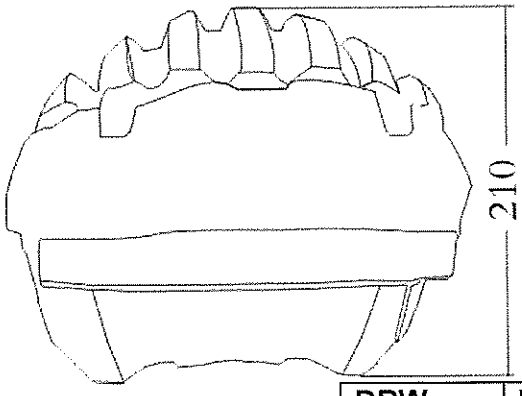


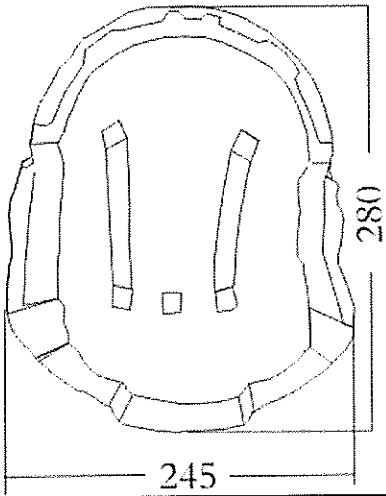












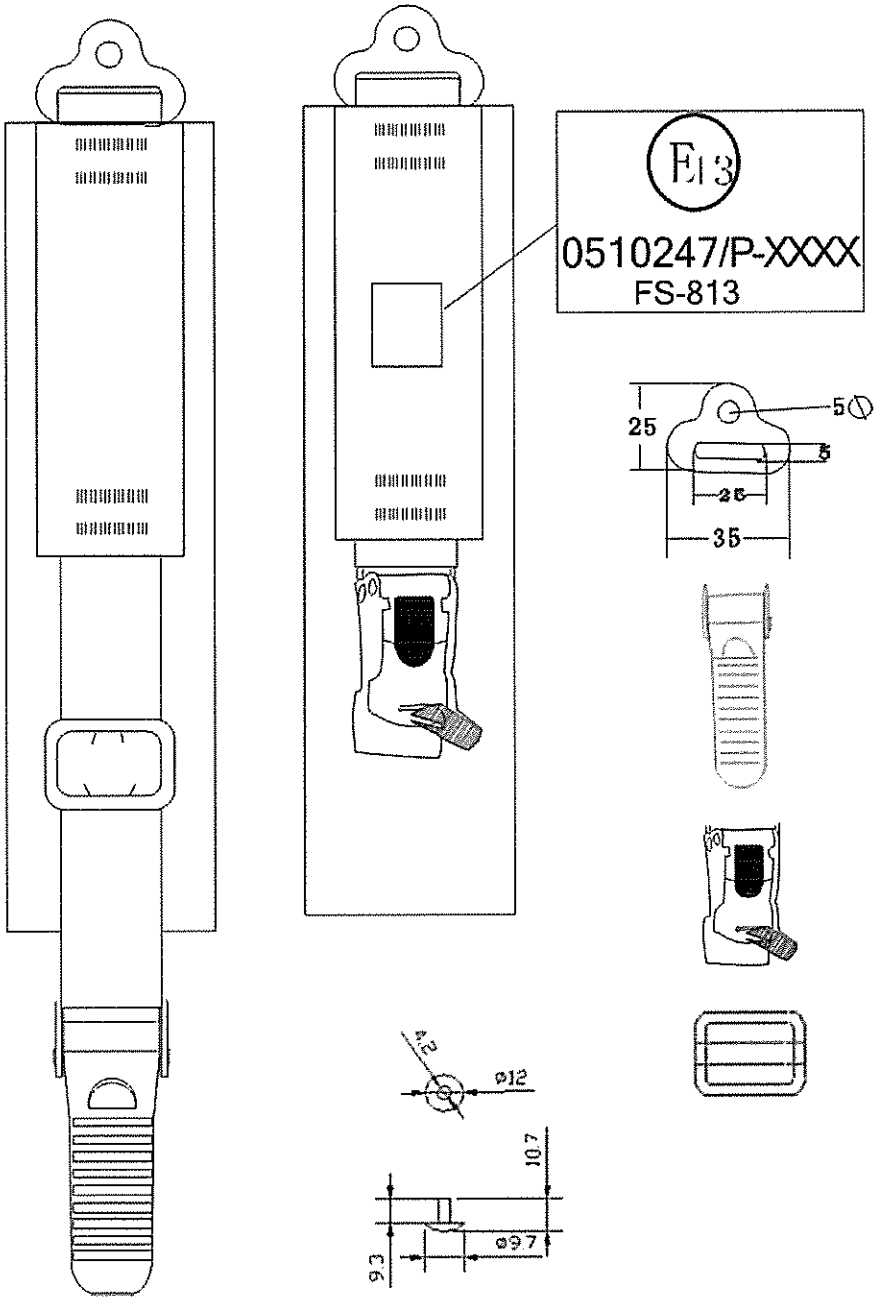
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DRW.	FS-813-05	EPS details (for version of FS-813A)

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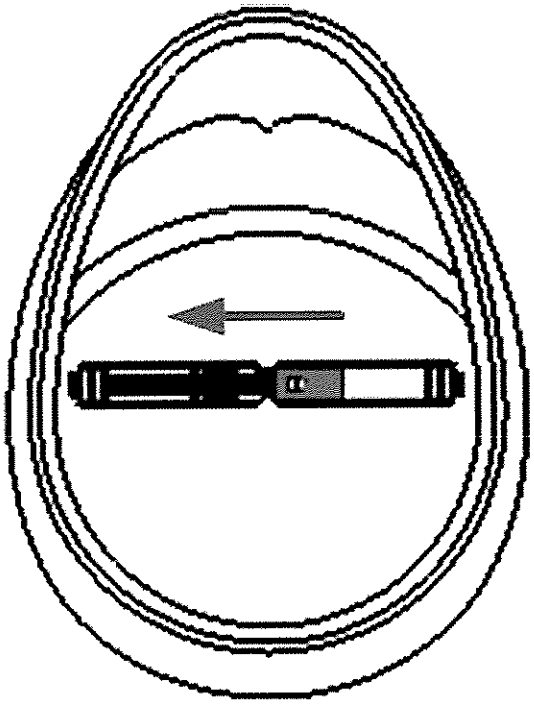
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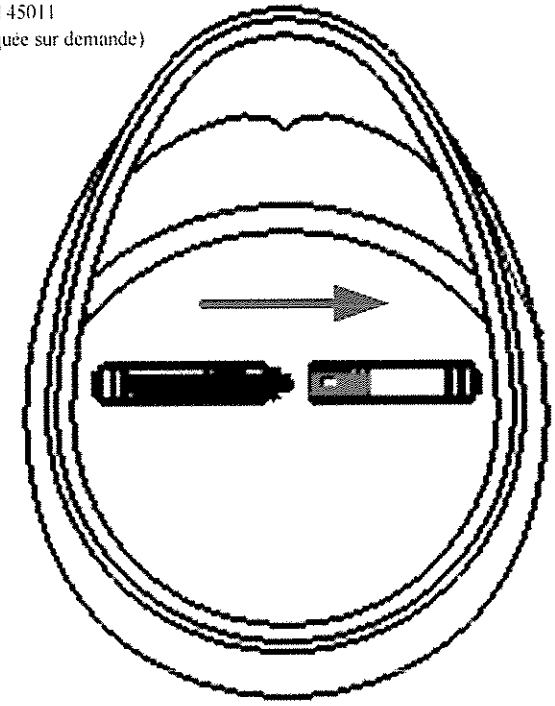
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Part No.	Subject or name		Material
1	Buckle		Iron
2	Sewing Line		Nylon
3	Chin strap		Nylon
	DRW.	**FS-813-06**	**Retention system (with FS-01 buckle)**

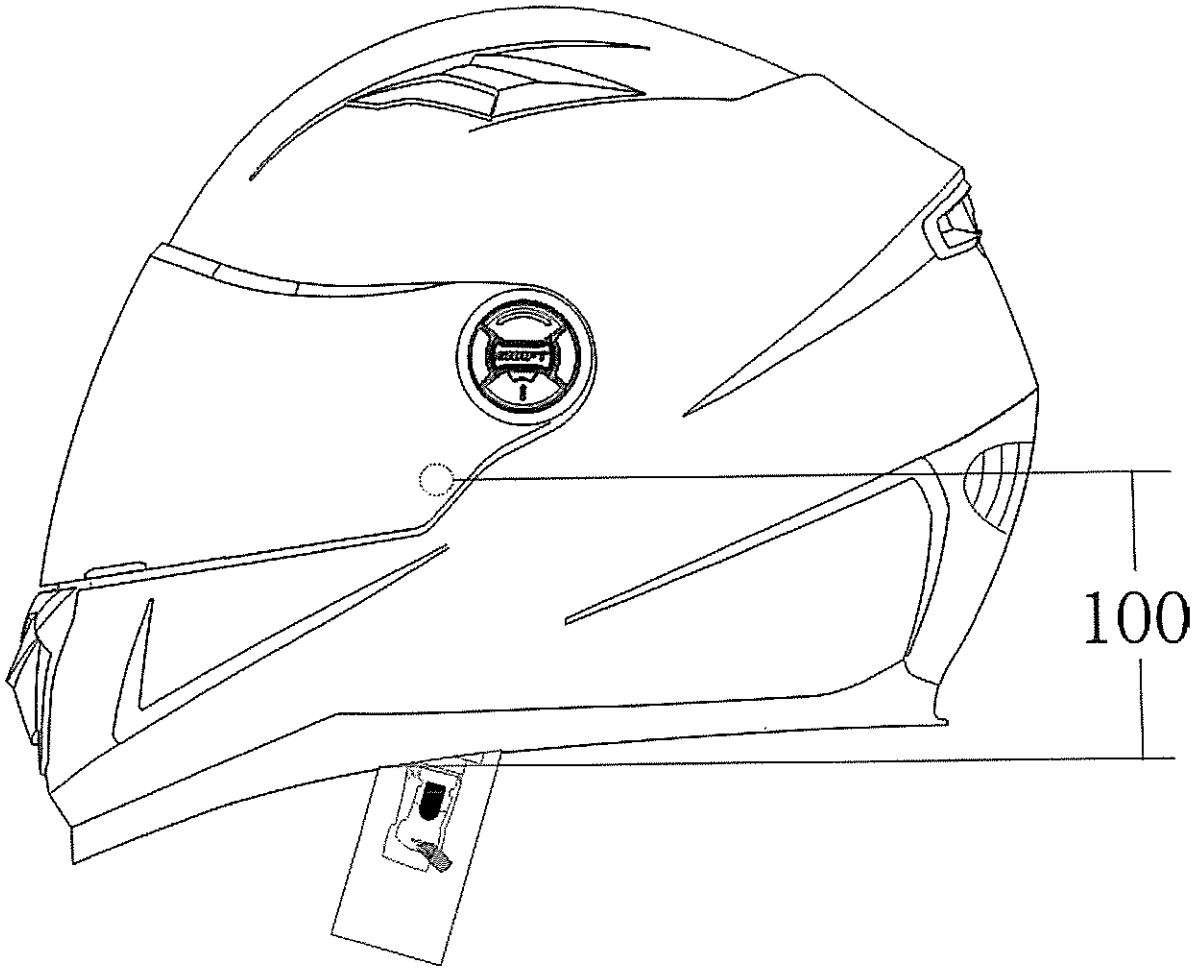
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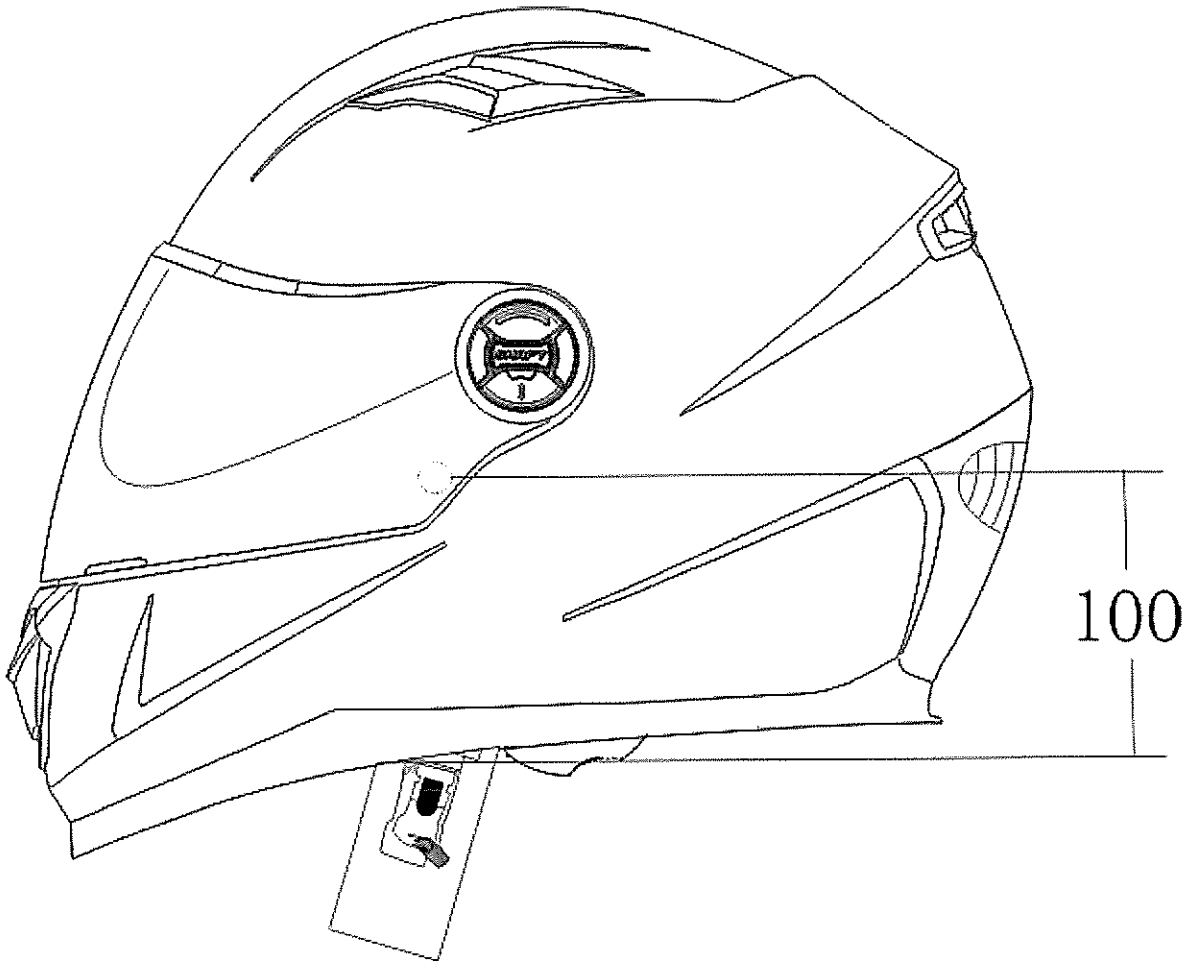


DRW.	FS-813-07	Retention system, chin strap operation



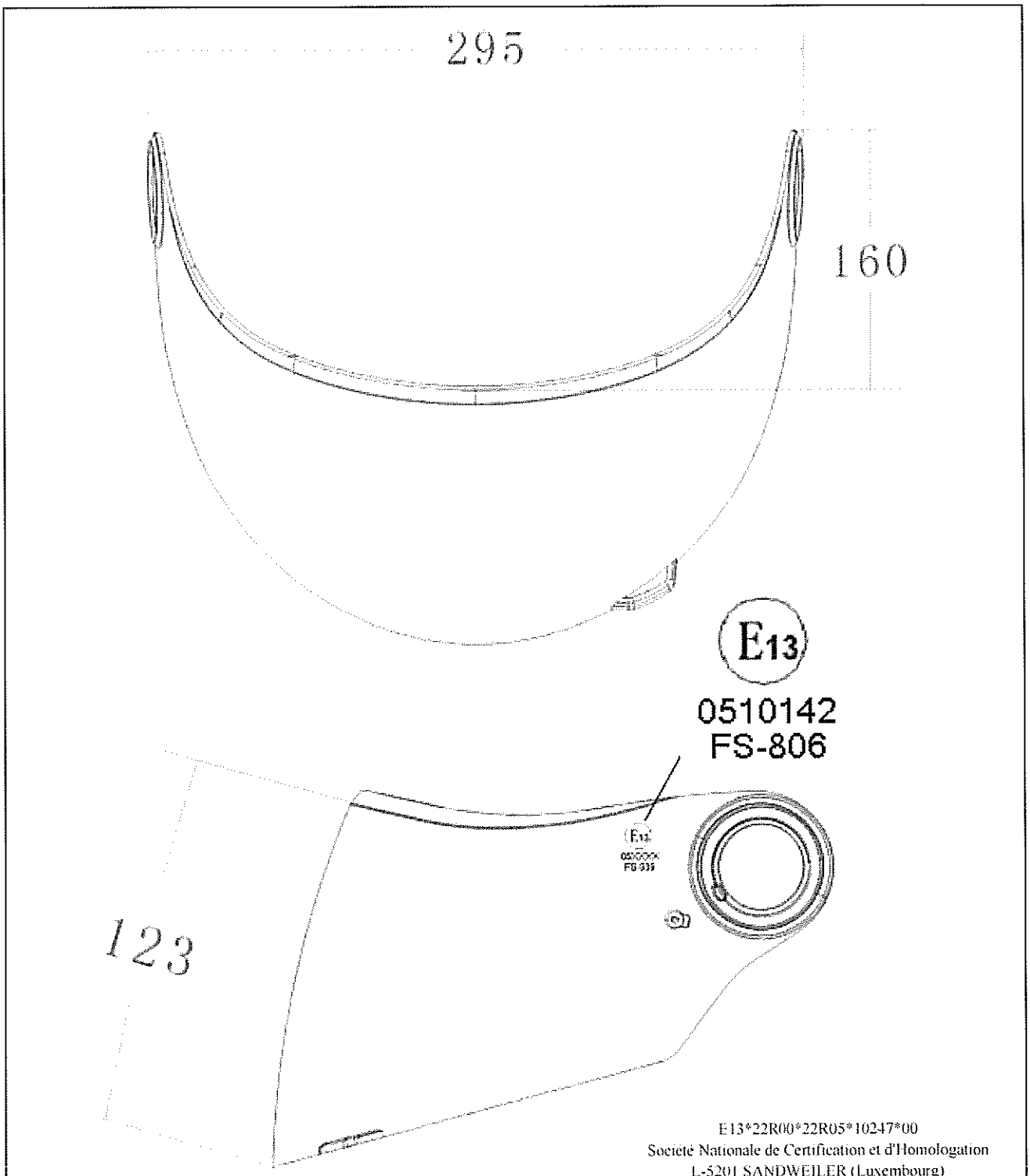
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DRW.	FS-813-08	Retention system, position details (for version of FS-813)



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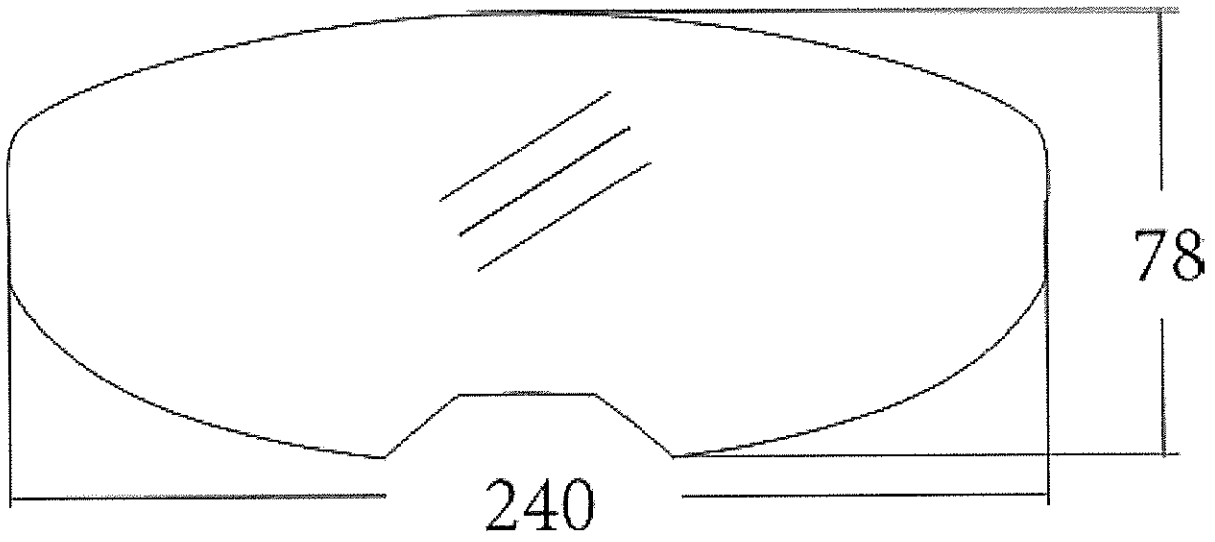
DRW.	FS-813-09	Retention system, position details (for version of FS-813A)



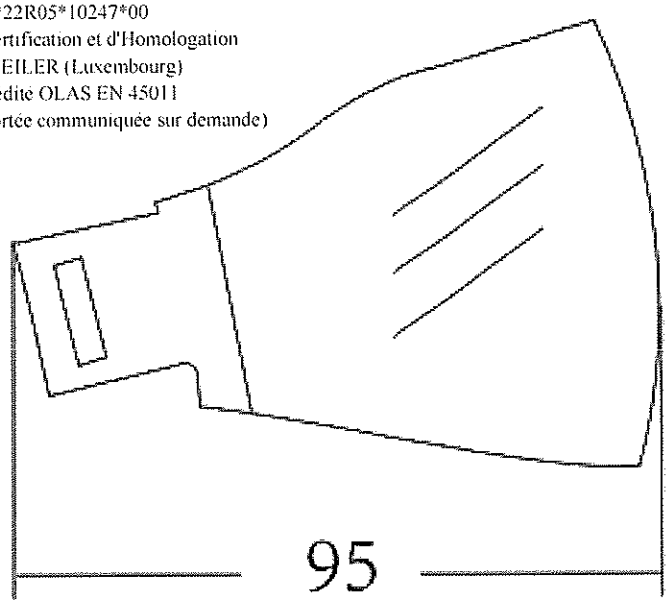
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Remark: the thickness of the visor is 2.0 mm

DRW.	FS-813-10	Drawing and details for visor



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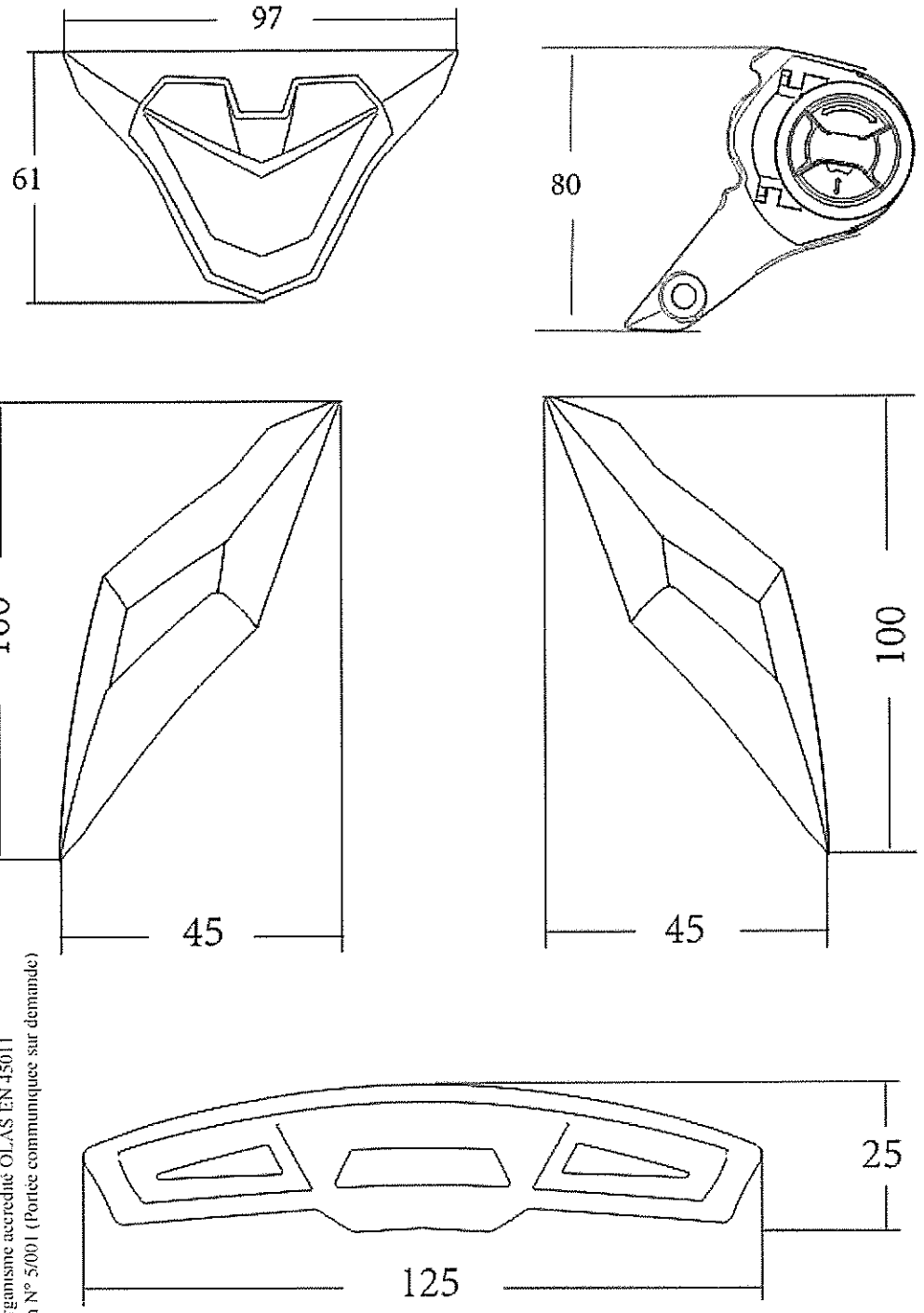


DRW.	**FS-813-11**	**Drawing and details for sun visor (for version of FS-813A)**

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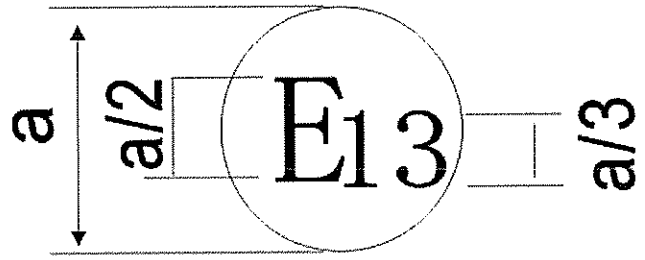
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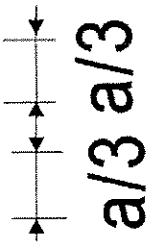
DRW.	FS-813-12	Accessories

Approval mark of helmet



0510247/P-XXXX

FS-813



Remark: a =8 mm

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DRW.	FS-813-13	Approval marking(s)









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DRW.	**FS-813-14**	**Helmet assembly pictures (for version of FS-813)**

Jiangyin City Zhegang Mould Plastic Co., Ltd.

Information folder No. ZG-MS-FS-813-00

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DRW.	FS-813-15	Helmet assembly pictures (for version of FS-813A)

	Type	FS-813
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