Technical report

Manufacturer	NEXXPRO Fabrica de Capacetes, SA Zona Industrial de Amoreira da Gândara - Lote N° 11 P-3780-024 Amoreira da Gândara - Anadia Portugal
Manufacturer's representative	NEXXPRO Fabrica de Capacetes, SA Zona Industrial de Amoreira da Gândara - Lote N° 11 P-3780-024 Amoreira da Gândara - Anadia Portugal
Date of technical report	14/11/2024
Object under test	Helmet
Make	NEXX
Type	X.Lifetour

Commercialised sizes	XS	S	M	L	XL	XXL	XXXL
	53-54	55-56	57-58	59-60	61-62	63-64	65-66

Test method	Test according to UN(ECE)-R22 "Uniform provisions concerning the approval of protective helmets and their visors for drivers and passagers of motor cycles and mopeds"
Test frame	Extension of type approval

Release of the report by

Ky-Tho Ly
Head of laboratory

The test laboratory having carried out testing services which are object of that technical report, is accredited by Belac for performing these testing services according to EN ISO/IEC 17025. The test report shall be reproduced and published in full by the client only. It shall however be reproduced partially with the written permission of the testing laboratory only.

ISO 17025
110-TEST

1. Modification made to the helmet

The data in the technical description mentioned in this paragraph is delivered by the manufacturer and is not verified by the laboratory.

Addition of a peak and o spoiler.

2. General information

The sampling is not an integral part of the laboratory's prestations.

Receipt of object(s) under test	11/10/2024
Amount	7
Testing location	Vias institute Chaussée de Haecht 1405 B - 1130 BRUSSELS
Testing date	08/11/2024
Ambient temperature	23 °C

3. Appendices

Appendix 1	Measurement protocol

4. Test results

The test result refer exclusively to the allocated test samples and in the report described object under test.
The uncertainties are given for a confidence level of 95 %. The statement of conformity appearing in this report do not take into account measurement uncertainty.
The object under test fulfill the requirements of UN(ECE) R22.06.
Detailed test results are shown in Appendix 1.

5. Note

One helmet (sample 7), selected among the samples presented for the type approval tests, will be conserved as a proof sample in the laboratory.

The data resulting from the tests is treated confidentially. However, within a legal framework, these could be transmitted to third parties.

If you are not satisfied with the service, you can submit a complaint using the form on www.vias.be. A controller will send you a confirmation of receipt and will respond to your question within the solution or rectify the error if it is justified.

Measurement protocol — Appendix 1

6. GENERAL SPECIFICATIONS *(Regulation no. 22.06, § 6, 4, 14)*

6.1.	Construction of the helmet *(6.1, 6.2, 6.3)*	PASS
6.2.	Assured protection *(6.4)*	PASS
6.3.	Comfort, form of the helmet *(6.5)*	PASS
6.4.	Exterior of the helmet, protrusions *(6.6, 6.7)*	PASS
6.5.	Interior of the helmet *(6.8)*	PASS
6.6.	Helmet assembly *(6.9)*	PASS
6.7.	Helmet retention *(6.10, 6.11)*	PASS
6.8.	Lower face cover *(6.12)*	PASS
6.9.	Used materials *(6.13)*	PASS
6.10.	Helmet deformation or breakage *(6.14)*	PASS
6.11.	Peripherical vision *(6.15)*	PASS
6.12.	Visors *(6.16)*	N.A.
6.13.	Inscriptions and markings *(4)*	PASS
6.14.	Indications meant for the users *(14)*	PASS

7. TESTS *(Regulation n°22.06, § 7)*

7.1. SHOCK ABSORPTION TESTS *(7.3, 7.13)*

Uncertainty :
Speed : 7.5 m/s : 0.044 m/s

6.0 m/s : 0.052 m/s

Acceleration : B, X, P, R : 4.4 %

S : 5.2 %

7.1.1. Linear Impact tests (7.3)

Tested size : XXXL Head form : 625

Helmet	Conditionning	Anvil	Impact point	Impact speed (m/s)	Max. Acc. (g) (≤ 275g)	HIC (≤ 2400)	Registration
01	50°C	Kerbstone	B	7,55	125	828	0424061.010
			X	7,49	126	778	0424061.011
			P	7,55	213	1569	0424061.012
			R	7,62	160	1021	0424061.013
02	-10°C	Flat	B	7,52	161	1125	0424061.001
			X	7,49	223	1867	0424061.002
			P	7,59	231	1996	0424061.003
			R	7,55	174	1296	0424061.004
			S	6,14	98	363	0424061.005
03	25°C/50% Hum.	Flat	B	7,59	183	1390	0424061.006
			X	7,59	216	1793	0424061.007
			P	7,59	216	1898	0424061.008
			R	7,62	197	1632	0424061.009
04	25°C/50% Hum.	Kerbstone	B	7,55	126	814	0424061.014
			X	7,52	170	1217	0424061.015
			P	7,62	265	1885	0424061.016
			R	7,59	170	1236	0424061.017
05	UV+H2O	Flat	B	7,65	199	1534	0424061.018
			X	7,52	214	1785	0424061.019
			P	7,62	222	1905	0424061.020
			R	7,52	194	1540	0424061.021

7.1.2. Low energy impact tests (7.3) - N.A.

Tested size : Head form :

Helmet	Conditionning	Anvil	Impact point	Impact speed (m/s)	Max. Acc. (g) (≤ 180g)	HIC (≤ 1300)	Registration
	25°C/50% Hum.	Flat	B X P R				

7.1.3. High energy impact tests (7.3) - N.A.

Tested size : Head form :

Helmet	Conditionning	Anvil	Impact point	Impact speed (m/s)	Max. Acc. (g) (≤ 275g)	HIC (≤ 2880)	Registration
	25°C/50% Hum.	Flat	B X P R				

7.1.4. Impact tests on extra point (7.3) - N.A.

Tested size : Head form :

Helmet	Conditionning	Anvil	Impact point	Impact speed (m/s)	Max. Acc. (g) (≤ 275g)	HIC (≤ 2400)	Registration
	25°C/50% Hum.	45°L	BXR BXPL RXPL RXR				
	25°C/50% Hum.	Flat	BXL BXPR RXPR RXL				

7.1.5. Oblique impact tests (7.14) - N.A.

Tested size : Head form :

Helmet	Conditionning	Anvil	Impact point	Impact speed (m/s)	Rot.Peak (r/s^2) (< 10400)	BrIC (< 0.78)	Registration
	25°C/50% Hum.	45°	FLR Rear LL				
	25°C/50% Hum.	45°	Front RLR				

7.2. RIGIDITY TESTS *(7.5)* - N.A.

Uncertainty : 10%

7.2.1. Transversal rigidity

Helmet	Size	Maximum deformation (≤ 40 mm)	Permanent deformation (≤ 15 mm)
	XXL		
	L		
	M		
	S		

7.2.2. Longitudinal rigidity

Helmet	Size	Maximum deformation (≤ 40 mm)	Permanent deformation (≤ 15 mm)
	XXL		
	L		
	M		
	S		

7.3. DYNAMIC TEST OF THE RETENTION SYSTEM (7.6) - N.A.

Uncertainty : Dyn. Displ. : 6.5% Residual dsipl. : 12%

Helmet	Size	Hed form	Registration	Dynamic displacement (≤ 35 mm)	Residual displacement (≤ 25 mm)
	XXL				
	L				
	M				
	S				

7.4. RETENTION TEST - N.A.

7.4.1. Roll off (7.7)

Uncertainty : 4.3 %

Helmet	Size	Hed form	Static load angle (≤ 30°)	Measured angle (≤ 30°)
	XL			
	L			
	M			
	XXS			

7.4.2. Test for projections of the category P/J with movable lower face cover (7.4.3.)

Helmet	Size	Hed form	Conclusion
	XL		
	L		
	M		
	XXS		

7.5. TEST FOR PROJECTIONS AND SURFACE FRICTION (7.4)

Tested size : M Head form : 575

7.5.1. Test of projections PASS

7.5.2. Test of outer surface PASS

7.6. VISOR TESTS (7.8)

Visor
Make : NEXX
Type : VS006 Approval ref. : E6-060067

Type : VS007 Approval ref. : E6-060068

The test results of the mechanical characteristics, the optical qualities and the scratch resistance of visors are conform to the prescriptions.

7.7. TESTS OF THE RETENTION SYSTEM (7.9, 7.10, 7.11) - N.A.

Retention system
Make :
Type :

7.7.1 Micro-slip test of the chin strap
Uncertainty : 0,30
Total slippage (≤ 10 mm) :

7.7.2 Test for abrasion resistance of the chin strap if the micro-slip ≥ 5 mm
Uncertainty : 0,15
Traction force of breaking (> 3 kN) :

7.7.3 Tests of retention systems relying on quick-release mechanisms

Inadvertent release by pression
Ease of release
Uncertainty : 0,60
Opening force (≤ 30 N) :

Durability of quick-release mechanisms