



TULIP GROUP 1 BUCKLE

Europe ECE R44 / ECE R129



Introducing the TULIP Group 1 Buckle, the first buckle to be launched by 2M Child Safety.

The Brand in any business is always important. In this highly competitive market we are creating not only a new company, but a new business model. While we establish 2M Child Safety as a viable alternative to existing suppliers, we are already planning our next aims.



The Trademark will be proudly displayed on every product we release, so that our customers (and eventually consumers) will recognize our range, and know at a glance the product is not only safe but innovative.



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Innovation drives all aspects of the new company. Our aim is to challenge many older established concepts of Child Safety by working closely with market leaders in the Car Seat Industry. Together we can bring a revolution.

Safety is always the most important aspect. 2M Child Safety continually test and monitor production through our in-house quality facilities to ensure products constantly meet the buckle requirements, as stated in the stringent regulatory standard ECE 44 R44, ECE R129 and new Chinese standards. All of our products are pre-tested in Europe and China to ensure they pass all the required standards **BEFORE** you put them on your seats.



Consumer Benefits will also be a major focus. All our designs will be attractive and compact, with an audible click for confirmed locking and positive spring ejected separation for easy operation.



Worldwide Sourcing of the same product is here. 2M will always be a European company and that will never change. Not only our product range is available in Europe and China, but also our design & production capabilities. We aim to dual produce our complete range, to ensure we can offer immediate delivery at competitive prices in Europe and Asia.



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Internal Quality Test

Release Unloaded: A buckle which has not previously been subjected to a load shall be used for this test. The force needed to open the buckle when it is not under load shall be in the range of 40 - 60 N.

Equipment used: Force Gauge "MECMESIN"
Range 0 - 500 N
Resolution: 0.1 N

Results: Please find results attached on page 5.

Static Strength Test: A harness buckle of mass group 1, 2 and 3 shall withstand 10.000N.

Equipment used: Universal Machine
Range 0 - 10000 N
Resolution: 0.002 N

Test Device: In-house made, according to ECE R44

Testing: Buckles tested until failure/ Speed test: 100 mm/min.

Results: Please find results attached on page 5.

5,000 Operations Test: The buckle shall be capable of withstanding repeated operation and shall, before the dynamic test, undergo a test comprising 5,000 opening and closing cycles under normal conditions for use.

Test Device: In-house made, according to ECE R44

Results: Please find results attached on page 5.

Release Under Load: A Child Restraint having already undergone both the 5,000 Operations and the Dynamic tests shall be used for this test.

The force required to open the buckle shall not exceed 80 Nw.

Test Device: In-house made, according to ECE R44

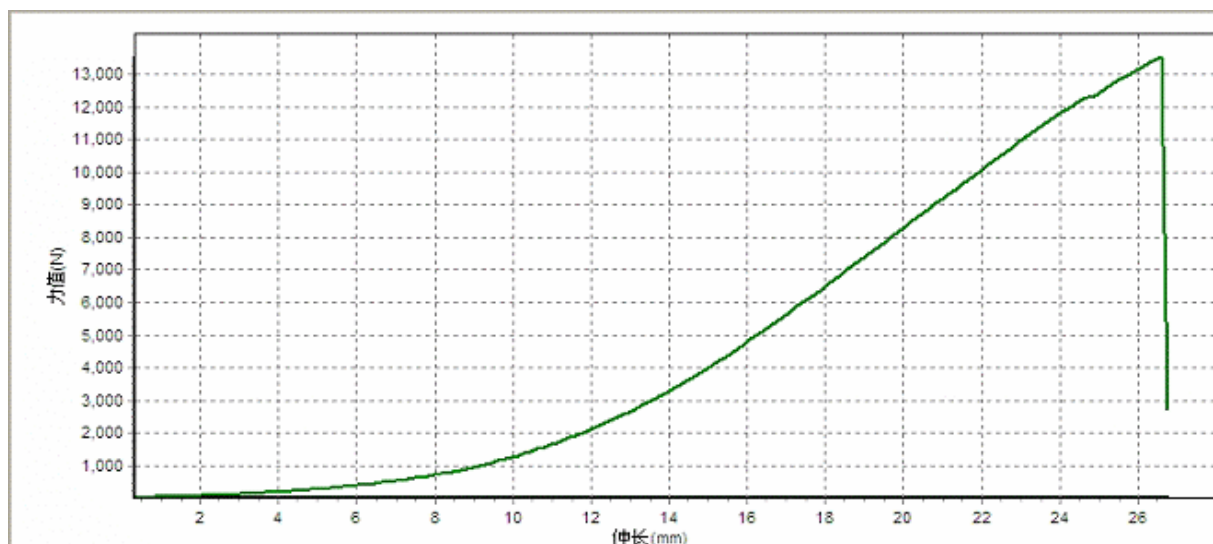
Testing: Parts used for this test have been submitted to the 5,000 operations test but not to the dynamic test.

Results: Please find results attached on page 5.

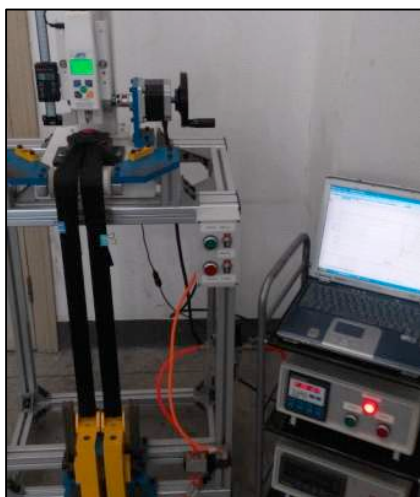
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Tensile Results

序号	最大力值 (N)	延伸率 (%)	拉伸强度 (Mpa)	断裂强度 (Mpa)	断裂伸长率 (%)	弹性模量	定伸1 (Mpa)	定伸2 (mpa)	定伸3 (Mpa)	定伸4 (Mpa)	定伸5 (Mpa)
1	13,563.5	531.85	4,375.35	886.95	535.25	150.43	93.15	408.60	1,280.252	688.30	4,019.4
平均值	13,563.	531.85	4,375.3	886.95	535.25	150.43	93.15	408.60	1,280.2	2,688.3	4,019.4
中 值	13,563	531.85	4,375.3	886.95	535.25	150.43	93.15	408.60	1,280.2	2,688.3	4,019.
标准差	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00



TeeChart Pro AX v5 Evaluation version. ©2001 Steema Software SL





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QC report

Product	Tulip	Brand name	2M		
catalogue	SAMPLE <input type="checkbox"/> MASS PRODUCTION <input checked="" type="checkbox"/>	ORDER	Tonis		
QTY	300只	Batch number	SL201507001	发货日期	
standard	ECER44				
序	item	regulation	results		
1	outlook	Must be clean	OK		
2	Single lock	Should not lock when insert single tongue plate	OK		
3	duration	≥5000次	OK		
4	Open force	≥40N≤80N	43-48N		
5	loaded	≤80N	60-70N		
6	Pulling test	≥10KN	OK (refer to 1360#)		
7	Loaded 200N opening force	≤80N	60-70N		
8	Pulling test	≥10KN	OK (refer to 1363#)		
备注：					
签发日期	2015年07月17日		签 发 人		





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金属拉伸试验报告

试验类型	金属定荷拉伸试验	试验编号	20150711-1360	标 距	5.00	试验速度	100mm/min	材料名称	拔扣	材料类型	I组			
规格型号	2M	材料批号		生产日期	15-07-11	试验标准		试验日期	2015-07-11	试验温度				
试验湿度		送检单位		备 注										
序号	最大力 (N)	最大伸长率 (%)	拉伸强度 (Mpa)	断裂强度 (Mpa)	断裂伸长率 (%)	定荷1	定荷2	定荷3	定荷4	定荷5	定荷6	定荷7	定荷8	定荷9
1	9,979.83	504.78	3,219.30	3,219.30	504.78	.96	1.78	2.77	3.61	4.11	4.78	5.28	5.78	.00
平均值	9,979.8	504.78	3,219.3	3,219.3	504.78	.96	1.78	2.77	3.61	4.11	4.78	5.28	5.78	.00
中 值	9,979.8	504.78	3,219.3	3,219.3	504.78	.96	1.78	2.77	3.61	4.11	4.78	5.28	5.78	.00
标准差	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

