TEST REPORT

Hardline Laboratory

Report No.： THA0127/2025
Page： 1 of 6
Date： NOV. 03, 2025

Mai Bikes
Wilhelmsdorfer Str. 6, 33604 Bielefeld, Germany

The following merchandise was submitted and identified by the applicant as:

Product Description: Mai Versa CGP frameset, Gravel Bike
Country of Origin: China
Sample Quantity: 2 carbon frames

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Requested: Clauses 4.8.2, 4.8.3, 4.8.4, 4.8.5, 4.8.6 and 4.8.7 of ISO 4210-2:2023 Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles.

Test Method: Clauses 4.1, 4.2, 4.3, 4.4, 4.5 and 4.6 of ISO 4210-6:2023 Cycles - Safety requirements for bicycles - Part 6: Frame and fork test methods.

Bicycle type: ☐ City and trekking ☐ Young adult ☐ Mountain ■ Racing

Test Result: --See following sheet(s)--

Date of Receipt: OCT. 22, 2025

Testing Period: OCT. 23, 2025 ~ OCT. 31, 2025

Signed for and on behalf of
SGS Taiwan Ltd.

Chinhao Lien
Asst. Manager

Testing Site: No.9, 14th Road, Taichung Industrial Park, Taichung City, Taiwan

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Report No.： THA0127/2025

Test Result:

ISO 4210-2:2023 Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles.

Bicycle type: ☐ City and trekking ☐ Young adult ☐ Mountain ■ Racing

Clauses	Test Item	Sample No. / Test Sequence	Result	Remark
4.8	Frames			
4.8.2	Frame - Impact test (falling mass)	#1 / 6	Pass	Annex 1
4.8.3	Frame and front fork assembly - Impact test (falling frame)	#1 / 7	Pass	Annex 2
4.8.4	Frame – Fatigue test with pedalling forces	#1 / 1	Pass	Annex 3
4.8.5	Frame – Fatigue test with horizontal forces	#1 / 2	Pass	Annex 4
4.8.6	Frame - Fatigue test with a vertical force	#1 / 3	Pass	Annex 5
4.8.7	Rear brake mount tests			
	- Static rear brake torque test	#1 / 5	Pass	Annex 6
	- Rear brake mount fatigue test	#1 / 4	Pass	Annex 7

Note: 1. Sample information: Material (Carbon), Frame size (480 mm), Mass (#1: 1,329 g).
2. The rigid fork required for the test was provided by SGS Taiwan.
3. The rigid fork is 400 mm in length with a 50 mm offset.
4. Wheel diameter: 700C × 50C.

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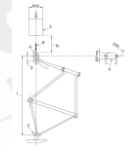
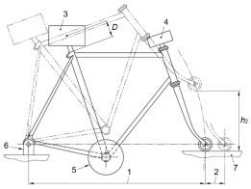
Annex 1:

Frame - Impact test (falling mass)						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.1 (ISO 4210-6:2023) 	Drop height, h_1 (mm)	180	180	360	212	1. Permanent set: 4.1 mm. 2. No visible cracks were observed on the sample after testing.
	Mass of Striker (kg)	22.5	22.5	22.5	22.5	

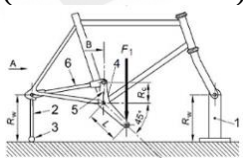
Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

Annex 2:

Frame and front fork assembly - Impact test (falling frame)						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.2 (ISO 4210-6:2023) 	Seat-post, M_1 (kg)	50	40	30	30	1. Permanent set: 4.5 mm. 2. No visible cracks were observed on the sample after testing.
	Steering head, M_2 (kg)	10	10	10	10	
	Bottom bracket, M_3 (kg)	30	20	50	50	
	Drop height, h_2 (mm)	200	200	300	200	

Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

Annex 3:

Frame – Fatigue test with pedalling forces						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.3 (ISO 4210-6:2023) 	Force, F_1 (N)	1,000	1,000	1,200	1,100	1. No visible cracks were observed on the sample after testing. 2. The peak deflection was no more than 20% of the initial value.
	Test cycles	100,000	100,000	100,000	100,000	
	Frequency (Hz)	3				

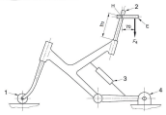
Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

Annex 4:

Frame – Fatigue test with horizontal forces						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.4 (ISO 4210-6:2023) 	Forward force, F_2 (N)	450	450	1,200	600	1. No visible cracks were observed on the sample after testing. 2. The peak deflection was no more than 20% of the initial value.
	Rearward force, F_3 (N)	450	450	600	600	
	Test cycles, C_1	100,000	100,000	50,000	100,000	
	Frequency (Hz)	3				

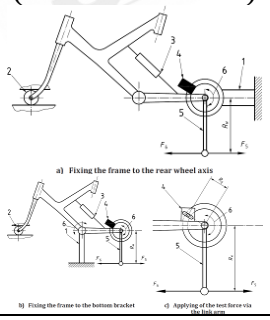
Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

Annex 5:

Frame - Fatigue test with a vertical force						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.5 (ISO 4210-6:2023) 	Force, F_4 (N)	1,000	500	1,200	1,200	1. No visible cracks were observed on the sample after testing. 2. The peak deflection was no more than 20% of the initial value.
	Test cycles	50,000	50,000	50,000	50,000	
	Frequency (Hz)	3				

Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

Annex 6:

Rear brake mount tests - Static rear brake torque test						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.6.2 (ISO 4210-6:2023) 	Rearward force, F_5 (N)	700	700	700	700	No visible cracks were observed on the sample after testing.
	Forward force, F_6 (N)	300	300	300	300	
	Arm length, R_W (mm)	365				
	Apply a rearward force of 700 N to the link arm against the direction of travel. Maintain this force for 1 min, then reduce the force to 0 and apply a force of 300 N in direction of travel, again maintain this force for 1 min and release the force.					

Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

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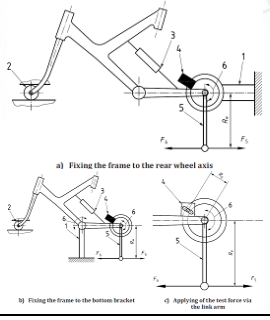
Annex 7:

Rear brake mount tests - Rear brake mount fatigue test						
Test Method	Bicycle type	☐ C	☐ Y	☐ M	■ R	Result
	Test condition					
Clause 4.6.3 (ISO 4210-6:2023) 	Rearward force, F_5 (N)	500	300	500	400	No visible cracks were observed on the sample after testing.
	Forward force, F_6 (N)	50	50	200	50	
	Test cycles	20,000	20,000	20,000	20,000	
	Frequency (Hz)	3				
	Arm length, R_W (mm)	365				

Note: C= City/Trekking Bicycle; Y= Young Adult Bicycle; M= Mountain Bicycle; R= Racing Bicycle.

* The content of this report is invalid if it is not presented as the entire report.
* The decision rule of the statements of conformity is following the ILAC G8:09/2019 by using the simple acceptance decision rule.

– Picture(s) –

Photo “A” Appearance of sample

Photo “B” Appearance of sample

--- End of Report ---