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BGLQ22F

报告编号：JC2022CP135

Test reports

Entrusting party: [redacted]

Product name: Corrugated beam plate
(Hot dip galvanizing coating)

Test category: Commissioned sampling inspection

Date of approval: 21.10.2022

检测专用章

China Transport Telecommunications and Information Center

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Entrusting party	[redacted]	Order number	JC2022CP135
Product name	Corrugated beam plate (Hot dip galvanizing coating)	Model specification	DB01 (4320×310×85×3) mm
Production unit	[redacted]	Detection site	Workshop of plant
Series number	-/-	Number of samples	JC2022CP135
Date of sampling/ Date of production	17.09.2022/01.08.2022	Sample receiving date	22.09.2022
Sampling place/ Sampling person	Factory warehouse/Liupeng	Sampling basic number	50
Test date	17.09.2022/20.10.2022	Sample quantity	50
Test item	Appearance quality, outer dimension and allowable deviation, material requirements, processing requirements, adhesion amount of galvanized layer, thickness of galvanized layer, uniformity of galvanized layer, resistance to bending, resistance to salt spray corrosion, adhesion of galvanized layer.		
Main equipment and serial numbers	YQ-2048-11 digital vernier caliper, YQ-2049-10 digital micrometer, YQ-2015-08 tape measure, YQ-2051 universal Angle ruler, YQ-2040-03 microcomputer controlled electronic universal testing machine, YQ-2052-02 analytical balance, YQ-2052-01 electronic balance, YQ-2014-03 Feeler, YQ-2074 coating adhesion tester, YQ-2011-03 coating thickness tester, YQ-2015-04 straight ruler (50cm), YQ-2085 paint film bending tester, YQ-2039 salt spray corrosion resistance test chamber.		
Test environment	Factory temperature: 21.0°C Laboratory temperature: (22 ~ 23) °C Laboratory relative humidity: (50 ~ 55) %		
Test/ Evaluation Criteria	1.GB/T 31439.1-2015 "Corrugated beam steel guardrail Part 1: two-wave beam steel guardrail" 2, GB/T 18226-2015 "Technical conditions for anti-corrosion of steel components of Highway traffic engineering"		
Test conclusion	The samples of hot-dip galvanized coating and wavy beam plate sampled by our unit are all in line with the requirements of testing/judging basis. Testing unit: (special seal for testing)		

检测：[redacted] 审核：[redacted] 批准：[redacted] 批准日期：2022 年 10 月 21 日

1	Sample description	1, Sample state: surface intact, no defects; 2. The coating color of the outer surface of the sample is silver white.
2	Detection specification	1, single detection conclusion column '/' indicates that this does not make a decision; 2. Client's technical requirements: connecting screw holes L-1, splicing screw holes P-3; 3. Additional information of the order: 2022-CY-135
3	Deviation statement	None

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Item number	Test item			Technical Requirements	Test Result	Single test result
1	Appearance quality		Cold-formed member	The surface of the cold-formed black member shall be free of defects such as cracks, bubbles, folds, inclusions and end-face delamination, but slight pits, bumps, indentations and scratches of no more than 10% of the nominal thickness are allowed; The cutting surface and mounting hole should be free of rolling edges, flying edges and serious burrs; no welding and lengthening.	Conform	Up to standard
			Zinc coating	The surface of the galvanized component should have the same color, uniformand complete plating parts should have no defects such as leakage plating; there should be no run-off, drips or excess clumps on the surface.	Conform	
2	Processing requirement			Wavy beam and plate should be formed by continuous roll forming.The bolt holes on the corrugated beam plate should be positioned accurately, and all splicing screw holes at each end should be punched at one time.	Conform	Up to standard
3	Overall dimension deviation from allowable	Corrugated beam length L (mm)		4320^{+5}_{-5}	4320	Up to standard
		Plate width B (mm)		310^{+5}_{0}	310	Up to standard
		External wave height H (mm)		85^{+3}_{0}	85	Up to standard
		Internal wave height h (mm)		83^{+2}_{-2}	83	Up to standard
		Fence plate base plate thickness t(mm)		$3^{+0.18}_{0}$	3.06	Up to standard
		Bolt hole distance	D（mm）	4000^{+4}_{-4}	4001	Up to standard
			X（mm）	160^{+1}_{-1}	160	Up to standard
			Y（mm）	100^{+1}_{-1}	101	Up to standard
		Connecting bolt	Nominal size a（mm）	$50^{+1}_{-0.5}$	50.2	Up to standard
			Nominal size b（mm）	18^{+1}_{0}	18	Up to standard
		Splice hole	Nominal size a（mm）	$40^{+1}_{-0.5}$	39.8	Up to standard
			Nominal size b（mm）	22^{+1}_{0}	22	Up to standard
		Bending degree (mm/m)		≤1.5	0.3	Up to standard
		Total curvature (%)		≤0.15	0.02	Up to standard
		Notch perpendicularity tolerance (')		≤30	20	Up to standard

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Item number	Test item			Technical Requirements	Test Result	Single test result
4	Material requirement	Mechanical property	Tensile strength (MPa)	≥375	390	Up to standard
			Yield strength (MPa)	≥235	286	Up to standard
			Elongation after fracture (%)	≥26	29.0	Up to standard
5	Adhesion of galvanizing layer			After the adhesion test, the zinc layer does not peel, bulge, crack or layer up to the extent that it can be wiped off with bare fingers	Conform	Up to standard
6	Adhesion of galvanized layer (g/m^2)			≥600	791	Up to standard
7	Galvanizing Thickness (μm)			≥84	102	Up to standard
8	Coating uniformity (%)			The difference between the maximum thickness and the average thickness should not be greater than 40% of the average thickness.	19	Up to standard
				The difference between the average thickness and the minimum thickness should not be greater than 25% of the average thickness.	15	Up to standard
9	Resistance to bending of galvanized layer			After the bending test, the zinc layer in the bending part should not be stripped, not raised, not cracked or raised to the extent that can be wiped off with bare fingers.	Conform	Up to standard
10	Corrosion resistance of zinc coating to salt spray			After the 168h neutral salt spray test, there should be no red rust phenomenon	Conform	Up to standard

Note: The galvanized layer bending resistance sample is 0.3mm tinplate. The standard sample is made of the same raw material and the same process as the sample.(blank below)