

Specifications of the material constituent the GJM STEEL BOX

Essential specifications	Legal reference	Minimum legal performance	Verified performance Eta 17/0059
Wire tensile and lengthening strength	EN 10223-8 "wire and product steel coated for fences and grids – gabions made by welded mesh- Paragraph 7.4	Max tensile stress before breaking > 500 MPa	max load before breaking = 14567 N max stress before breaking = 554,12 MPa max deformation = 6,47 %
Weld shear strength	EN 10223-8 "wire and product steel coated for fences and grids – gabions made by welded mesh- Paragraph 7.5	Welding strength \geq 75% of the max tensile stress before breaking	Medium value = 14181,25 N > 11037 N
Measurement of the coating alloy of zinc and aluminum got with the gravimetric method	EN 10244-2 wire and product steel coated – metal coating without iron on the steel wires – part 2: zinc or other zinc alloy coating" Paragraph 5.2.2.1/5.2.2.2 e Tab. 2	Measurement of the coating alloy of zinc and aluminum got with the gravimetric method \geq 290 g/mq for the class A	Medium value on 5 coating mass test = 401,8 g/mq
Verification of the grip between the coating and the wire through winding test	EN ISO 7802 "metal material – winding test of the wire"	No detachment of the coating	No detachment of the coating
Corrosion tests in artificial atmospheres	EN ISO 9227 "corrosion tests in artificial atmospheres- saline mist test"	Surface affected by rust < 5% after 1000 hours of saline mist	Surface affected by rust < 5%
Hooks strength test	Unnecessary test performed by the Università degli Studi di Trento, industrial department	Shape maintenance	Opening strength value = 2000 N