

MP5 painting system

The name "MP5 system" identifies a coil-coated steel with modified polyester resins that guarantee an high quality finished product for exacting customer: the coil-coated, nobler than standard system by chemical resistance and workability, is destined to similar "MP3 system" employments, and an average duration of at least 15 years *.

Physical characteristics

Cold rolled steel, depending on the final quality required by customer, is subject to hot dip galvanizing as per eu-ro-norm and, in order to achieve the highest guarantee over the life of finished products, the zinc coverage shall never be lower than 200 gr/m².

The painting cycle foresees a non-chrome treatment of nitro-cobalt salts and a passivation of zirconium salts of the galvanized steel: this set of treatments will support the application of 5 µm of primer and 20 µm of modified polyester paint to form a total dry layer of nominal 25 µm of organic protection. For the lower side the application of 5/7 µm of foamable backcoat is foreseen or, under specific request by the customer, of the same painting cycle used on the upper side.

The colour matching / reproduction is very high despite the environmental standards of Marcegaglia impose the use of non-toxic paints only, that is formulated without any use of toxic pigments as for instance chromate, molybdate and lead salts pigments.

Chemical and quality characteristics

Salt spray resistance (EN 13523-8)	The test is performed with reference and according to euronorm and does not allow for blisters on the cross more than 2 mm per edge (total 4 mm) and, on the surface, more than the degree 8 from the ASTM D714 scale after 750 hours exposure
T-bend test (EN 13523-7)	The test determines the adhesion of the paint to the steel which must not exceed 1 t, and it is performed by tearing with adhesive ribbon the bending itself and the elasticity of the paint that must not crack over 2 t
Specular gloss (EN 13523-2)	It is measured with a gloss-meter having the incidence radius of 60° and must be within 30 ±5 gloss.
Pencil hardness (EN 13523-4)	It is measured by engraving the paint at 45° with K oh-I-Noor pencils and must not be any lower than grade F
Resistance to solvents (EN 13523-11)	After 100 double rubbing (50 for metal colours) with cotton pad, soaked in MEK (metil-etilchetone) and pressure of about 1 kg, the paint must not show any discrepancy nor defect

(*) Provided both Parties have reached an agreement and in presence of our evaluation of the installation site