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NZTM-Q06A:- **G250 / ZM275 Gavanised (NZ) Steel Coil Specs {Hot-Dipped zinc-coated with spangled}**

This internal specification covers the mechanical properties and chemical compositions of G250 / ZM275 Galvanised Steel coil sourced from NZ Steel and used by New Zealand Tube Mills for the manufacture of tube

Zinc coating helps in two different ways of protecting steel substrate from rusting:-
1) Barrier Effect - Protect from direct intrusion agent to the steel
2) Galvanic Effect - Protect its adjacent steel substrate by scarifying itself

When forming steel strip into tubular sections, the mechanical properties are affected. The extent of this effect depends on the specific dimensions of tube being produced and particularly the tube diameter to thickness ratio. In general during tube forming, the yield stress will be substantially increased, the tensile strength slightly increased and elongation reduced.

SPECIFIED MINIMUM MECHANICAL PROPERTIES OF STRIP

YIELD STRESS	**250 MPa (min.)**
TENSILE STRESS	320 MPa (min.)
ELONGATION	25 % (min.)

NORMAL RANGE OF MECHANICAL PROPERTIES OF STRIP

YIELD STRESS	255 to 325 MPa
TENSILE STRESS	345 to 395 MPa
ELONGATION	27 to 40 %

SPECIFIED CHEMICAL COMPOSITION - (LADLE ANALYSIS)

CARBON	C	0.07 % max.
MANGANESE	Mn	0.25 % max.
PHOSPHORUS	P	0.03 % max.
SULPHUR	S	0.03 % max.

ZINC COATING WEIGHT

COATING WEIGHT (ZM275)	**275**	**g / m^2**	**both side**
Calculated Coating Thickness (ZM275)	**38.5**	**µ m**	
	Minimised Spangle		
	Based on Standard AS1397 - 2001		

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