








SC	DESCRIPTION	CAUSE	EFFECT / REMEDY RESPONSIBILITY	A/R/N C/REP	EXAMPLE
17	DISCOLOURATION OF THE PAINT COATING OVER HOT DIP GALVANIZING AFTER EXPOSURE TO THE ENVIRONMENT	Inadequate repair of a damaged surface on the hot dip galvanized coating prior to the application of a paint coating.	Make use of the correct repair materials and application procedures when touching up cut or welded hot dip galvanized components. See Coating Repair Procedures.	R	
				B REP	
18	COATING THICKNESS PROVIDED ON FASTENERS USED TO ASSEMBLE HOT DIP GALVANIZED STRUCTURES	No matter how the zinc coating is applied, the coating life is proportional to its thickness in a given environment. Often electroplated fasteners with insufficient coating thickness are incorrectly used in external environments.	Specify hot dip galvanized fasteners to SANS 121 / ISO 1461, where required. Alternatively overcoat fastener with an approved zinc rich paint or epoxy. See Coating Repair Procedures.	R	
				D / B REP If acceptable	
19	MECHANICAL DAMAGE. Mechanical handling or transport damage can occur, particularly with extremely thick coatings, which tend to be brittle in nature.	The use of chains, wire ropes, dragging or dropping of the component onto a hard surface, can cause mechanical damage. This is particularly relevant with thick brittle coatings.	Warning labels, highlighting a thick coating and possible damage if manhandled, should be attached by the galvanizer, before the component is transported. The use of nylon lifting slings is recommended.	A	
				G / B REP If necessary	
20	OXIDE LINES. Light aluminium oxide film lines on a hot dip galvanized surface.	Due to the shape and / or drainage conditions of some components, the hoist crane has stopped and started upon withdrawal of the items from the molten zinc.	No effect on corrosion resistance. The overall appearance becomes uniform in time.	A	
21	PIMPLES OR BLISTERS. Pimples or blisters formed during hot dip galvanizing are usually associated with surface imperfections such as dross inclusions.	Dross pimples result from agitation of the dross layer at the bottom of the bath or from dragging material through the dross layer. They appear as small, hard lumps on an otherwise normal galvanized surface. Blisters may be formed by hydrogen, which is absorbed during pickling and diffused at galvanizing temperatures.	The galvanizer should avoid disturbing the dross layer at the bottom of the bath, by controlling immersion depth and crossing regularly. Since dross pimples represent minor disturbances in coating uniformity, they do not affect corrosion resistance.	A	
				G C If necessary	
22	REACTIVE AND NON-REACTIVE STEELS, WELDED TOGETHER. Variations in coating thicknesses can arise when reactive and non-reactive steels are welded together. Efforts to increase coating thickness on the less reactive steel may result in an undesirably thick and brittle coating on the most reactive steel.	This difference in coating thickness, is brought about by a combination of a more reactive silicon killed steel, and/or high phosphorous resulting in a thicker coating and a less reactive aluminium killed steel, resulting in a coating thickness sometimes below that required in the specification. Should the galvanizer be asked to regalanize in accordance with the specification, the resultant coating thickness on the reactive steel will be excessively thick, resulting in a brittle coating more susceptible to damage.	Select the same steel for fabricating a component. If need be, accept a concession request by the galvanizer, when the thinner coating is possibly below specification.	A / N Accept Concession Request	