






Surface Conditions (SC)

LEGEND:

A - Accept R - Reject N - Negotiate C - Clean REP - Repair
RESPONSIBILITY: G - Galvanizer D - Designer B - Builder/Fabricator S - Steel Type/Surface

SC	DESCRIPTION	CAUSE	EFFECT / REMEDY RESPONSIBILITY	A/R/N C/REP	EXAMPLE
1	APPEARANCE OF SODIUM DICHROMATE. A small amount of sodium dichromate is generally added to the quench water bath for passivation.	Although the recommended quantity of sodium dichromate is about 0,15 to 0,3%, occasionally when topping up, more is added. This often results in a dark yellow to brown colour on the galvanized surface. The darker colour will provide enhanced initial corrosion protection.	Maintain concentration of sodium dichromate at about 0,15 to 0,3%. G	A	
2	ASH DEPOSITS Ash deposits are grey, non-metallic deposits consisting of zinc oxide that have been deposited on the hot dip galvanized coating.	Zinc oxide deposits can take place when the component is dipped or when it is removed from the bath.	The coating is normally intact underneath the ash deposits. Ash must be removed and the coating thickness verified for conformance to the specification requirements. Remove ash from all liquid conveyance pipes. G	A / N C/REP If necessary	
3	BARE SPOTS. Although excluded from SANS 121 / ISO 1461, bare spots of about 5mm ² (2,2 x 2,2mm), due to small localised flaws, are adequately protected by the sacrificial properties of zinc and will have very little effect on the service life of the coating. Where necessary, such spots may be repaired using one of the specified repair methods. Gross uncoated areas are a cause for rejection. See Coating Repair Procedures.	There are several causes of bare spots. These include: Overdrying. If the time between fluxing and hot dip galvanizing is prolonged or the drying temperature is too high, the barrier protection provided by the flux may be lost. This is indicated by a rusty appearance on the ungalvanized article, which can result in coating discontinuities after hot dip galvanizing. Excess Aluminium. A condition sometimes referred to as black - spots may occur if the aluminium content of a bath becomes too high. No trouble should be experienced if flux concentration is correct and the aluminium content of the bath is maintained below approximately 0,007%. Further causes are: Blowouts; flux deposits; stains and inclusions; mechanical damage; touch marks; uncoated surfaces caused by - surface contaminants, scale or sand; welds and weld spatter. See SC No's 6, 16, 19, 30, 33, 34, 35 and 37	 G G REP If necessary	A / R	
4	BLACK STEEL INSPECTION. Inspection prior to hot dip galvanizing is extremely important.	Components should be checked for distortion caused during rolling or fabrication. Check for appropriate vent, fill and drainage holes: removal of weld slag and spatter; venting of overlapping surfaces; unsuitable joining materials; temporary identification markings; clearance for moving parts and potential distortion due to the process.	Insufficient inspection prior to hot dip galvanizing can be the cause of dispute. G	A / R	