





Heat Treated	Scale common, may need fluoride in acid to fully descale
Induction Hardened	Standard sequence may produce off colors, extended time in acid and black oxide may be required
Tools Steel	Standard sequence may produce off colors; extended time in acid and black oxide may be required

No blackening	Contact with mild steel Surface not activated Increase pickle time Surface oxides require passivation Bath damaged by overheating
Smutty black	Too much pickle time Over activation Bath requires skimming Bath need desludging Parts need passivation Temperature too high
Iridescent colors	Temperature too low Temperature too high Needs contact with mild steel Bath damage by overheating

