



WELDING BULLETIN

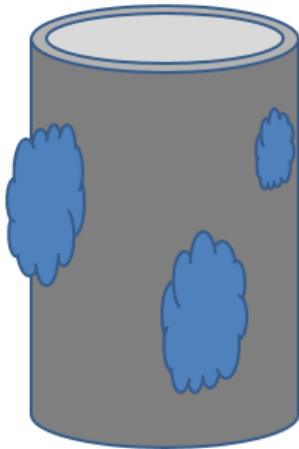
LESSONS LEARNED FROM THE SHIPYARD

SWB-0003



Shiny is Clean

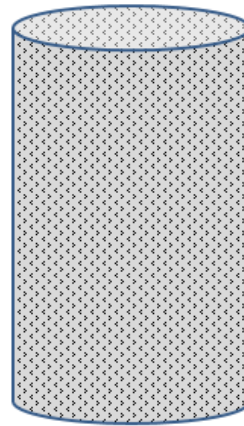
While the cleaning of base materials is typically covered in the weld procedure, the cleaning of filler material is often overlooked. Even though a filler material may look clean after a wipe down with solvent, there can be an oxide layer present. This is often noted through a dull appearance to the metal's surface. This oxide melts at a much higher temperature than the filler material and its presence may impact weld puddle characteristics and weld quality.



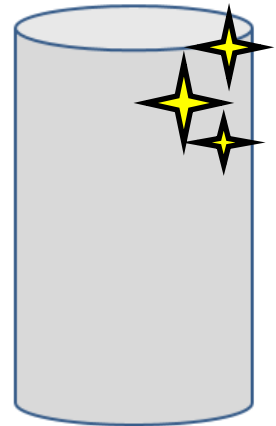
Filler material as is with oxide and contaminants on surface (oil, dirt, etc.)



Filler material after solvent wipe down (oxide still present)



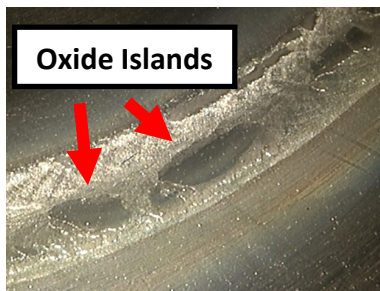
Filler material after abrading surface (oxide is broken but still on surface)



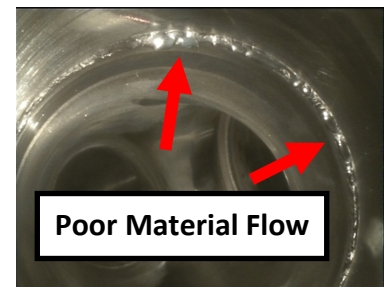
Filler material after abrasion and solvent wipe down (Clean and shiny)

Recommended minimum best practice

Recommended best practice



Don't forget about consumable inserts. The oxide presence may cause issues with material flow and form oxide islands.



For both base and filler material (including inserts) remember:

Shiny is clean



Questions?

Contact EBSupplierWeldingSupport@gdeb.com.