

# COMPARISON OF METAL SPRAYING WITH GALVANISING

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Galvanising is a well established process for applying a corrosion protection layer of zinc to steel. Treated steelwork is immersed briefly in molten zinc and the coating builds up very quickly. Galvanised layers are usually of even thickness, dense and metallurgically bonded to the steel. Thickness is typically 0.002 - 0.006 in (50 - 150 $\mu$ ). Coating compositions are sometimes varied to control deposit thickness and give better protection in certain specific environments.

### Metal Spraying Offers the Following Advantages Over Galvanising

- Low heat input during spraying eliminates the risk of thermal distortion
- Low heat input eliminates the risk of thermal metallurgical degradation
- Sealed hollow fabrications may be treated without risk of explosion
- The process is not limited to zinc. The coating material may be selected specifically for the environment
- Coating thickness may be varied from place to place to provide extra protection in critical areas
- There is no limit to the size of article which can be treated
- Articles can be treated on site
- There is no effluent disposal problem
- Reduced stocks of zinc are required. Working capital is not tied up in a molten zinc bath
- Fuel is not needed to keep zinc molten when the process is not working
- Metal spraying is used to restore corrosion protection on damaged areas of welded galvanised steel.