

A critical comparison

MCU-Ferroguard OR MCU-Miozinc/MCU-Ferroguard **versus** Coal tar Epoxy

There is no justification for using coal tar epoxy instead of MCU-Coating's MCU-Ferroguard. MCU-Ferroguard is superior to epoxy tar in every performance and application property when used alone and can show dramatic performance and extended life if used over MCU-Miozinc

ADVANTAGE OF MCU-FERROGUARD OR MCU-MIOZINC/MCU-FERROGUARD	COAL TAR EPOXY
MCU-Ferroguard and MCU-Miozinc can be applied at temp. as low as -12°C, humidities to 99%, no dew point restriction.	Cannot be applied in humidities above 80-85%, or temperatures below 7°C, or within 3°C from the dew point.
MCU-Miozinc and MCU-Ferroguard can be immersed after 30min.	Requires 2 to 8 days prior to immersion.
Both can be recoated or touched up at any time without special treatment.	Cannot be recoated after 12-36 hours unless reblasted or used with special tiecoating. Field-touch up is always a problem.
All MCU coatings are single component with no mixing, measuring or catalyzation and therefore have NO POT LIFE limitation.	Plural components must be precisely mixed. Pot life can be very short.
MCU-Ferroguard and MCU-Miozinc have excellent urethane flexibilityn weatherability, and abrasion resistance.	Epoxy Tar are notoriously brittle and never as good as urethane for weathering and abrasion resistance.
MCU-Ferroguard is resistant to 86°C, continuent water immersion and intermittent temperatures up to 120°C.	Epoxy Tars blister with exposure to intermittent temp. over 79°C.
MCU-Miozinc/MCU-Ferroguard can not undercut. Typical salt spray resistance is over 20000 hours.	Epoxy Tars will undercut at mechanical damage, or holiday.
MCU-Miozinc/MCU-Ferroguard can not undercut. Typical salt spray resistance is over 20000 hours.	Epoxy ferroguards requires very dry concrete with a concrete cure time of at least 28 days. Recoating a water blasted surface is always a problem.
MCU-Ferroguard and MCU-Miozinc comply with all current proposed VOC and lead reduction legislation.	Varies
MCU-Ferroguard does not irritate skin and eyes of the applicator. MCU-Coatings are isocyanate monomer free. MCU-Ferroguard contains only 20-25% refi ned tar.	Epoxy Tar is extremely irritating to applicators. Typical epoxy ferroguard contains up to 85% coal tar or refined tar.
MCU-Ferroguard contains micaceous iron oxide, which improves properties for abrasion, blistering, weathering, corrosion resistance and marine growth penetration.	Does not contain micaceous iron oxide.
MCU-Miozinc/MCU-Ferroguard has a dramatic advantage for miscellaneous steel,pipes or pipes which may be mechanically damaged, abraded or driven. (This system will not undercut or creep at mechanically damaged site. Undercutting is limited to less than 1/8 inch (<3mm) after 10 years in salt water splash zone.)	Epoxy Tar will fail at every unrepaired damage point.
MCU-Ferroguard is always recommended at thinner films: 100µm to 300µm.	Epoxy Tar usually requires a min. of 450µm.

COSTS

The material cost of MCU-Ferroguard at 300µm is the same price as epoxy Tar at 450µm DFT.
The material cost of MCU-Miozinc at 75µm with 150µm of MCU-Ferroguard is equivalent in material cost with 450µm of epoxy Tar, and offers a superior protection.
Field touch-up problems with epoxy Tar can cause a complete stop in many projects.
The expected life time of MCU-Miozinc, MCU-Ferroguard system on pilings and bulkheads in salt water is over 25 years, with no rust development. If life cycle costs are considered rather than cost per litre, MCU's coating systems are lower in cost than any coating in the industry.